

Findings from a Civil Society Mediated and Technology Assisted Grievance Redressal Model in Rural India*

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ABSTRACT

Social welfare schemes and public infrastructure services often face implementation and last mile delivery challenges. Governments in India have set up phone helplines for beneficiaries to report irregularities but we find that it remains challenging for beneficiaries to realise positive outcomes through these helplines; without a personal follow-up with the concerned local government officials by experienced members from the civil society, the redressals done are often inadequate. To combine the scalability of centralised helplines with the effectiveness of decentralised mediation by civil society groups, we set up an IVR (Interactive Voice Response) system where beneficiaries can record their grievances, which are then delegated to a network of civil society volunteers who do the required local follow-ups for resolution of these grievances. Through this pilot, we analysed over 200 cases of redressal and document how volunteer networks operate and can plug accountability gaps in government services. We advocate for formalisation of this civil-society mediated and technology assisted model into the design of public welfare schemes to enable citizens to engage with government departments in productive ways.

CCS CONCEPTS

• **Applied computing** → **E-government**; • **Information systems** → *Mobile information processing systems*; • **Human-centered computing** → *Empirical studies in HCI*;

KEYWORDS

Grievance Redressal, Helpline, Civil Society, Community Volunteers, Public Welfare Schemes, IVR, Android

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1 INTRODUCTION

Significant irregularities are known to arise in the implementation and delivery of government social welfare schemes and public services in India. The employment guarantee scheme (NREGA) faces problems like non-enrolment, non-payment of wages, poor quality of work and ghost work [15, 27, 37]. Similarly, irregularities are reported in the Public Distribution System for subsidised food [16, 17], the National Health Insurance Scheme (RSBY) [24], schemes for subsidised housing (IAY, PMAY) [30] and other social welfare schemes. The governments also often fall short in providing basic public services and infrastructure like roads, power, healthcare and education [28].

Beneficiaries who encounter these problems can report them, and governments have set up grievance redressal avenues like phone and web-based helplines for this purpose [2, 4, 5]. Unfortunately though, the beneficiaries are mostly people from economically weaker sections, and who we find are not able to realise effective outcomes from grievance helplines alone. We ran a survey in four districts across three states in rural central India, and found that several barriers arise to resolve grievances successfully through the centralised helpline systems. These include access challenges such as the inability of the people to use the helplines, awareness issues to be able to provide detailed information to file an actionable grievance, feelings of intimidation in communicating with a government official, poorly functioning systems and processes that make it hard to track registered grievances, low accountability of the helpline operators to attend to the grievances, etc.

To bridge this gap in helping citizens reach out to service providers, many civil society groups have been working for the rights of marginalised communities to help them get their social welfare entitlements and dues [12]. The staff and volunteers of these CSOs are usually knowledgeable and empowered, they know the rules and laws, and have personal contacts and influence over government officials to be able to strategically enforce accountability and help the beneficiaries. Centralisation of grievance helplines however cuts these civil society groups from the loop, which leads to poor outcomes because, as we show, these civil society members are needed to help the beneficiaries negotiate with service providers at the local level and use pressure tactics to bring about successful resolutions.

To be able to integrate the civil society into the grievance redressal process in a formal manner, we deployed an IVR platform which we ran for over six months in four districts. Beneficiaries could use the IVR to record grievances, and pre-identified civil society volunteers could choose a few grievances on which they could follow-up with the local government authorities for resolution. The IVR was anchored and publicised via a wider IVR-based community media platform in the region, Mobile Vaani, run by our social enterprise

partner Gram Vaani [21]. Through the pilot, we were able to closely observe the resolution of thirty grievances through the mediation of civil society volunteers. In addition we analysed over 180 prior grievances resolved by the volunteers attached to Mobile Vaani. Through this analysis, and interactions with civil society members and beneficiaries during several field visits, we unveil the dynamics of how grievance redressal unfolds on the ground and explain the criticality of civil society groups for successful redressal. We argue for formalising the participation of civil society volunteers through suitable technology platforms into the design of centralised grievance redressal helplines for all public welfare schemes.

Our contributions are three fold: (a) we outline specifically for what kind of grievances filed centrally, is civil society mediation helpful at the local level; (b) we outline various on-ground dynamics that influence grievance redressal, and strategic methods used by civil society groups to ensure successful redressal; and (c) we describe the IVR-based platform which formalises the processes to involve civil society members in grievance redressal, and can be integrated into the implementation of welfare schemes.

2 RELATED WORK

Our work straddles four segments: The use of mobile and web based tools for grievance redressal in the context of developing regions, learning from the operations of centralised government helplines, the role played by media to demand accountability from governments and service providers, and the role of civil society in collective representation of the interests of citizens.

Marathe, et al. [18] compare two phone-based grievance redressal systems in Central India: one set up by the government, handled by live operators, the other running over an IVR-based citizen-journalism service [23]. They observe that while the government helpline is able to quickly resolve simple cases, the other service is able to draw attention to large and neglected problems. In previous works, [11, 34] we used automated IVR calls to verify the data published by the government on the employment guarantee scheme in India, and find that people register grievances if it is made simple for them to do so. Similar to these initiatives, our platform also uses IVR systems. Our focus in this work however is to document the importance of civil society groups and the processes they follow to bring about successful redressal, and propose how they can be formally integrated into centralised grievance redressal systems of the government.

Narayanan [26] describes two case studies of online public grievance redressal mechanisms in Bangalore and Mumbai in India, and recommends greater horizontal accountability within the government departments to be able to deliver better services to the citizens. Mohan, et al. [20] review two e-governance interventions in Karnataka, one of which was a complaint tracking system, and similarly found it to not be effective because of its centralised nature which prevented the citizens from directly engaging with local service providers and officials for their complaints. Veeraraghavan [39] examined if the elaborate Management Information System (MIS) for the employment guarantee scheme in India, was able to eliminate corruption. He found that local officials discovered ways to subvert the system, and it largely helped in making the financial accounting processes more streamlined rather than the intended

objective of greater accountability and transparency in the implementation of the scheme. Our work builds upon these insights and we demonstrate through our pilot that involving the civil society in a decentralised manner to hold local officials accountable, can possibly deliver better results than centralised systems operating within the walls of the government departments. The findings of van Teeffelen and Baud [38] are similar to ours. Looking into an e-grievance redressal system set up in a municipality in Southern India, they highlight the difference between entitled citizens living in regular settlements who are able to demand their rights, and citizens living in irregular settlements who are not entitled to many basic civic amenities, because of the extra-legal nature of their settlements, and have to go through local politicians or community organisations to access them. We build upon similar insights and propose a system in which the civil society can be formally involved in the grievance redressal process.

Mass media can be instrumental in building pressure on authorities and service providers to be accountable to the citizens, and several initiatives have successfully used media pressure to improve grievance redressal. Publishing statistics on mass media and social media related to unresolved complaints on urban waste management from different parts of Delhi was found to be useful in catching the attention of senior officials to take action [31]. Publishing audio-recordings of grievances on public voice-based discussion forums became a vehicle for government officials to stay informed and take the grievances more seriously which had earlier gone unnoticed [11, 18, 21]. Voltmer [40] states that mass media is the primary source of information for citizens and can therefore play a strong role in enforcing government accountability by raising issues in a timely manner especially at the time of elections. Similar to some of the above initiatives, our grievance redressal platform was anchored to a wider community media platform running in rural central India, and we outline how airing of grievances on this platform influenced their redressal.

Srinivasan [33] documents how decentralised collective action by the citizens has led to better delivery of public services like schools and healthcare in Tamil Nadu in India, than in other states. He argues that the history of mass social movements in Tamil Nadu empowered marginalised communities for self-organization, and built internal resources and local leadership within the communities to be able to demand improved public services from the local administration in a decentralized manner. Stolle and Rochon [35] discuss how the social capital created by people's associations in bringing different stakeholders together, leads to better schools and education, enhances economic development and makes governments more effective. Carothers and Barndt [10], and Weiner [41], similarly highlight that governments should provide space for civil society groups to bargain legitimately for their rights. Brenton in an Australian Parliament research paper [14] argues for a reform in public administration towards 'co-creation' and 'co-production' wherein government agencies, non-government organisations, communities and individual citizens collaborate to design policy. Narayan [25] lists some primary successes of pressure groups in India in bringing legislative reforms, like the Right to Information Act, the Lokpal Act, and mandatory disclosures by election candidates. In our work we do not focus on policy formulation per se, but highlight the important role that civil society plays

in the rural Indian context in helping communities get their rights and entitlements on government schemes.

3 MOTIVATION

We ran a survey in three states to understand the usage and outcome of existing government run grievance redressal helplines. We also interviewed several government consultants and civil society experts on their views, and observed the functioning of civil-society organisations that helped people with grievance redressals. We describe our findings here, and use them to motivate the design of our technology assisted grievance redressal platform that integrates civil society volunteers into the redressal process.

3.1 Feedback on government grievance redressal helplines

Using Mobile Vaani, the IVR-based community media platform of Gram Vaani, we ran an IVR survey in our four pilot districts: Bokaro in Jharkhand, Jamui and Madhubani in Bihar, and Chhindwara in Madhya Pradesh¹. The states of Jharkhand [4] and Madhya Pradesh [5] have centralised operator-based phone helplines. Bihar has a distributed mechanism where a government officer in every sub-district holds in-person quasi-judicial hearings to resolve grievances [2].

We asked six questions in the IVR survey. Table 1 summarises the questions and the responses. 1199 respondents from across the four districts completed all the questions. A majority of the respondents in Bihar and Jharkhand reported that they were not aware of the helpline being run by the state government, while in Madhya Pradesh most people knew about the helpline. Among the people who were aware about the helplines, the usage was low, with almost half of the respondents saying that they never used the helplines. Madhya Pradesh again fared better in this. Among the people who used the helplines, we asked how many of their grievances had been resolved. Most respondents answered negatively. We also asked what avenues did they currently use to get their grievances resolved, and most people indicated that they used in-person interactions at periodic public meetings held at the village and district levels, and did not prefer to use the helplines.

We also followed up over manual phone calls with some of the survey respondents, and through the community media platform we solicited qualitative data on people's experiences with the helplines. One of the common complaints highlighted was that resolutions are not provided in a timely manner. Often the resolutions are also meaningless - some people reported that the officers against whom grievances are filed submit false claims countering the grievances, and the complaints are subsequently closed taking the officers' words at face value. One person added that "... officers try to resolve grievances from their offices and hardly visit the ground", pointing to the observation that while certain grievances like clerical errors in data entry (such as the number of work days in the employment scheme) are solvable from an office, grievances which are on entrenched corruption with local contractors or discrimination with certain groups, need a more layered and decentralised approach.

Our interviews with government consultants and local experts revealed similar aspects. One significant drawback reported of phone based helplines was *over-centralisation*. Experts pointed out that a one-size-fits-all model misses local wisdom and knowledge which is required to deal with issues in a practical manner. In fact, in Jharkhand the Chief Minister's office selects only three districts each week and tries to focus in detail on a few grievances there. Language is another issue: "*The operators behind the helplines are under-trained and beneficiaries speaking regional dialects and languages find it difficult to communicate with the Hindi-speaking operators.*" Although the helpline managers told us that there are regional language speakers on their roster, consultants told us that that is not the case.

Several experts also highlighted the issue of *trust and faith* in technology based impersonal platforms. "*People tend to put more trust in people who they can see and talk to directly. There is a lot of negative publicity by people whose grievances are pending or unresolved with the system.*"

The *answerability* of the helpline officials was also reported to be questionable. One expert told us that the only time there is some effort to resolve a complaint is when there is pressure from higher officials, and not because the official felt it was necessary to resolve the grievance. Although denied by the helpline operators, a consultant also reported that grievances are often closed without resolution. One of the volunteers in our pilot who has been extensively involved in social work told us, "*I had filed a grievance (with the helpline) that there is no toilet in the primary school. The complaint was escalated twice and then I was informed that the grievance has been resolved and we are closing it. But the toilet has not yet been built.*"

3.2 Offline civil society systems

There are several organisations set up by the civil society, and often encouraged by the government, like the *NREGA Sahayata Kendras* (NREGA Help Centres) [12], which help beneficiaries resolve grievances and get their dues. The centres have been quite successful because of their on-ground presence and availability in the local community, and have built a lot of trust and goodwill over the years. An expert associated with the Right to Food Campaign told us "*If one is only providing mechanical responses then it does not work. But if someone is talking to the person face to face, or even on the phone, and trying to understand the problem, or explaining the procedure to the person on how to submit the complaint, that has a different effect. That has a human touch. We keep the complainant informed about the status, the people in our office follow-up on the complaint.*" The NREGA Sahayata Kendras also educate people about the scheme and help them enrol for it and use it. If and when grievances arise, they help file them at appropriate levels. They provide hand-holding support and train the beneficiaries so that they can help other beneficiaries in their villages as well. This in turn builds trust within the community about the Sahayata Kendras and the people running them. The Kendras' staff and volunteers use their own expertise and methods to operate, customising them based on the attitude of the local officials, and sometimes even build pressure by organising public hearings to hold the officials accountable. "*Protocols exist but the problem is with accessibility,*" an

¹These are also the places where we ran our pilot. We chose these places because Gram Vaani has a strong presence there.

Table 1: Summary of a survey carried out in 3 states about existing grievance redressal systems. Other than Madhya Pradesh, the survey indicated that people were generally not aware of the existence of these systems, and usage was low even when people were aware of their existence. In addition, the redressal rate of grievances was low, and people preferred using public meetings to get their problems resolved.

Condition		Options	Bihar	Jharkhand	Madhya Pradesh	Total
	No. of respondents		707	383	517	1607
	Completed all questions (%)		75	70	77	75
	Gender (%)	Male	74	81	89	81
		Female	26	19	11	19
	Age (%)	<18	38	31	25	32
		18 - 30	45	53	60	52
		30 - 50	14	14	11	13
		>50	3	2	4	3
#4 > 18	know about government grievance redressal system (%)	Yes	22	30	57	36
		No	78	70	43	64
#5 = Yes	used government grievance redressal system (%)	Yes	36	48	57	50
		No	64	52	43	50
#6 = Yes	how many grievances filed by you were resolved by the government system? (%)	None	ISD	50	54	53
		At least half	ISD	33	25	26
		All	ISD	17	21	21
#4 > 18	what grievance redressal avenues do you use currently? (%)	Public meeting at Block or District office	25	28	5	-
		Public meeting at village	35	28	35	-
		District grievance redressal cell	10	-	-	-
		Public meeting at the Chief Minister's office	-	-	29	-
		None of these	33	43	31	-

ISD = Insufficient Data; '-' = not present in this state

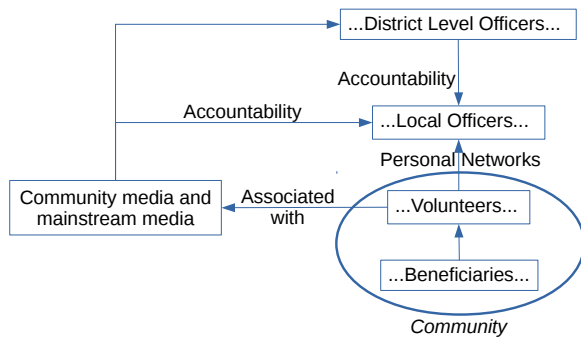


Figure 1: High level view of our model.

expert working with the Public Health Resource Network [6] told us, “If people are not able to access the officers directly and therefore they go through me, then it is an accessibility issue. There are people far and wide who are not able to reach the officers . . . they come to the civil society and the civil society then further links them to the system either through their network or connections, or through their influence, or points them in the correct direction.”

Given the challenges noticed with grievance redressal helplines of low awareness, over centralisation of redressal action, trust deficit, and low answerability of the helpline operators, and noticing how civil society groups improve accessibility and accountability of the government officials, we build our model with the goal of integrating civil society into the redressal process of helplines, assisted

through appropriate technology. A high level view is shown in Figure 1: Beneficiaries can record grievances on a helpline and are then matched with appropriate civil society volunteers; volunteers leverage their knowledge and experience to influence government officials to resolve grievances; volunteers can boost their influence by also tapping into media networks such as Mobile Vaani to publicly air the grievances and bring them to the notice of higher government officials. Our model thus aims to formalise the role of civil society volunteers in the grievance redressal process while preserving the scaling capability of helplines. We describe in the forthcoming sections the pilot study design and our observations on how volunteer networks operate, what kind of grievances are suited for centralised versus decentralised processes, and how the model can be scaled.

4 PILOT STUDY DESIGN

Our primary goal with the pilot was to involve civil society members in the redressal of common grievances originating in the community, and understand what kind of assistance do the civil society members provide to bring about successful redressals. This would help us understand the types of grievances suitable for resolution centrally and the types of grievances that require local decentralised involvement of the civil society, the limits of civil society assistance, and aspects to keep in mind if such a model is to be scaled.

We chose four districts in which our community media partner, Gram Vaani, was active, and used their platform to publicise a grievance recording IVR system we co-developed with them. We then recruited participants from among Gram Vaani’s field volunteers

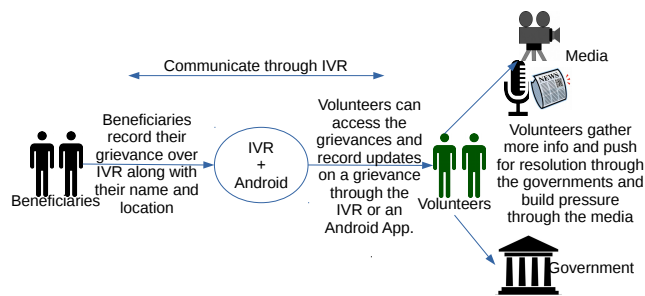


Figure 2: Overall system design.

who had been actively involved in helping communities resolve their problems with government schemes and local departments, and provided them with an IVR system (and an equivalent Android application) to accept grievances on which they can follow-up, and provide updates on the follow-ups. At the backend, we were able to track the status of different grievances, and kept in close touch with the volunteers to document the steps they undertook to take the grievances to conclusion.

Figure 2 gives a broad overview of the system. A beneficiary places a missed-call and the system calls them back. The beneficiary thus does not incur any cost, and can record her/his grievance over the returned call. Civil society volunteers can access the grievances through a different IVR (or an equivalent Android app) system developed for them. The volunteers can listen to the recorded grievances, choose the ones they want take up, and post regular updates through the IVR or app. Beneficiaries of the corresponding grievances are updated about the progress through automated voice calls whenever a volunteer posts an update. The system works at the district level, so that volunteers in a specific district are able to access and report on only grievances from their district.

4.1 About the volunteers

Mobile Vaani carries content on a range of topics like discussions on local news, agricultural Q-and-A, gender empowerment, health awareness campaigns and cultural expression. A technology team builds and maintains a cloud hosted IVR platform to deliver the service. A content team in consultation with the community conceptualises new topics to raise discussions, and moderates the discussions by reviewing audio contributions made by the users to filter messages for publication. Finally, a community mobilisation team works with a large cadre of volunteers, and trains them on several aspects like community news reporting, mobilisation activities to publicise the platform, and how to assist communities on grievance redressal. The volunteers come from a range of backgrounds - some are social workers, some are students, some work with regional newspapers, or as school teachers.

In addition to training the community volunteers on reporting and mobilisation techniques, they are also trained on how to write petitions to the administration on issues of public interest and how to follow-up on them. Gram Vaani begins with introducing them to the local government officials to build trust between the volunteers

and the administration. In many cases, the volunteers have pre-existing networks with the officials which get boosted because of the additional credibility that their association with the community media platform now brings. The volunteers then, based on the needs of their communities, float campaigns on the platform on topics of public interest to mobilise support for these causes. Feedback from the users is summarised into letters, reports are drafted by Gram Vaani, and these are formally taken to the administration by the volunteers. In another activity, the volunteers meet the officials and make them listen to voice recordings of reported issues, and then get a commitment for redressal from the officials. Consistent follow-up by the volunteers on these petitions and grievances has led to several successful resolutions, including payments of pending wages to labourers, improved attendance of staff at public service kiosks, better power supply, regularisation of mid-day meals in schools, better drinking water supply at public health centres, and several other cases.

We enrolled participants for our programme from this pool of volunteers. We held meetings with around 40 volunteers from the four districts and trained them on how to use the system. 10 of them actively participated in the pilot. Most of them have at least a bachelor's degree, two of them have a master's degree. Most have steady sources of income - few are teachers, some have businesses and do some form of farming, while one is a contractor and another is a government pensioner. The least period that a volunteer was involved in journalism and social work is 5 years, while one of them had been involved in journalism for 35 years and in social work for 40 years. We did not provide any monetary incentive to the volunteers to participate in the pilot. Gram Vaani has a financial incentive policy for the volunteers which is designed to be pro-rata to the IVR call volumes from their areas, but largely intended to compensate them for out-of-pocket expenses for their work with the platform. The pilot therefore did not intend to change anything in the working of the community media platform and the activities performed by the volunteers, it was only intended to evaluate a technology based formalised grievance registration and tracking process, and to use this to understand the dynamics of civil society mediated grievance redressal on the ground.

4.2 About the IVR

The grievance redressal IVR was intended for two sets of users, the beneficiaries to report grievances and track the status, and for the volunteers to accept grievances and provide status updates. Phone numbers of the volunteers were pre-registered on the platform to be able to provide the appropriate interface to the callers depending on whether they were a volunteer or a user. Four different instances of the IVR were deployed, one for each district, with their own unique phone numbers. The platform was publicised via the wider community media platform, and it was also possible for users calling into the community media platform to simply press a button to jump to the grievance redressal IVR for their district.

The beneficiary IVR interface was very simple and only asked the caller to give as much information about their grievance as possible, along with their name and detailed location information.

The volunteer IVR was more complex with 8 different actions that could be taken. The volunteers are accomplished with using

Table 2: Socio-economic profiles of the pilot districts

	Jamui	Madhubani	Bokaro	Chhindwara
Illiterate (%)	51	52	38	38
Marginal Worker (%)	16	13	15	14
Unemployed (%)	59	64	68	54
Marginalised communities (scheduled castes and tribes) (%)	22	13	27	48

Data sources: Census of India 2011

fairly complex IVRs and were trained specifically on this interface as well. The IVR begins with playing unassigned grievance recordings from the district of the volunteer. The volunteer can flag grievances that may be poorly recorded, and these are passed on to the content moderators of Gram Vaani for another check. The volunteer can also accept and assign a grievance to himself, or talk to the beneficiary to gather more information about the grievance, or skip to the next and previous grievances in the unassigned list. Whenever a grievance is assigned, the volunteer and the beneficiary both get an SMS with each other's phone numbers. At any time, the volunteers can jump to a sub-menu in which they can listen to the grievances assigned to them and record updates on the redressal process. Any recorded updates are also sent to the beneficiary through an outbound call. Moderators constantly review the updates, and we also kept in close touch over the phone and WhatsApp with the volunteers to get insights on what methods were they using to take the grievances to conclusion.

4.3 About the Android application

We also designed an Android application for the volunteers to make it easier for them to navigate through the grievances. The structure was similar to the IVR, with the additional feature that the volunteer himself could record a grievance on behalf of a beneficiary, to handle cases where the volunteers would come across beneficiaries who were not aware of the platform and found it hard to use the IVR right away. Three volunteers in the pilot used the app more actively than the IVR, but also reverted to the IVR whenever data connectivity was poor in some parts. In this work we do not delve deeper into IVR or app usability, our focus rather is on the insights gained by observing the grievance redressal process mediated by the volunteers.

4.4 About the locations

Our choice for districts was primarily driven to capture the diversity across different states, and to choose some of the most active districts of Gram Vaani in these states. However, the socio-economic conditions of these districts also made them ideal field sites for our pilot. A summary of the district profiles is shown in Table 2 [3]. The districts have high levels of illiteracy and unemployment. There is a substantial population of marginalised communities of scheduled castes and scheduled tribes. Consequently, there is significant dependence on public social welfare schemes and public infrastructure and services. Bokaro and Jamui are also hit by left wing extremism, so there is an emphasis by the government to provide additional social assistance in these areas.

5 RESULTS

Over the course of six months of our pilot, we received over 2500 posts from the four districts, of which around 450 were valid grievances. The posts which we categorised as invalid were either blank, the audio was too noisy to understand, or people did not report a grievance in these posts. The most heavily reported issues were about roads, electricity, the public distribution system, education, and housing. The high number of invalid posts were probably because of users of the community media channel opted to visit the service but did not have a grievance to post. The volunteers worked on around 40-45 grievances out of the 450 valid grievances and were able to bring 30 of them to a logical conclusion. In addition, the community media volunteers working with Mobile Vaani have been able to bring impact in more than 180 cases over the years [21], and we interviewed them about their prior grievance redressal experiences as well to understand the dynamics of the process on the ground. In this section we first present a breakdown of different kinds of grievances and then outline in more detail the mechanisms that led to their redressal, or challenges faced in resolving them.

5.1 Grievance categorisation

Table 3 summarises the 30 plus 180 cases of grievances which were resolved, the percentage of grievances in each category, and the dominant avenues adopted for their resolution. We were unable to obtain detailed information about grievances reported or resolved by the government helplines, and rely on the successful resolutions tracked by us to build an understanding of the issues faced by people and how they were resolved.

Administrative inaction. Almost half of the grievances resolved with help from the civil society volunteers had been caused due to administrative delay and apathy. These issues had been reported through different channels earlier but did not lead to any action. These included several cases where villagers depended on a hand-pump for drinking water, but the hand-pump had become defunct and the authorities did not get it repaired. Similarly, the power transformer in a village had burnt but no replacement was made for several weeks. There were complaints of irregular payments in pension schemes, scholarship schemes, and wages under the employment guarantee scheme where the money actually paid to the people did not tally with the official records. There were similar complaints of dysfunctional street lighting, irrigation facilities, or irregular mid-day meals in schools. The common thread across these grievances was they were all local problems that could have been dealt with through systems already in place, but the authorities just dragged their feet. Such grievances may also be suitably dealt with through the government helpline if there is enough accountability in the system. For these cases, continuous follow-ups by the volunteers through their contacts and the airing of grievances on community media helped bring about the necessary action.

Lack of public infrastructure. Some complaints were about the need for new public infrastructure like new roads, village electrification, and construction of new bridges. We distinguish these from the category of *administrative inaction* because these cases were not about negligence in the repair of existing defunct infrastructure, but on the lack of the infrastructure itself. These cases are harder to

Table 3: Summary of resolved grievances. Shown below are the different categories of grievances, the percentage of grievances from each category, and suitable avenues for their resolution.

Category	%	Examples	Resolution avenues*
Administrative inaction	48	lack of information on village meetings, hand pumps defunct, transformers defunct, employment guarantee wages irregular, pensions, hospitals: medicines, vaccinations and staff absent, bad sanitation facilities, girl child benefits inaccessible, incompleteness of public work like road construction, street light, non-arrest of criminals, red tapes in various departments, irregular mid day meal, scholarships not paid, irrigation not facilitated	C, H, M
Lack of public infrastructure	27	non construction of roads, inadequate coverage of electricity, lack of drinking water sources, lack of child and maternity care centre, lack of bus passenger shelter	M
Local corruption	11	hospital taking bribe, irregularities in public distribution system, opium cultivation overlooked, irregularities in road construction, false voters in election, toilet construction money embezzled, corruption in banks, headmaster charging money for admit cards, bribery for aadhar card, employment guarantee money embezzled	C, M
Community demands	5	non creation of new district and sub-district, non payment of crop insurance, lack of development of tourism, wrong question paper provided in university examinations, lack of school text books, violation of prohibition, non distribution of forest rights, lack of access to sanitary napkins, lack of fire accident relief	C
Systemic Corruption	4	sand mining, bootlegging, mid day meals, land dealings	M
Personal relief	4	faulty insurance card, housing scheme amount not received, insurance amount wrongly credited, relief for poverty-stricken families	C, H

* C = Personal influence of civil society volunteers, H = Government Helplines, M = Mobilisation of public opinion through the media

address because they usually require allocation of funds and drawing up of work orders, which requires resourcefulness on the part of the concerned officials to be able to mobilise the funds internally. Civil society volunteers were able to successfully draw attention to such cases by floating petitions on the community media platform and also bring other organisations into the conversation to make a stronger case. Strong attribution to the community media platform was made in several cases where new hand pumps were sunk and bus passenger shelters were constructed.

Local corruption. Some complaints of corruption were of a local nature, and although these are recurring cases across many locations they do not seem to be rooted in any organised corruption networks. These include cases where a government hospital charged money for free medicines or tests, a dealer in the public distribution system did not distribute supplies in a timely manner and reduced the allotted quotas arbitrarily, a village head embezzled funds from the construction of household toilets and the employment guarantee scheme, undeserving beneficiaries in one village were given benefits of the housing scheme, a bank manager demanded bribes to sanction loans, a school headmaster demanded payment to issue examination admit cards, and some agents demanded bribes to enrol beneficiaries for Aadhar cards (universal identification platform). These are not clerical grievances for which data or evidence can be collected easily over a centralised helpline. The redressals require inspections by higher officials and we found that in such cases, the officials can be persuaded to take prompt action by the civil society volunteers who can vouch for the veracity of the claims.

Community demands. Similar to the above, several initiatives were demanded by the community which did not have any broader government scheme to anchor them. This included a request by private schools in a remote block to distribute textbooks in the schools, relief funds for a fire accident in a village, and initiatives to develop tourism at a historic site. Owing to public demand around these issues, government officials took one-time steps to meet the

demand. The role of civil society volunteers was instrumental in raising and following-up on these issues.

Systemic corruption. The nature of some grievances pointed to well organised and systemic corruption likely to have a deep involvement of government employees or representatives. Examples include illegal sand mining from river beds, smuggling illegal liquor in states where prohibition is in place, and illegal land dealings with the help of unscrupulous officials. Demanding action by the authorities on these issues can be facilitated by demonstrating a large mobilised public opinion, and we found that mass media and community media can play a significant role to convince authorities to take note. These issues otherwise are unlikely to get redressed by reporting specific incidences of such cases on government helplines.

Personal relief. There were a few grievances which related to individual citizens and not to the community as a whole. A beneficiary was not able to access health insurance as her insurance card was damaged, and a volunteer got the card replaced. Similarly, a beneficiary received a pending amount that was due from the housing scheme after a volunteer intervened to help with the application. A long standing dispute was resolved where an insurance company credited an amount to a wrong person. A family was accidentally not included in the list of Below Poverty Line (BPL) families, and a volunteer was able to obtain a temporary status for them until the next round for preparation of the BPL list. Such grievances can also be dealt with through government helplines, provided the beneficiaries are able to provide the required details.

Incorrect grievances. There were also several cases not included in the table above where beneficiaries requested for resolution of grievances which were not valid. This was largely because of not having complete and accurate information about the government schemes. For example, only people on the BPL list are eligible for the housing scheme but several other people also complained that they did not receive the benefits. Volunteers provided them with this information through our system. Similarly, the quota under the public distribution system is different for different categories

of people depending on their income levels. Clarifications by the volunteers helped address these concerns. In such cases where the beneficiaries did not have adequate information, civil society volunteers were able to guide them. Centralised helplines can also serve as an information source provided the helpline operators are well trained and informed themselves.

From the description above, it can be seen that in their current mode of working, centralised government helplines can be useful for only a certain category of grievances, and for which too there is likely to be a role that the civil society members may need to play in ensuring prompt and appropriate redressal. For many categories of grievances however, local action is required through in-person meetings and follow-ups by people experienced and knowledgeable about the government schemes. We next outline in more detail the underlying processes that volunteers follow for redressal.

5.2 Factors affecting resolution

We found that the network that civil society volunteers have built over the years with government officials and the media plays an important role in the process of resolution and in prioritising the issues for officials to take action. We outline some specific examples below.

Approaching the appropriate officials. A significant factor we found that determined the fate of a grievance was taking it to the right person. In some cases, officials or public representatives were personally known to the volunteers, so when the volunteers approached them, the grievance was resolved on priority. In other cases, routing the grievance to the correct official helped in the resolution. Common people often do not have knowledge about the processes or officials who are responsible to handle a particular type of issue.

In one instance, an MLA (Member of Legislative Assembly) committed to building bus passenger shelters before an election, but nothing moved after he got elected. A beneficiary reported this to our system, and one of the volunteers who knew the MLA personally then got in touch with him. The MLA soon sanctioned ₹500,000 and construction of the passenger shelters was initiated. In a similar case, the power transformer in a village had burnt and was not being replaced. A volunteer got in touch with an engineer he knew in the department and expedited its replacement. In yet another case, a beneficiary reported that his family was having trouble making ends meet as their name was not in the BPL list and consequently they were unable to get subsidised food under the public distribution system. A volunteer knew the village head who then made temporary arrangements for the family to get the BPL benefits.

The typical method that the community media volunteers use to leverage their contacts is that they begin with forwarding the recorded grievances to the concerned officials. This message forwarding can be done through the IVR platform itself; the volunteers have to key in the phone number of the recipient and also record their own name, following which the recipient gets an outbound call from the system announcing the name of the volunteer who has forwarded the message, and then the message is played. The volunteers then also follow-up over the phone with their contacts,

and if required then they meet them to provide the required details, or guide the beneficiaries to meet the officials.

Escalation to higher officials. Another mechanism used by the volunteers was to escalate the grievances to higher officials in the administration. In many cases the senior officials ensured that action was taken by the lower officials to get the issues resolved. Volunteers also made use of the weekly or monthly public hearings (*Junta Darbars*) held by officials at the district and the state levels to bring attention to grievances. For instance, an employment guarantee scheme beneficiary hired labourers to work on a well in his village, but they were not paid after completion of the work, and the official in-charge denied any pending payments. A volunteer examined the papers and collected details of the issue along with the name of the officer, recorded a comprehensive audio report on Mobile Vaani, and forwarded the message to authorities at the district and block levels. Having come under pressure from his supervisors, the official made half of the payment the very next day and promised to make the remaining payment soon. One volunteer was also instrumental in starting *Junta Darbars* at the local block level besides those at the district and state levels to resolve local problems.

Media pressure. Several resolutions were facilitated as a result of the pressure exerted by publishing grievances publicly on the community media platform, and sometimes also in regional media newspapers. A volunteer through his contacts with a local newspaper, cross-published a complaint about a clogged drain on the community media platform along with a picture in the newspaper. The drain was immediately decongested the next day.

The Mobile Vaani platform runs campaigns called the *Jan Shakti Abhiyan* (People's Power Campaign). In these campaigns an issue of larger community interest is highlighted and the experiences and feedback of the listeners on the issue is solicited. The feedback is compiled and petitions are submitted to the government urging action on the issue. Several of the grievances resolved were issues which had been taken up as campaigns across multiple districts. Reports on illegal sand mining and bootlegging from across the state were simultaneously collected and posted on Mobile Vaani. Data was collected through IVR surveys on the state of drinking water and availability of free medicines at the health centres. The survey statistics and experiences of the people were carried on the Mobile Vaani platform, and a regional newspaper also got in touch with Gram Vaani and carried a large feature story on the issue. Similarly, with widespread irregularities in the mid-day meal schemes, citizen accounts were solicited over the community media platform, compiled together, and aired on the platform. Written applications were also sent by Gram Vaani to the authorities urging action against these practices. The results were extremely encouraging - arrests and seizures were made in the sand mining cases, the mid-day meal scheme was improved, and several health facilities reported better functioning after the campaign.

In these cases, the media platform helped mobilise the opinion of citizens which was leveraged to put pressure on the concerned officials. Forwarding of messages, playing them to the officials in one-to-one and public meetings, carrying the reports on the community media platform and regional newspapers, and writing formal

letters to the authorities citing verified evidence of the problems, served as a catalysing factor in bringing attention to the issues.

Influence of volunteers. In some cases, the volunteers were able to resolve disputes because of their social standing and influence in the community. In a case of mistaken identity, an insurance cheque went to a different person with the same name as the beneficiary. The other person encashed the cheque and refused to return the money. The volunteer was able to call both parties to the *gram kacheri* (local quasi-judicial dispute resolution forum in the village) and impress upon the other person the consequences if legal proceedings were initiated by the beneficiary. The other person then agreed to return the money. The beneficiary strongly suggested in an interview to us that the standing of the community media volunteer as a respected social worker played an important role in convincing the other person.

5.3 Unsuccessful resolutions

There were cases where civil society volunteers were unable to bring grievances to a satisfactory resolution. Many such grievances were related to the construction of new assets like roads or rural electrification. Despite campaigns on the community media platform as well as stories carried by local newspapers, and assurances given by the local authorities, no action was taken because in these cases the fund allocation was done at the state level where the local officials had no influence. The volunteers were also not able to pursue the matter at the state level because of their own limited networks which were largely local. Even our partner, Gram Vaani, did not have a connect in these state departments.

An interesting case during a campaign on irregularities in the public distribution system, was a grievance against the local dealer in a village that the dealer provided subsidised food items lesser than the allotted quota per household. To verify the matter, the volunteer asked the complainant to bring with him a few more people as witnesses so that he could then take up the case with the authorities. The complainant however backed out at this stage, citing that the dealer belonged to a majority caste in their area and testifying against him could land the complainant in trouble. The volunteer dropped the matter at this stage. It is hard to say whether the verification method adopted by the volunteer was appropriate or not, and whether the complainant was raising a real issue or was he trying to extort a personal vendetta, but this case does reveal the extent of complexities that can arise in a loosely structured civil society mediated redressal model. We discuss such issues in the next section.

We also note that the ten volunteers over a duration of a six month pilot were able to work on only 40-45 grievances out of 450 recorded valid grievances. The main reasons cited by the volunteers was limited time that they could devote given their other occupations, and that their expenses went up because of the additional follow-ups they had to do for the pilot. Of the grievances that the volunteers took up for resolution, they were however able to resolve almost 70% of them, which demonstrates a high efficiency. Similarly, the reason for only 10 volunteers to participate in the pilot out of almost 40 volunteers of Mobile Vaani in the four districts, was the time commitment required over and above whatever they were

doing already with the community media platform for reporting and community mobilisation.

We can therefore see that civil society mediated grievance redressal has its challenges too. To what extent can the volunteers stretch their influence and network, how much time and resources can they invest, how can they be incentivised or remunerated for their efforts, and also whether they follow appropriate methods for verification and community engagement, are aspects that affect the success of this model. However, the gaps in the centralised helpline models are significant as documented above, and civil society certainly has a strong role to play to augment helplines and ensure that marginalised communities get their due entitlements.

6 DISCUSSION

Given the pros and cons of the civil society mediated grievance redressal model described above, we next discuss the scope for institutionalising such a model for scale-up.

6.1 Institutionalising and scaling the model

What seems clear from our observations through the pilot study is that civil society groups have much to add over and above centralised grievance redressal helplines. They can certainly play an important role for categories of grievances that are not suitable for centralised handling, but also grievances that can be handled centrally can get a more rigorous treatment if an experienced civil society member is kept in the loop. The governments are not averse to such a role being played by the civil society - the *NREGA Sahayata Kendras* described earlier are recognised by the government as legitimate bodies that represent the people, and a programme called the *Bharat Nirman Volunteers* (Volunteers for Building India) was initiated in 2005 [1] with the view to recruit and train volunteers who can ensure that the benefits of welfare schemes reach the intended beneficiaries. Our model only suggests the use of technology to bring such civil society groups and volunteers into a formal grievance redressal process, so that the ease of scaling and tracking through a centralised helpline can be combined suitably with the decentralisation of civil society members to be able to follow-up locally with the appropriate government officers. Further, this can be augmented with leveraging mass media and community media to bring transparency on the status of grievances and community demands, and to pressurise authorities for accountability in their responsiveness.

The challenge that however remains is whether the civil society can be expected to participate and assist in the grievance redressal processes at scale. Why would they want to do it? How much time can they invest? Should they be engaged in a voluntary role like the groups in our pilot, or in a paid model? We discuss these questions below.

We trained forty community reporters on the system but only around ten actively participated. The reason behind this low uptake, as cited earlier, was a lack of time plus additional expenses they would incur in the process – we did not provide any monetary incentive to the volunteers to participate in the pilot. When we asked the ten volunteers why they chose to get involved with the pilot, one volunteer told us that with being attached to a media he was only able to highlight people's issues, but this pilot also

enabled him to take these issues to resolution, which was new for him. Another volunteer pointed out that the acceptance of the community media platform was enhanced because of the grievance redressal pilot, and more people began to appreciate the platform. Most of all, everybody said that they were enthusiastically involved with social work, and this pilot was another medium to channelise their passion. Even the broader set of volunteers working with Mobile Vaani who did not actively participate in this pilot, expressed similar views that to the extent they can manage, they enjoyed their work in empowering communities to create their own media and to bring about action through the platform.

While the volunteers seemed to be truly motivated for social development, they consistently stated that even the reasons behind being able to take up only 40-45 grievances for action out of 450 that were reported, was because of their time availability and additional expenses incurred in travelling to the beneficiary's home and to the government offices. Although this varied from case to case, volunteers typically had to undertake 1-2 trips per grievance, each trip costing them around ₹60-120 (1-2 litres of petrol, depending on the distance to the government office or the beneficiary's residence) and each visit taking about 1-2 hours depending on how busy were the officials. Some simpler grievances however did not require travel and could be resolved just through phone calls. The volunteers suggested that more people will involve themselves if at least their expenses could be covered through suitable remuneration or other incentive policies.

We therefore looked at ways in which incentives had been designed in other programmes that heavily depended on civil society involvement for success. An earlier study by Gram Vaani [21] showed that most volunteers who were economically well-off with a steady source of income, were not motivated so much by the small amount of financial incentives given by Gram Vaani, but by the professional development opportunities they got by being associated with the community media platform, and the increased social credibility it brought for them in their community. Singh et al. [32] studied incentive schemes for community health workers across five countries, and found that hybrid markets which combined social and monetary incentives behaved more similar to monetary markets. They showed that monetary incentives skewed the priority of the health workers towards the tasks for which they were incentivised at the cost of other crucial tasks. In an experiment in Zambia, researchers tested if financial incentives motivate community members to deliver and promote health goods [8]. Hairstylists were recruited for counselling their customers (female) and selling them female condoms. The participants were divided into four groups: two groups having small and large financial rewards for each packet sold, the third group having no financial reward but social rewards in terms of a star rating displayed in their shops and an invitation to a social event if set targets were met, and no incentives for the fourth group. It was observed that participants in the group with social incentives out-performed the other groups by selling twice the number of packets as participants in any other group.

Given these findings, we feel that the social credibility and sense of service that the model brings for civil society members should be the primary incentive for their participation, and consequently it will be crucial to select the right set of people who are motivated

Table 4: Rough calculation of the costs on volunteers per 1000 households (~village) per month

No. of residential households in MP	14106381
No. of grievances per month in MP helpline in 2016	128106
No. of grievances per 1000 households (1 village) per month*	9
Weekly grievances that 1 volunteer might take up	1
No. of volunteers required per 1000 households per month	2
Monthly cost of following up on grievances (@ ₹100/- per grievance) per 1000 households (1 village) [in ₹]	900

Data sources: MP CM Helpline, Census of India 2011

*Assuming no grievances are overlapping

by these aspects, and to train them well on how to engage with community members and government officials. Considering the feedback of the volunteers however, it seems that suitable monetary benefits will also be required which at the minimum can compensate people for their expenses. Measurement of voluntary effort can be a challenge however, given the variability in effort required for the redressal of different kinds of grievances, and can lead to disputes. This happened in the early stages of the community mobilisation model of Gram Vaani, and they report that the disputes on financial incentives were avoided by giving the incentives not to individual volunteers but to a group of volunteers (called a volunteer club, one in each district) who were collectively responsible for running the community media platform in their district [22]. When the volunteers together held each other accountable for the club's success, they were able to eliminate free-riders, and felt comfortable with a standard policy to then distribute the incentives equally amongst themselves. Given the success of Mobile Vaani's club model we feel that aggregating benefits for well knit groups of volunteers based on the volume of grievances handled by the group could be a plausible model for scaling. This can bring together the best of collective action, avoid corruption of individualised financial incentives, and preserve a sense of service required to bring strong outcomes. The additional monetary expenses required by this model to support the civil society can either be funded by the government or by the community itself, individually or collectively. We hope to experiment with these models in the future.

Table 4 shows a very rough calculation of the cost that would be incurred to cover the expenses of the civil society volunteers, per month, per 1000 households (which is roughly the size of a typical village). The number of grievances filed on the Madhya Pradesh grievance redressal helpline in 2016 was 1,28,106 [5]. We take the example of Madhya Pradesh because in our surveys more people knew about the helpline in Madhya Pradesh than in other states. Taking into account the number of residential households in Madhya Pradesh [19], this comes to around 9 grievances filed per month per 1000 households that were filed on the grievance redressal helpline. If a volunteer is able to take up around 1 grievance per week, one village will require around 2 active civil society volunteers per 1000 households. This role can be easily rotated to divide the work load equally among all volunteers. If the expenses to follow up on one grievance is around ₹100, the cost works out to around ₹900 per 1000 households per month. This is likely to come down as several grievances are usually overlapping. To this needs to be added the cost of the technology (like an IVR) but this might be absorbed into the technology cost that the government is already deploying. Given

the current volume of grievances, this cost estimate appears to be very reasonable and should be possible to cover from the funds with the village level self-governing bodies. In addition, crowd-funding can also be mobilised to cover the costs. Through crowd-funding, privileged households can fund impoverished or needy community groups, or local community groups can also self-organize to fund representative structures for themselves. The funds thus collected can be spent on covering the costs of the volunteers who work on resolving the grievances of the community.

6.2 Role of automation

The IVR and Android app designed by us can potentially be integrated into any helpline system to formalise the integration of civil society members into the redressal process. This technology augmentation was useful for us to track and observe the grievance redressal processes as they unfolded on the ground, and served a crucial monitoring purpose. We were also able to observe that volunteers in different districts were working on similar issues, and shortly after the start of the pilot we set up a WhatsApp group connecting several community journalists (including the volunteers with smartphones) to be able to share with everybody various methods being used by the volunteers to be able to learn from each other. A significant benefit the volunteers also reported was being able to talk directly with the beneficiary through the platform, because it saved calling costs for them.

Three of the ten volunteers actively used the Android app over the IVR. They said that the app was easier to use than the IVR - the audio was clearer, it was easier to access details such as the phone numbers of the beneficiaries, and it was easier to navigate than the IVR. They even suggested to add features to be able to upload pictures or short videos about the grievances. The only problem with the app was that it required mobile Internet which can be unreliable in rural areas, and the volunteers reverted to using the IVR at such times. Volunteers who only used the IVR did so because they did not have smartphones.

We want to add that since our pilot was at a small scale and done entirely outside the government system, we were not in a position to suggest systemic changes based on how certain grievances should be handled and duplication of effort should be avoided. However, all such opportunities can be possible with a larger implementation integrated internally with the centralised government helplines. In addition, better management of the grievance assignment pipeline to balance the load across volunteers, and to combine trips to the same government office for different grievances, could make the process more efficient as well.

6.3 Collective structures for representation

We want to briefly situate this model in the broader context of labour unions and other collective structures for representation. Under-represented and marginalised groups of people have often organised themselves into collectives that can advocate for their causes. The structure of labour unions [42], emergence of spontaneous collectives for land acquisition protests [9], campaigns such as the Right to Work [13] and Right to Food [7], all arose as part of civil society and led to the creation of large interest groups with strong collective bargaining power. Our proposed model which

puts more power in the hands of the civil society and formalises their engagement with the government, could lead to the creation of such collectives as well. On the one hand, the collectives as they grow powerful could bring about large positive systemic changes in the handling of grievances and citizen engagement, but on the other hand they could also become politicised and lead to unintended consequences [36]. Safeguards would therefore need to be built into the model to prevent misuse. Compulsory rotation of group coordinators, transparency in leader election processes, and continuous training could be a few ways to alleviate these concerns. We plan to look at the SHG (Self Help Group) model more closely which creates large village and cluster level federations that in addition to monitoring the finances of the SHGs, also try to play a broader community development role to ensure that social welfare benefits reach the SHG members [29].

7 CONCLUSION

The standard method for government departments to enable citizens to file grievances is by setting up centralised helplines. However, in the context of poor and marginalised communities benefiting from public welfare services, our survey showed that people find it hard to use these helplines because of capability and empowerment gaps, and often do not get the desired redressals. Civil society groups on the other hand have been able to use their influence and local networks with government officials to help solve the grievances in a decentralised manner. We set up an IVR system to bring the best of both together, and enable civil society members to mediate in the redressal process between citizens and government officers. During the pilot study, we were able to closely observe that a large set of grievances were not amenable to getting solved through centralised helplines and it was imperative to involve civil society groups to help. We also found that even for grievances that could be handled centrally, the civil society groups could ensure that the resolutions were done appropriately and in a timely manner. We found that the civil society members strategically used their own contacts and networks to help in the redressal process, and leveraged community media and mass media platforms to bring government attention to pressing issues for the community. Using very limited resources, a large number of grievances were successfully resolved by civil society volunteers of Gram Vaani. We propose how such a model can be adapted at scale, to augment centralised government run grievance redressal helplines with help from civil society groups to ensure effective resolution.

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