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# Seeing data like a state: A case of Open Government Data in India's livelihoods program

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**Abstract.** Open Government Data (OGD) initiatives promise to make governments transparent, enabling citizens to participate actively in governance. Yet, empirical evidence suggests that OGD doesn't have the democratic impact that its advocates expect. Based on a 14-month ethnography of India's livelihood program, we argue that the assumptions underlying the design of OGD initiatives vary with citizens' social context. We show how OGD initiatives are state-centric in their design to make the functioning of the everyday state legible towards controlling corruption. However, citizens and social activists do not always share such an "anti-corruption" view in their engagement with the everyday state. Instead, they prioritise "getting things done", i.e. accessing the state's services. The state-centric OGD is of limited value to them due to its techno-official language and its emphasis on aggregate datasets. We suggest complementing state-centric OGD with citizen-centric OGD to enable the citizens to "see the state".

Keywords: Open Government Data, local government, livelihood, corruption, ethnography

**Key points for practitioners:**

- Open Government Data must support citizen grievances to contribute to achieving development outcomes;
- OGD initiatives might have a limited impact on citizens' participation due to power asymmetries in society;
- Data intermediaries need to pay closer attention to the social context of data production and use before derriving insights and analysis.

## 1. Introduction

India's livelihood program, the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), is the world's largest public works program providing employment every day to over 8.5 million workers. Every member of a rural household can apply for work at the local government office. Upon performing "unskilled manual labour" (such as desilting a lake), the government is supposed to pay them their legally guaranteed wages within the stipulated time. The scheme's claim for success is not merely its rights-based core and massive scale but also its technology backbone, with multiple information systems proactively disclosing data about the operation of the scheme in the public domain. Enthused by the datasets, the first author made easily comprehensible visualisations depicting budgetary outlays and other performance indicators across local governments. The assumption was that such micro-level

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data analytics would generate conversations in the village communities on the performance of the local government and eventually lead to greater participation in local government. He took these visualisations to Rajeev, an activist of grassroots organisations working on the program for over a decade in dryland regions of Karnataka, to aid him in his grassroots campaign. Rajeev was dismissive of such visualisations and rhetorically asked – "what should I do with this, pickle it?"

In the historical context of the transparency movement, access to datasets such as those we analysed and visualised is no ordinary feat. The official data of the predecessor programs of MGNREGA were not in the public domain. Social movements had, in the past, often struggled to gain access to such datasets relating to welfare programs. Such a sustained campaign led to passing of a Right to Information Act and many pro-transparency measures within MGNREGA.[1] Nor was the move towards transparency restricted to India, instead unfolding worldwide. Digital information systems enabled the state to cost-effectively disclose data in the public domain proactively. OGD enthusiasts, including governance reformers and tech enthusiasts, see huge potential in publicly available digital government data. The emergence of digital technologies has significantly expanded our ability to store, compute and communicate digital data on an unprecedented scale. Such "datafication" promises not merely a shift in the material form of data but also promises to alter the functioning of organisations and society. Governments worldwide have been quick to use such affordances of digital technologies to datafy their information systems. While governments have historically been at the forefront of adopting and even contributing to innovations in recording administrative data, what is new is the claims of such datafication enabling citizens' participation in governance. The assumption is that "opening up" the hitherto hidden government data will lead to an open government, in both the sense of being made visible to citizens and providing opportunities to voice their concerns (Meijer et al., 2012).

The availability of datasets has indeed contributed to greater questioning of government performance. For instance, social activists have used similar datasets of MGNREGA to successfully seek judicial intervention to address delayed payments (*Swaraj Abhiyan Vs Union of India*, 2016). Similarly, data journalists routinely use such datasets to bring out data stories in the public domain, providing key insights into the performance of the programs. Further, the academic community has extensively used such datasets to critically analyse the performance of the program.

Notwithstanding these positive possibilities of OGD, the evidence of the impact of OGD remains rather weak. Multiple systematic literature reviews on OGD support such a view. Francey and Mettler (2021) review the literature to assess the empirical evidence on the effects of OGD and find that there is little to substantiate that OGD supports citizens' participation. Yet another literature review by Safarov et al. (2017) assesses the utilisation of OGD. They find that the effects of OGD are often "only proclaimed and not empirically tested". Similarly, based on a literature survey on the impact of OGD on democratic societies, Ruijer and Martinius (2017) suggest the need to temper our expectations, especially in light of many challenges and barriers, such as lack of data literacy and supporting data infrastructures.

We seek to understand why OGD doesn't lead to citizen participation and, more broadly, the role of OGD in the everyday engagement of ordinary citizens with state institutions. Our focus is on citizens who are recipients of welfare programs on livelihood security, healthcare, social security, housing and others. Following the emerging literature on the anthropology of the state, we seek to examine the "banal, mundane, routinized . . . unexotic" practices of citizens' engagement with what could be called the "everyday state", i.e. those institutions that engage with citizens daily (Fuller & Bénéï, 2001; A. Sharma

[1] Prashant Sharma (2015) contests this dominant narrative and shows at least two other influences – the changing social composition of the bureaucracy itself and the global consensus towards Freedom of Information legislation.

& Gupta, 2005). Such emphasis on the everyday state assumes importance, especially due to the schisms within the seemingly monolithic state whereby the policies are often "reinterpreted beyond recognition" by the everyday state (Kaviraj, 1984). While such emphasis on the workings of the everyday state is important, we also analyse the OGD initiative through the lens of what could be called the "distant state". We use the term "distant" to imply that it is distant in terms of its effects on people's everyday lives and to indicate the continuance of ways of thinking about governing populations.

Often, research on OGD begins with data availability and examines its use (and non-use) and impact. Drawing on Avgerou (2010), such a perspective can be called a "transfer and diffusion" perspective. In contrast, we adopt a "socially embedded" perspective that examines the social context in which such initiatives are embedded and sheds light on what is "locally meaningful, desirable, or controversial". Our findings on OGD use and non-use by citizens are based on a 14-month ethnography of India's livelihood program under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

We argue that OGD initiatives present data that is desired by the state. Drawing on James Scott's work on "seeing like a state" (Scott, 1999), we show how these datasets are state-centric in both their objectives and their form of presentation (Section 3). A key assumption underlying state-society relations is that citizens are willing and able to monitor the society's functioning and further contribute to the decision-making process. OGD initiatives assume such "citizen-auditors" to monitor the functioning of the state. Further, seeing data like a state introduces a techno-official language that citizens are expected to master.

We show how not all citizens see themselves as "watchdogs" or anti-corruption crusaders but as recipients of welfare services (Section 4). Their key objective is to "get things done", through an engagement with the local state. Yet, the implicit assumptions of OGD design – that they are primed to be crusaders – contribute little to the citizens' engagement with the state. Further, since OGD represents data as seen by the state, the citizens are expected to speak like a state. We conclude by highlighting our research's implications and suggesting a "citizen-centric" OGD to complement the existing state-centric OGD initiatives.

## 2. Research design: An ethnography of India's livelihood program

Our findings are based on an ethnographic case study of India's livelihood program, the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). MGNREGA is a universal program open to any rural household. It mandates that a minimum of 100 days of guaranteed wage employment in a financial year should be provided to every rural household whose adult members volunteer to do unskilled manual work (Ministry of Rural Development, 2013). This program has two key objectives: to provide employment to wage-seeking rural citizens and, secondly, to create durable assets, improve water security, soil conservation, and agricultural productivity. Together, these two objectives are intended to provide livelihood security to rural citizens.

MGNREGA is best suited to understand the role of Open Government Data (OGD) in citizens' participation for the following reasons. MGNREGA has an explicit commitment to deepening democracy by enabling citizens' participation and making the everyday state transparent to ordinary citizens. Further, MGNREGA has multiple information systems, all being real-time, transaction-based systems with much of the data available in the public domain. Notably, the publication of such data online precedes

Table 1
List of sites observed

| Site | Comment | No |
|---|---|---|
| Gram Panchayat office | The lowest-level administrative and political body where officials and elected members interact with the citizens | 8 |
| MGNREGA worksites | The public works sites such as village lake where wage-seekers who participate in MGNREGA work together | 26 |
| Labour market | A physical location where wage-seekers assemble to meet potential employers. This is a site where wage-seekers who self-exclude or are excluded by the MGNREGA program seek work | 1 |
| Village community meetings/hangouts | This includes the spaces of organic participation and deliberation for members of the village community, including wage-seekers, elected members and opinion leader | 16 |

the popularity of OGD initiatives such as data.gov portals and Open Government Partnership.[2] Also, as described previously (Section 1), social movements had long campaigned for such datasets to be accessible, even before the digitisation of information systems. Thus, the datasets exist with the key assumption that they will enable citizen participation in their everyday engagement with the state. Also, the precarious livelihood situation, especially in dryland regions, makes the program extremely relevant to rural households. In terms of budgetary outlays, too, MGNREGA stands out among all other programs with a cumulative expenditure of over US $ 100 billion (Rs 7,77,514 crore) since its launch in 2005.

MGNREGA is a centrally designed program, with the union government providing most of the funds, scoping the program, and designing the digital technology backbone to administratively manage the program. However, MGNREGA follows a decentralised program implementation with reasonable autonomy for the Gram Panchayats[3] in program implementation. Thus, the Gram Panchayat is responsible for registering job seekers, identifying works to be undertaken, providing employment to job seekers, and disbursing payments.

We study the OGD initiative of MGNREGA using an ethnographic research design since we seek to understand OGD from a socially embedded context where the phenomenon under study cannot be easily delineated from its contextual factors. It thus requires an in-depth understanding of these factors. We conducted our fieldwork in the Gram Panchayats of the rural dryland district of Chikkaballapur in Karnataka, South India, between January 2018 and March 2019. The rural livelihood distress, especially in these dryland regions, makes MGNREGA relevant to rural households. We used participant observation, interviews, and document analysis as the key methods of data collection. The first author, whose social position as a male urban dominant caste researcher gave him significant access to most sites, conducted the ethnography predominantly. The ethnography engaged with three key actors – social activists and citizens, Gram Panchayat and local elite, and the social audit team. However, for the purposes of this paper, we have drawn predominantly on the findings from the social activists and citizens. A brief overview of the site and events observed and participants interviewed is shown in Tables 1–3.

Our initial foothold in the fieldsite was through an organisation we call NPO, a loosely structured organisation working from a rights-based perspective. It consists of a team of 3 core social activists and

[2]Following Yu and Robinson (2011), we interpret OGD broadly as open government's data rather than narrowly and technically as open (machine-readable) data of government. Thus, we include initiatives that publish government data online with a commitment to democratic values, and do not confine ourselves to data catalouges published on data.gov portals.

[3]India follows a federal structure with a union government at the national level and a state government at each of the 28 provinces. The provinces are divided into 748 districts, consisting of a population of about 1–2 million, which form the key administrative units to implement programs such as MGNREGA. Further, the rural districts consist of elected local bodies, the lowest tier being the Gram Panchayat, for a cluster of villages with a population of about 4000.

Table 2
List of events observed

| Event | Comment | No |
|---|---|---|
| Gram Sabha (Village Assembly) | Officially mandated public meetings where all citizens in a village can participate in the decision-making process of the local government | 5 |
| Rozgar Divas (Employment Day) | An event conducted by the local government to inform people about the objectives of the program as well as their rights | 2 |
| Activist meetings | Intra-organisational and public meetings of organisations working on MGNREGA | 12 |

Table 3
Profile of participants interviewed

| Participants | No |
|---|---|
| Officials | 25 |
| Local elite | 17 |
| Citizens/potential wage-seekers* | 28 |
| Non-Profit Organisation (NPO) staff | 22 |
| Quasi-official volunteers | 12 |

*We also conducted 19 Focus Group Discussions with workers' groups consisting of 5–25 members.

other freelancing volunteers. This team is led by Satish, who has a long history of working on campaigns for the right to food and livelihood. While the organisation is three years old, Satish and his team have worked pro bono for at least ten years to facilitate people's access to MGNREGA. Satish has a very strong informal social network and has friends in various quasi-official roles within MGNREGA. Satish emphasises the socio-economic backgrounds of his team, who, unlike many of the "city-based activists" hail from the very same villages and communities they engage with. According to Satish, these are the "real social activists" who deal with "*abhadrathe*" (insecurity) about their livelihood every day and have faced similar forms of discrimination that the communities deal with. All three social activists of NPO belong to socially marginalised scheduled caste (SC) and scheduled tribe (ST) families involved in dryland agriculture on small pieces of land. Some are from families involved in bonded labour until a decade ago. NPO has previously intervened in getting people to work under MGNREGA, facilitating access to veterinary doctors for livestock and securing institutional bank linkage and loans for self-help groups (SHG). The social activists stay in the nearest[4] town and travel to the villages for community meetings. We rented a small room next to the ones used by social activists of NPO, which allowed us to observe and participate in their organisational meetings and accompany them in their community meetings at the villages. Along with NPO, we also observed the functioning of two other non-profit organisations working predominantly on gender and community commons, respectively, and on the livelihood security concerns of MGNREGA. One of the villages, which we call Venkatapalli, became the key observation site. The first author visited the village in the evenings, teaching English to school students and participating in community gatherings, festivals, and other events.

While access through NPO helped us understand citizens' perspectives, we also independently engaged with the local government, i.e. the Gram Panchayat. A Gram Panchayat is the lowest tier of the elected government and covers a population of about 4000, and consists of 10 villages that are represented by 15 elected members. While we visited and observed five Gram Panchayats, we spent much of our

[4]A Taluka is a sub-district, also known as a block and is an administrative unit with about 30 Gram Panchayats (local self governments) and 250 villages covering a population of 3,00,000.

time in the Venkatapalli Gram Panchayat office. The Data Entry Operator (DEO)'s room is one of the most active sites within the Gram Panchayat, where most transactions related to MGNREGA occur. The administrative processing of MGNREGA is heavily dependent on the use of information systems. The extensive use of information systems makes the DEO one of the most important actors in the MGNREGA ecosystem. Along with the DEO's office, two other sites became our primary source of observations and semi-structured interviews. One was the courtyard outside the office, where the elected members and elite gathered for a chit-chat. Some key decisions would also be taken here, such as the allocation of houses under the government housing scheme. Another site where we conducted most of our semi-structured interviews was the local tea stall next to the Gram Panchayat. While sipping a cup of tea in a plastic cup, the engineers, watermen, bill collectors, and social audit volunteers would share their challenges with the "system". We also followed up the observations by studying the work practices of Block Panchayat officials, including the MIS (Management Information System) Coordinator, Technical Coordinator, and Engineers.

The third key set of actors included the social audit team. A social audit is a participatory mechanism to ensure transparency in the program's functioning. A social audit involves a door-to-door verification of households, physical inspection of all worksites and verification of all the documents to ensure compliance with the rules of MGNREGA. The Village Resource Persons (VRPs) who conduct the social audit are not government employees but are considered volunteers. We followed the social audit team in multiple Gram Panchayats to better understand the practice of social audit.

As common in ethnographic research, we let field events guide our site choice and participants. Yet, a routine began to emerge in the first few weeks of our fieldwork. We spent the mornings with the social activists of NPO in their office, often cooking food together. Such informal conversations helped us understand their challenges with the local government and citizens. We spent the official working hours (10:00 AM to 5:00 PM) on most days in government offices, observing and interviewing the officials and the visitors. Social audits took place during these working hours and allowed us to visit multiple villages and Gram Panchayats. Village visits were reserved for late evenings when the citizens, mostly engaged in casual labour, would return home. We taught English to children in the evenings, which was followed by semi-structured interviews and late-night dinners. We would return to our room in the block late at night to transcribe the interviews and observations of the day.

We systematically analysed the data after the completion of data collection through the standard practice of coding, sorting, local integration, and internal integration (Weiss, 1995). We adopted an issue-focused approach to data analysis within each site. The initial codes were a mix of inductive and deductive codes (Weiss, 1995). We followed Miles and Huberman (2014) to develop codes clustered together as meta-codes or pattern codes.

The following sections describe the state-centric and worker-centric understandings of Open Government Data. Section 3 describes two key OGD initiatives within MGNREGA. Using document analysis of state's archives, we show how the distant state assumes that the workers will use the OGD initiative to confront the everyday state. However, as our ethnographic findings suggest (Section 4), workers do not always see themselves as activist-citizens confronting the everyday state.

## 3. Seeking data like a distant state: OGD and the quest for legibility

The state plays a significant role in addressing many development challenges concerning poverty, malnutrition, health, rural roads, social security and housing. Despite substantial budgetary allocations and spending, a perpetual concern has been the on-ground implementation of such programs, especially

by the lower officials who directly engage with the citizens. Such concerns are evident in the official documentation and the detailed accounts of social movements working on governance. The state has often responded to such concerns by datafying these programs to make the functioning of the everyday state legible. A large number of datasets belonging to many government programs, for instance, on education, health, nutrition, livelihoods, and agriculture, are now available in the public domain. While the publication of such datasets is significant, we show how the datasets represent state-centric thinking on OGD. Following James Scott's "seeing like a state", we show how the datasets seek to ensure the legibility of the everyday state and citizens.

As described earlier, MGNREGA is considered landmark legislation for its rights-based approach and has an explicit commitment to enable citizens' participation and government transparency. Direct participation is encouraged by giving importance to the Gram Sabha, an assembly of all adult voters. Such forums are intended to provide opportunities for citizens to seek information and justification from elected members and officials. MGNREGA further provides a legal right for citizens to access key government documents such as the wage list and muster roll. The program design also provides every household with a "job card", a key document which contains the details of the household with the program. The commitment to transparency is so explicit that it was often called the sister legislation of India's Right to Information Act, 2005 (cited in (Mathur, 2012)).

Despite the existence of such transparency measures, concerns about corruption began to emerge in the initial few years. For instance, the lower officials and elected members would falsify data to include non-existent worksites and misappropriate the expenses. Similarly, workers would be paid less than their wages due to them. Non-existent workers (known in official documents as 'ghost beneficiaries') would be included in the program to misappropriate their wages. The distant state responded to these challenges by deploying digital technologies, which enabled higher officials to monitor the functioning of the everyday state. Further, such administrative data began to be published online to ensure citizens' participation in monitoring the program. We describe two such initiatives relevant in the context of Open Government Data – the NREGASoft information system, which publishes data on workers and worksites and the Janmanrega app, which visualises worksites on a map.

### *3.1. NREGASoft*

NREGASoft is the core information system designed to digitally manage most of the administrative processing of tasks related to MGNREGA. As described earlier, every household possesses a "job card" containing data on their participation in the program. It includes data such as the number of days they have demanded work, the number of days they have worked, and the wage payments due to them. The next key document is the "muster roll" which contains the attendance of all the workers working on a worksite. Upon completion of work, the workers are paid their wages through the "wagelist". While it is mandatory for the Gram Panchayat to maintain these documents and datasets, the NREGASoft has digitised these datasets to make them available online. An official press release outlines the objective of datafication as below:

> *The Ministry of Rural Development has developed a web-enabled MIS (www.nrega.nic.in) for improving the efficiency and transparency of operational processes and all the information related to NREGA is available in a computer database and is also made available to public . . . The NREGA MIS is not just a tool for internal management, but also for external communication as it places all critical data in public domain making the implementation of NREGA completely transparent. All Job cards and Muster Rolls are being uploaded on the NREGA website. When fully operationalized,*

> *www.nrega.nic.in will, in fact enable citizens to avail of their right to get information without recourse to the legal procedures of RTI. (Government of India, 2008)*

The "critical data" that NREGASoft provides access to includes the job card, muster roll, wage list and asset register. Further, the NREGASoft provides many reports for administrative purposes with aggregate performance indicators, such as the list of Gram Panchayats with total expenditure and temporal demand for work across Gram Panchayats.

### *3.2. Janmanrega*

Janmanrega is an android app available to citizens which has information on the citizens' entitlements. It also allows citizens to search for assets based on geolocation and provide feedback. As the official documents note:

> *Mahatma Gandhi NREGS has reached a new milestone today by geotagging one Crore assets and putting them in public domain . . . One Crore assets have been geotagged and put in public domain in the last seven months. It is expected that the exercise will lead to greater transparency and ensure accountability at field level. (Government of India, 2017)*

Yet another government report emphasises the role of Janmanrega in ensuring transparency.

> *Citizen awareness is the key to efficient, effective and transparent execution of any scheme . . . The application allows locating already geotagged Mahatma Gandhi NREGS assets on Indian Space Research Organisation's Bhuvan Map Interface along with their attributes and two photographs using an Android mobile phone. Citizens can use it to locate the assets. There is provision for capturing her/his feedback on such asset(s). (Government of India, 2020)*

The data of geotagged worksites is collected to prevent the everyday state from including duplicate or non-existent worksites within official data through geotagging. The distant state publishes such geographic data of worksites to enable citizens to monitor and report on the functioning of the everyday state.

### *3.3. Distant state and OGD*

The two OGD initiatives within MGNREGA described above are primarily designed to make the data on workers and worksites visible to higher officials. The digitisation of official records has made data of six crore household records, such as job card details, bank account details, and households' engagement with the local government, visible to the higher officials. Similarly, most of the five crore worksites are now visible to the distant state based on their precise geolocations. Likewise, the workings of the administrative and technical staff of the local government, such as the Panchayat Development Officer and Technical Assistant, are visible to the distant state in real-time. These include the work estimates, technical drawings, and expenditures for each site. While paper files continue to be maintained for each worksite at the level of a Gram Panchayat, much of the paper records are generated from the digital records published on these information systems. The distant state might have always mandated periodic reporting of aggregates in the form of Monthly Progress Reports. Yet, what exists now is real-time reporting of granular data on an unprecedented scale published online.

OGD thus seeks to make the everyday state legible and furthers James Scott's argument of "seeing like a state" (Scott, 1999). Scott's key argument is that the high modernist state seeks legibility and simplification of administration and society through reordering and social engineering. He describes

several modernising projects, such as collective farming, urban planning, and social forestry, to highlight the state's obsession with making things legible to itself. As evident from the above description, the OGD is an extension of this logic of legibility and simplification. Indeed, the very existence of a program like MGNREGA with clear guidelines, standard operating procedures, manuals, and formats shows the state's attempts at legibility and simplification. Yet, with digital information systems, the metaphorical "seeing" has become real with unprecedented legibility through direct, unmediated access to digital records.

Thus, state-centric design of datasets has two key aspects – aggregate performance statistics and administratively ordered datasets. Many of the state-centric datasets publish aggregate statistics comparing performance across various attributes. These include, for instance: "Expenditure of Gram Panchayats in a financial year", "Temporal patterns of demand for work", and "Share of women in total persondays across regions". Such datasets are extremely useful for higher administrators to monitor the performance of local governments and further for planning and allocating resources. Publishing such datasets has enabled researchers and journalists to analyse performance indicators and contribute to policy analysis.[5] Further, NREGASoft publishes multiple datasets such as muster rolls, wage lists and asset registers. Yet, each of these datasets has a state-centric ordering of data. Such data is collected for administrative processing and is later published as OGD. Such datasets help identify cases of false inclusions, which might be indicative of corruption and misappropriation. Similarly, the data on the Janmanrega app helps citizens report fraudulent worksites.

Such logics of "seeing like a state" underlying the OGD initiatives has two key assumptions. One, the citizens have the ability to use OGD to participate in governance. However, since the OGD has been designed to monitor the lower officials, it introduces a "techno-official language" far removed from the everyday life of ordinary citizens. Understanding the data requires workers to make sense of muster roll, wagelist, Fund Transfer Order (FTO), seeding, freezing, and other terminologies used in administrative and technical contexts. Second, the OGD assumes that citizens are willing to analyse the datasets to address corruption. In other words, there is an inherent assumption of citizen-activists, who, empowered with the data, will keep the local government accountable. Indeed, such an assumption, and the objective of activist citizens participating in the local government, might deepen democracy. Yet, as we show below, we should not conflate the empirical reality with what seems normatively desirable. Workers' key interest might not be so much in fighting corruption as to "get things done". In the following sections, we describe the everyday engagement of the workers and social activists with the everyday state and the role of OGD, including NREGASoft and Janmanrega.

## 4. Seeing "data" like a worker

As noted in the previous section, many of the datasets on MGNREGA are proactively published online. Such datasets have been widely used by both the officials within the state and by reformist activists outside the state. Discussions based on NREGA data have taken place in multiple forums, including academia, media, parliament, judicial courts and most importantly, the villages. While we recognise the importance of data to debates on MGNREGA, our key focus for this research is the use of data in the village, especially in the engagement of ordinary people with the everyday state.

There is evidence, especially based on ethnographic studies, of social activists mobilising village communities to question the everyday state (Sharan, 2021; Veeraraghavan, 2021). However, our findings

[5] See for instance the "MGNREGA Public Data Portal" developed jointly by the Evidence for Policy Design (EPoD) of Harvard University and Ministry of Rural Development with support from DFID. (National Informatics Center, n.d.)

Table 4
Role of data in fighting misappropriation

| Method of misappropriation | The role of open government data |
|---|---|
| Non-existent workers are billed | Public access to muster roll might expose such non-existent workers |
| Non-existent worksites are billed | Public access to non-existent worksites, with geolocation might expose non-existent worksites |
| Workers paid less than the actual amount billed to them | Public access to the wagelist might expose such illegalities to the workers |

(focussed in this paper on workers and activists rather than other significant actors such as bureaucrats) attempt to shed light on the participation of citizens in the last mile, especially in regions where there might not be sustained investment from organised social movements. Also, as we show below, social activists often temper their normative ideals based on their understanding of workers' lived realities. Thus, the social activists shift their emphasis from a right-based anti-corruption agenda to somehow "getting things done". We elaborate below on the subtle distinction between an anti-corruption agenda and getting access to one's own entitlement. We also highlight how the OGD might not be helpful in such contexts and might have to be reoriented to contribute to citizen participation. There are three key reasons why the current design of OGD is not being found directly relevant by workers. The nature of misappropriation is blurring the difference between legally correct and incorrect data. Two, the costs of confronting the state on corruption continue to be non-trivial and have severe repercussions for workers, as evident in our findings but also supported by other ethnographies. Three, the social acceptance of corruption takes away the moral right of citizens to demand accountability from the elected members. The implication is that workers value data that will enable them to identify the "face and place" of officials and office, to "get things done", and to better negotiate with the everyday state.

### *4.1. Changing nature of misappropriation*

Much of the earlier era's extra-legal practices were related to fudging official records under secrecy by a coalition of the local elite, often consisting of elected members, contractors and officials. As Aruna Roy, a key social activist instrumental in campaigning for MGNREGA has chronicled, the official records would consist of names of non-existent workers or non-existent works (Roy, 2018). The other common method of misappropriation would be through duplicate entries, for instance, with the same work on desilting a lake being billed twice. The third category of misappropriation involves the workers being paid less than what they are entitled to. Social activists believed that access to such data would enable genuine workers to expose such misappropriations and demand their right to work (Table 4).

The technology solutions, in many ways, responded to such needs. For instance, the NREGASoft and Janmanrega prevented the inclusion of duplicate and non-existent workers and worksites through deduplication systems such as biometric-based digital identity and geotagging, respectively. Further, since the wages are electronically transferred into the workers' bank account, the local elite cannot interfere at that stage once the payment is digitally signed off. Specifically, in the context of OGD, the NREGASoft and the Janmanrega proactively disclosed data online. As described above, the NREGASoft provides a list of all the worksites with copies of the muster roll and wage list. The Janmanrega app allows workers to locate all the worksites and even provide feedback to higher officials.

However, newer forms of misappropriation have since come up, known locally as "adjustment".[6] For instance, Suresh, a resident of a neighbouring village within the Venkatapalli Gram Panchayat, is

[6] Jenkins and Manor (2017, p. 80) mention similar form of misappropriation from other states.

part of the "adjustment network". His wife is an elected member of the Gram Panchayat. He owns an earth-mover, a truck, and a car. MGNREGA design prohibits the use of machinery in carrying out work as the program's principal objective is to provide wage employment. Also, to ensure that the local state (and local elite) do not come in the way of disbursing full wages to workers, the money is directly transferred from the higher tiers (the union government) into workers' bank accounts. Also, each worker's Job Card on NREGASoft database is linked to their biometric-based digital identity, thereby preventing the prevalence of ghost and duplicate cards.

Despite these measures, the local elite, such as Suresh, are not deterred from misappropriating the resources from the program. For instance, they get the work done using an earth-mover, which is prohibited under the program design. There are significant cost savings when the work is done using machinery compared to manual labour, sometimes up to 80% of the estimated labour cost. Work is almost wholly done through machinery. Because MGNREGA follows a direct benefit transfer, and money can only be directly transferred into the accounts of job card holders, contractors also enrol cooperating job card holders into their adjustment network. Such cooperating job card holders do not work in the program. Yet their names exist on paper (and on the OGD). Their wages are directly transferred into their bank accounts: however, they are expected to withdraw the money and hand it over to contractors like Suresh. The cooperating households are paid a token amount of Rs.200 for allowing their job cards to be used in official records and for their effort to withdraw money from the bank account. The local elites refer to this process of managing the official data to comply with official norms as "adjustment".

We found such "adjustments" to be a widely followed practice in our visits to over 200 households across at least 6 Gram Panchayats as part of the social audit process. Here is a conversation between Sudha (social auditor) and one of the job card holders of a neighbouring village, a middle-aged lady washing clothes near a hand pump in front of her house.

*Social auditor: Have you worked in Narega (MGNREGA)? Desilting the lake?*
*Job Card holder: I don't know about any such work.*
*Social auditor: Ok, have you given your job card to someone? Under the job card scheme?*
*Job Card holder: Oh, yes. Suresh anna*[7] *asked for the card. I gave it to him. What is it all about?*
*Social auditor: Ok, please sign here*.[8]

While the names that the job card holders revealed were different (and it was always men), the underlying adjustment process remained the same. Our findings from our observations and interviews at the Gram Panchayat office with the officials and elected members (such as Suresh) reiterated this practice of *adjustment*.[9]

The key implication of such "adjustments" is that the earlier contestation on access to and accuracy of official data is losing relevance. The worksites exist, and so do the job card holders who are "paid" the wages. There are few duplicate or non-existent workers/worksites. The key process of misappropriation is around the use of machinery instead of manual work, as illustrated above. This misappropriation also subsumes the direct benefit transfer process by retrieving funds back from the worker after the state has paid him/her. Such creative subversion of the process makes it much harder to contest the local elite through open government data.

[7] Anna in local language translates to brother and is a common way women refer to other men.

[8] The social audit process limits itself to such superficial verification unlike findings from other regions, for instance Veeraraghavan (2021), Aiyar and Mehta (2015) and Aakella and Kidambi (2007). This can be attributed partly to the institutional structuring of social audit units. However, a detailed discussion is beyond the scope of this paper.

[9] However, for this paper, we focus on the workers and activists.

### *4.2. High costs of confrontation*

Thus, such data now is not technically inaccurate, unlike the earlier phase of "fudged data". While the legal accuracy of the data is hard to contest, there have been many instances of social activists contesting the local elite in public forums (Roy, 2018; Veeraraghavan, 2021). However, as these scholars document, using data to confront the local elite is risky, often having violent repercussions. Satish recalled numerous instances of physical violence and intimidation from his earlier years of activism for being vocal about corruption.

> *I started a village meeting by saying, "contractors are taking away your money from Narega (MGNREGA). What they are doing is illegal". The contractor standing nearby overheard this and hit me on my head. He then said – "Let's see how you will return to the town". I was very afraid, and I started crying. Later some people consoled me. I somehow managed to reach the town.*

In another instance within the block office, a Panchayat Development Officer (PDO) and an engineer were waiting with us to meet a senior official in his chamber. The PDO, the administrative head of the Gram Panchayat, shared how a "trouble-maker" who had complained to higher officials had been "rightly beaten". The grouse of the PDO was that this person "neither does the work nor allows us to work". The engineer nodded in agreement with the PDO and hoped the youth had "learnt a lesson". Incidents of violence, especially against social activists, have been widely reported in the media from different parts of the country and are certainly not uncommon.

The local elite often complements such physical violence with other forms of threats. For instance, a newly joined member of Satish's team has complained to the district office about a few local contractors using machinery in MGNREGA. In response, an anonymous complaint of sexual harassment was filed against Satish's team. Though confident about the complaint's lack of credibility, Satish was wary of the delays in the judicial system. Thus, along with the difficulties of contesting the legality of data accuracy on the OGD portal, the ability to contest the data in public forums also brings with it the threat of violence and mounting social pressure.

### *4.3. Social normalisation of corruption*

The third barrier to using data in confronting the local elite is the prevailing moral economy around corruption and what is classified as corruption. The assumption inherent in the design of OGD initiatives is that the data on the local government will enable the citizens to demand accountability from the elected members. However, asking questions in the public interest, without any personal stake or grievance, is considered inappropriate. When asked why Nagaraju, a daily wage worker, did not question the local elected member about the illegal use of machinery in an MGNREGA work, he said:

> *If I ask, they retort, "Is it your father's money that I am taking? What is your problem?"*

It is, in fact, common knowledge that the local elite gets the work done through "adjustments" which is a non-issue in the prevailing norm on corruption. Adding to the weakening of a political relationship between the elected and the electorate is the prevalent practice of "vote-buying". Vote-buying refers to a feature of clientelistic politics whereby candidates of elections buy people's votes through extra-legal means. The contesting candidates in the election pay from Rs 500–Rs 1000 per vote to most of the voting population. Candidates consider the elections as investments that pay rich dividends later through "adjustments" described in the previous section. Citizens believe they lose their moral right to demand answers from the elected members. Once elected to power, these representatives exercise autonomy and

are under no obligation to respond to citizens' questions. Nor do citizens expect accountability from them. In the backdrop of such a relationship between the local state and the citizens, there is a limited role in using OGD to question the elected.

### *4.4. Getting things done*

Ruud (2001) in his ethnography of a village in eastern India, points to the ambivalence citizens have about their views on elected members. While they consider politics "dirty", they nevertheless rely on the same politicians to "get things done", often through negotiations and even extra-legal means. The politician who can navigate through the messy power network of the local elite and get things done is considered "powerful". Our findings point to a similar view among wage seekers and social activists. Rather than confronting the local elite over their acts of misappropriation, the emphasis is more on "getting things done" with regard to their work and wages. Social activists, too, realise the limits to citizens monitoring the functioning of the local government. Realising such limitations, social activists tactfully avoid talking about the extra-legal practices of the "adjustment network" and instead focus on ensuring that the citizens get their entitlement. The below description of NPOs office meeting is instructive of such an approach.

As described above (4.2), a new member of Satish's team has complained to the district office about a few local contractors using machinery in MGNREGA. In response, an anonymous complaint of sexual harassment has been filed against Satish's team. Satish is confident that he can prove that these allegations are baseless. However, his team members are wary of the delays in the judicial system. To overcome this challenge, Satish is seeking support from Rajeev, a senior activist of the state-wide collective of workers. The mood in the office meeting is rather tense, with the activists pausing all their visits to the villages. Rajeev listens patiently to the turn of events and reprimands the activists:

> *What you are doing are all signs of heroism, the hunger to become a "leader" and to gain fame. You might feel that you want to eliminate corruption. There are so many people in the country who have been wanting to fight corruption over the last so many years. They have ended up getting 20–30 cases against them. They run pillar-to-post fighting cases. By the end of it, they feel tired and say – "Ok, I don't want activism or NREGA, my complaints are all false, please leave me alone".*

Rather than an anti-corruption strategy, Rajeev suggests something along the lines of "getting things done" through collectivisation.

> *How to reduce corruption in the long run? Build the Sanghatan (collective). Strengthen them. Let these groups get work. Then more and more groups will work. Eventually, out of 100 people, 50 will work. And then 70 people. Automatically JCB work (work through machinery) will come down. The rest 30 will then start feeling that they shouldn't feed into these people's money. Also, these people will protest and demand their rights in front of govt offices. If you want to reduce theft, should you strengthen our doors and windows or go around finding all thieves in town? We should first take care of our home. THIS is how we should reduce theft. THIS is how corruption will come down. So, we should strengthen the collective.*

The above instance highlights the limitations of the OGD as an anti-corruption mechanism and the need for an alternative conception of OGD as enabling citizens to "get things done". Ordinary workers might value the ability to apply for work and get their wages on time. A recurrent issue is the denial of work and delays in the payment of wages. Workers use the English word "clear" in the sense of knowing clearly whom to meet and where to go. Their right to work is often lost in the administrative maze between

different tiers of government (centre, state, local) and the different officials involved in processing their demand for work. Responding to such demands, the social activists too value data that can enable them to know the "face and place" with certainty so they can meet the official and negotiate with them if required.

However, OGD, as described above, is structured as an anti-corruption mechanism. For instance, the below discussion with workers highlights the limitations of Janmanrega app on such OGD.

> *In one of the worksites, as the workers taking a break from digging a bund on a sunny afternoon, we showed them the Janmanrega app. All the workers put their equipments aside and gathered around us. We used the app to show all the worksites nearby, which included a desilting of a lake and a cowshed with its expenditure. Workers looked at our mobile screen with some interest. But soon, we realised that the interest was for the newness of the app, and less for the data which it highlighted. We asked if they knew about the these works being undertaken under MGNREGA. One of them answered with some disinterest "Sir, we do not know. May be someone has got it done. Why should we bother about all that."*

The OGD might provide them with data that has little impact on their living conditions. It might not be aiding them in "getting things done" as evident in the above discussion. The OGD doesn't help them understand the reasons for the delayed wages. Social activists with some familiarity with the workings of MGNREGA, too, struggle to understand the "techno-official" language of MGNREGA. They must sieve through the datasets full of official terminologies to make sense of them. For instance, if an activist intends to understand why a worker has not been paid, they must trace these multiple datasets using the following path:

> Job Card Number → Job Card → Asset Register → Muster Roll → WageList Number → (Search for WageList) → WageList → Fund Transfer Order Number → (Search for Fund Transfer Order) → Fund Transfer Order → Search for Job Card Number.

Thus, there are 11 operations, including two key-in searches and nine hyperlinks, before one can understand the payment status. Despite these 11 operations, there is uncertainty about the payment status as the data contains only rejection codes, which make little sense to them. For instance, a social activist from the NPO team complained:

> *Sir, we are in a fix. We want to help people. I have been working on MGNREGA for the last ten years. Earlier, we would protest in front of the local government office in case of grievances. Nowadays, if we go there, they give us a copy of highly technical official records such as an FTO (Fund Transfer Order) and tell us to examine everything. We cannot make sense of anything on that copy or the online datasets.*

This is not to say that activists have not made sense of these cryptic codes. There are indeed examples of activists in certain parts of the country enabling the interpretation of such OGD datasets.[10] Yet, the design of OGD doesn't aid the social activists and ordinary workers to engage with the everyday state.

## 5. Conclusion

Governments worldwide have begun to proactively publish hitherto inaccessible datasets online, throwing light on the functioning of their different interventions in society. Such initiatives hold promises of

[10] For instance, Libtech group http://libtech.in/ has simplified the error codes.

enabling citizen participation, improving state accountability and contributing to achieving developmental outcomes. Multiple literature reviews including Safarov et al. (2017) and Francey and Mettler (2021), however find very little empirical evidence to such promises of OGD. They, therefore, suggest that "qualitative studies using in-depth interviews may be able to trace causal mechanism between the utilization of certain OGD initiatives and its effects"(Safarov et al., 2017). Responding to such a call, we have sought to understand the role of OGD from a socially embedded perspective (Avgerou, 2010) in enabling citizens' participation. While we recognise the role of OGD in contributing to debates in the arenas of academia and media, our specific focus is on its role in shaping ordinary citizens' engagement with the "everyday state".

Our findings are based on the ethnography of India's livelihood program, the MGNREGA, in the rural dryland district of Karnataka, in south India. Borrowing from James Scott (1999), we highlight how a "seeing like a state" logic underlies the design of the OGD initiative. With digital information systems, the metaphorical "seeing" has become real with unprecedented legibility through direct, unmediated access to digital records. The state-centric design of datasets often consists of aggregate datasets on the performance of different program attributes. Such datasets might be useful for researchers or data journalists to contribute to policy analysis. Yet, they are of little value to ordinary citizens in their engagement with the everyday state. Further, even when the datasets are granular, they are administratively ordered. By this, we mean that the key assumption of the datasets is to fight corruption, especially by the everyday state. In the process, the datasets introduce a "techno-official language" often far removed from the everyday realities of the citizens.

We show how such assumptions underlying a state-centric OGD might not match the lived realities of ordinary citizens who do not share the anti-corruption agenda for at least three reasons. One, the changing nature of corruption has blurred the difference between legally accurate and "fudged" data. Social movements have often sought to confront the everyday state using access to such "fudged" data containing "ghost" and duplicate entries (Sharan, 2021). However, with the practice of "adjustment", administrative data is free of such errors while perpetuating newer forms of corruption. Second, the costs of confrontation with the everyday state and the local elite are non-trivial. Challenging the well-entrenched practices of the local elite can have violent consequences. Our findings reiterate other similar ethnographies on the use of data to confront the local elite (Roy, 2018; Sharan, 2021; Veeraraghavan, 2021). Finally, the moral economy of corruption implies that confronting the everyday state on corruption doesn't have much social appeal. As Webb (2012) points out, citizens might not always share the idea of an "ethical citizen" who must be rescued from the "dirty politics" of parties, patronage, and brokerage.

Instead of confronting the everyday state, the citizens often prefer to "get things done", i.e. access their entitlements (Ruud, 2001). Citizens are often caught in an administrative maze and value knowing the official and the office to negotiate and "get things done". Yet, the state-centric OGD doesn't support such efforts mainly because it is designed to make the functioning of the everyday state legible to the distant state. The administratively ordered datasets containing aggregates are of little value to ordinary workers in getting their work or payments on time. Even when granular data exists, it is presented in a distinctively "techno-official" language. A parallel can be drawn between the OGD and the Right to Information Act. Sharma (2013) shows how the practices of RTI "bureaucratises social lives and activism, forcing ordinary individuals to become competent in a specific kind of technical literacy". The OGD requires competence with the "digital" in addition to the "official" keywords drawing the citizens into the language of the state. Further, the citizens are required to "speak like a state", i.e., grapple with the techno-official language to engage with the datasets put out by the state.

One of the key implications of our findings is the need to reorient OGD initiatives towards citizens' needs. While we acknowledge the relevance of state-centric OGD, we suggest the need to complement

it with a citizen-centric framing. Our findings also highlight the role of social movements in preparing the ground for the use of OGD. A citizen-centric OGD and social movements can mutually reinforce each other. Our findings, especially on the blurring of differences between legally accurate and fudged data through the creative process of "adjustment" caution us against "data worship".[11] Such caution is warranted especially when data is used to claim policy successes prematurely, including by the state. Finally, our study highlights the need for a research agenda on OGD from a socially embedded perspective, especially from underrepresented regions that do not have a strong activist network.

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[11] We borrow this phrase from a keynote address delivered by social activist Aruna Roy.

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