

Examining the Role of ICT on Financial Inclusion in World's Biggest Public Employment Programme in Uttarakhand, India¹

Key words: | Citizen | Financial Inclusion | Innovation | Rights | Services.

ABSTRACT

This study examines how deployment of ICT in public employment programme is improving e-governance making and helping the workforce to access banking services for receiving their wages. The study draws on field work done among 118 MGNREGA beneficiaries in Chamoli district, located up in the Himalayan State of Uttarakhand. The beneficiaries of the 100 days employment guarantee scheme are finding work only for 36 days. The compulsory routing of wage payments through bank and post offices have enabled inclusion in the banking process, however, these accounts are not being used beyond savings and withdrawals. The study recommends maintaining guaranteed employment to a minimum of 100 days, reducing delays in wage payment to a maximum of two weeks compared to one year at present and introduce multiple layers of checking details of beneficiaries against available personal identification documents to reduce the phenomenon of ghost clients.

INTRODUCTION AND PROBLEM STATEMENT

Few would doubt the power of Information and Communication Technology (ICT) can play in overhauling operational efficiency and transparency in the governance of public administration. Within the context of Mahatma Gandhi National Rural Employment Guarantee Act (hereafter NREGA) and associated NREGA Scheme (hereinafter NREGS) , ICT has played a vital role in delivering government services, exchange of information, communication transactions, integration of various stand-alone systems and services between government-to-citizen (G2C), government-to-government (G2G) as well as back office processes and interactions within the entire government framework. This paper looks into the role of ICT in enhancing the efficiency, transparency, and effective implementation of NREGS in Chamoli district of Uttarakhand, and how it has promoted financial inclusion among the NREGS beneficiaries. In conclusion, the paper offers a few strategies for the proper use of ICT for more effective implementation of NREGS in India.

NREGS is the largest employment guarantee program in the world — guaranteeing 100 days of unskilled manual work to all rural households in India. In 2016-17, about 2207.3 million person-days of work were generated under the scheme. The Act actually gives rural households the right to work — making it obligatory for the State to give them work on demand. Household could actually sue the Government if their demand for work is not met. Recourse is regularly taken by civic society members under the Right to Information Act for seeking information on financial and implementation aspects of any approved work under scheme. The Scheme emphasizes on building durable assets like toilets, health centers, roads, canals, ponds and wells. The block

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development office (BDO) is the administrative node for implementation of the Scheme. The Act stipulates a minimum wage-material ratio of 60:40. The average wage per day per person in 2016-17 was ₹161 (US\$ 2.5). The Act mandates that payment of wages has to be done on a weekly basis and it cannot be delayed more than 15 days. The Central Government Budget for MGNREA for 2016-17 was ₹480,000 million (US\$ 7385 million).

Implementation of MGRNEGA is critically dependent on the smooth functioning of a computer based Management Information System through an ICT network interconnecting all the gram panchayat² (GPs), blocks, districts, state capital and the Ministry of Rural Development (MoRD), Government of India, which is responsible for the effective execution of the scheme. Four major components contribute to making the NREGS end-to-end ICT-enabled eco-system (Manoj 2012: 3), viz. (1) An information kiosk housing text-to-voice enabled and touch screen computers with biometric access to work details, job enrolment, and accrued wages, (2) A biometric and GPS verified attendance tracking system for formulation of worksite muster roll, (3) A community radio for promoting Scheme awareness and encouraging critical dialogue, and lastly (4) A Web-portal displaying latest about activities at GP, Block, District, State and national level.

In order to bring about transparency in wage payments and prevent misappropriations of funds, the Act was subsequently modified in 2009. It was amended to ensure that “the payment of wages shall be made through the individual or joint savings account of the workers in banks or post offices opened in accordance with the directions of the Central Government”. Nearly 100 million bank or post office accounts have been opened under NREGS (Government of India, 2014) and around 95 per cent of NREGS payments are made through this route. An electronic fund management software (eFMS), developed by the National Informatics Centre, is used for facilitating online transfer of funds to the beneficiary accounts, exclusively for the beneficiaries coming under the NREGS. Thus, apart from the direct and obvious impact of MGNREGS in providing extra work opportunities and income to the poorest in the rural areas, the Act complemented the efforts of various government agencies to increase financial inclusion in rural areas. As the wage payments were made through formal financial institutions, the opening of accounts brought the poor and the marginalized into the organized financial sector (Sharma, 2009).

POLICY RELEVANCE

The policy relevance of a study on NREGS derives from four inter-related considerations. First, the Scheme has been recognized by World Bank and many international development agencies as an innovative practice for ushering financial inclusion in rural areas through transfer payment³. It may have some lessons to offer to other countries which are planning to introduce or expand their social protection schemes. Secondly, the Scheme reaches out to 251.9 million beneficiaries or 15 per cent of India’s population. The scheme is socially inclusive for 50% of the

² GPs are the elected village councils and are the corner stone of local self-government vested with administrative and financial powers under the 73rd Amendment to the Constitution of India.

³http://articles.economicstimes.indiatimes.com/20131010/news/42902947_1_worldbankworlddevelopmentreportsafetyonet

beneficiaries are women and 37 % belong to socially marginalized scheduled caste (20.26%) and scheduled tribe (16.62%) communities. The poor and not so poor have used NREGS to ward off poverty by supplementing their income by working during lean agriculture months. Thirdly, the side-effects of NREGS is not well understood. The innovative arrangement for direct wage transfer into beneficiary accounts have forced people to open 100 million new bank or post office accounts. The newly opened accounts have aided access to bank credit, and overdraft facilities. Some studies even point to improved education for children in NREGS households. Fourthly, there are questions whether the big buck spent on the scheme is sustainable. NREGS has been slow to measure productivity or durability of the assets created so far. Sadly, only 48 million of the 180 odd million households NREGS beneficiaries could manage to secure 100 days of work in 2015-16. Any improvement in NREGS functioning, therefore has strong repercussions on inclusive rural development through its impact on social protection, livelihood security and democratic governance (Shah, Mann and Pande, 2012).

PRINCIPAL RESEARCH QUESTIONS

Against the backdrop of the emerging role of ICTs in financial inclusion and also of the streamlining of NREGS processes, this study sought to examine the use of mobile phones by NREGS beneficiaries in accessing formal banking system and thereby draw implications for policy and practice. Reasons for doing so are manifold. Considering that in the ten years that have passed since the implementation of NREGS act, it would be imperative to examine whether policy initiatives along with technology-enabled interventions have led to an expansion in reach and accessibility of formal banking systems among NREGS beneficiaries. Secondly, in contrast to both PC/Internet and bank branches, the penetration of mobile phones is high and rapid. Further, there has been major policy shift towards promotion of cashless transactions and using mobile to make payments. Thus while the initial decision to transfer NREGS payment via formal systems led to financial inclusion as in opening of a bank account, it would be worthwhile to examine whether mobile phones and introduction of mobile-based transaction systems have led to deepening of financial systems i.e. use of other banking products and services. Specifically with imminent convergence between NREGS and Aadhaar and mobile phone banking, it would be worthwhile to examine the use of mobile phones by NREGS beneficiaries and thereby assess possible impact on financial inclusion and financial deepening. Further the study is located in Uttarakhand in India, a mountainous state with poor bank branch network but rapidly increasing mobile phone penetration. The role played by ICT in servicing and fulfilling banking needs of such large number of hitherto financial excluded population contains important lessons for policy makers on the design, operation and replication of NREGS model both within India and abroad.

The research questions in brief can be summarized as:

- How well banking services are being used by NREGS beneficiaries?
- How are mobile phones being used by NREGS beneficiaries to avail various banking services and products?
- Based on the Chamoli experience, what are the pre-requisite for financial inclusion and deepening in mountain areas?

LITERATURE REVIEW

The Reserve Bank of India has defined financial inclusion as “the process of ensuring access to appropriate financial products and services needed by vulnerable groups such as weaker sections and low income groups at an affordable cost *in a fair and transparent manner by mainstream institutional players*’ (Chakrabarty, 2011, Government of India, 2008). There are both demand side and supply side factors contributing towards financial inclusion. These include, among others, financial literacy and credit counseling, credit absorption capacity, appropriate products and services, and robust financial markets, banks and services.⁴ The link between NREGS and financial inclusion arise from two different reasons. Firstly, the insistence of NREGS payment through bank and post offices brings marginalized sections of the society within mainstream banking. The opening of savings accounts is the first step to universal access to wide range of financial services including receipt of transfer payments, recurring deposits and fixed deposits, loans, insurance, short term credit (e.g. credit card, over draft), remittance and advisory services at reasonable cost (Planning Commission, 2009). As a sop to encourage frequent use of bank accounts, no frill account holders, banks were expected to offer reasonable need-based credit facilities by liberally sanctioning overdraft facility. A debit card (RuPay card) was to be issued to each account holder for ease of transactions at ATMs and approved merchant establishments.

However, due to relatively weak economic position of MNREGA beneficiaries, low levels of financial literacy and awareness about bank services deepening of financial services may be limited (Gupta & Ahmed, 2014). Secondly, a number of steps have been taken, primarily by the Reserve Bank of India to expand the reach of formal banking system and make them accessible to most. These include relaxing know-your-customer (KYC) norms, provision of zero balance accounts, Aadhaar enrollment and business correspondent model among others (Morawczynski, Hutchful, Rangaswamy, & Cutrell, 2010).

Giving impetus to such efforts has been the deployment and use of ICTs for delivering financial services in rural and remote areas. ICTs for financial inclusion can be broadly divided into three groups: (a) The distribution system, (b) the core systems, and (c) the external information system (IBEF). The distribution system consists of devices like, Internet enabled kiosks, ATM/micro ATM machines, mobile phones, biometric solutions and PoS machines enable the customer to access the banking system and avail its services. Included here are also the Internet-enabled kiosks that enable customers to avail financial services with or without intermediaries. Recent innovation includes biometric based payment systems like Aadhaar Enabled Payment System (AEPS)⁵. The transactions made through the various access points interact with the multiple integrated systems that constitute the core system. Included here is the core banking systems providing seamless

⁴ <https://www.oecd.org/finance/financial-education/48303408.pdf>

⁵ Aadhaar is a 12 digit unique-identity number issued to all Resident Indians by the Unique Identification Authority of India containing biometric and demographic data. Increasingly, Aadhaar number is being used as proof of address and identity. Aadhaar number is becoming mandatory to receive any public service, or benefits under various Government schemes. It is a powerful tool to eliminate ghost clients.

services thru computers, connectivity and customer friendly software. Also included here are the payment gateways and the various other technology-enabled platforms that allow transfer of money and information. The external information system refers to databases maintained by third party vendors for credit information, customer authentication etc.

Deployment of banking solutions based on biometric and mobile technologies is said to have potential to remove some of the reported lacunae in the existing institutional system for payments of NREGS wages. ICTs also form an integral part of business models like the banking correspondent and business facilitator. These technology enabled models seek to expand the reach of formal banking systems into regions that were generally considered as unviable. They eliminate the need to set up a physical bank branch at a remote location and allow servicing banks to work together as an interconnected system.⁶ Electronic Clearance System, National Electronic Fund Transfer (NEFT) and Real Time Gross Settlement (RTGS), Mobile and Internet Banking etc. are also based on ICT systems that facilitate transfer of money. Mobile phones along with Aadhaar, the Indian biometric identification card are part of the ambitious policy initiative called Jan Dhan-Aadhaar-Mobile (JAM), by the Government of India to enhance delivery of services in rural areas. It is hoped that the basic bank accounts called Jan-Dhan when linked with Aadhaar and Mobile numbers will help plug the leakages of government subsidies. Specifically in case of NREGS, there have been large scale efforts to link both mobile phone number and Aadhaar card number with the NREGS beneficiary bank account. The prime objective is to ensure that transfer payments are made only to the intended beneficiary and thereby prevent leakages.

THEORETICAL AND ANALYTICAL FRAMEWORK

One of the imperatives of elected democracies is to take care of the interest of the electorate. Successive ruling parties in India have affirmed their commitment to achieving economic growth and social justice. The concept of pro-poor inclusive growth is one of the guiding narrative of modern India attempting to reduce socio-economic inequalities by broadening the space for equal participation of weaker sections in the growth process. Inclusive growth basically implies that every citizen is able to participate in the growth process, regardless of their class, caste, gender, disability, belief and creed. Several studies have shown that growth is sustainable when the focus is on productive employment rather than direct income distribution as a means of redistributing income to socially marginalized groups. (Ranieri & Almeida, 2015; Ianchovichina & Lundstrom, 2009).

Guaranteed public employment and financial inclusion are considered vital tools for poverty alleviation, and participation of labor force, particularly women and population at the base of the pyramid (Figure 1).

⁶ www.ibef.org/download/Technology-Application-For-Financial-Inclusion-060212.pdf

Figure 1: Virtuous Cycle of Job Creation and Financial Inclusion



The origins of employment guarantee schemes is about two hundred years old. Early examples of EGS are Poor Employment Act, 1817 and the Poor Law Amendment Act 1834 in Great Britain (Blaug, 1964), and the more recent New Deal programs of the initiated during the Great Recession (1937-1938) in the United States during (Kesselman & Savin 1978, p. 208). EGS have also been introduced to reduce poverty in Latin America (Argentina 1995, Chile 1987), Asia (India 1978, Pakistan 1992, Bangladesh 2009, Philippines 1990), and Africa (South Africa 1994, Botswana 1960, Kenya 1992). (For a thematic review of the key design features and impacts of such programs, see Devereux & Solmon, 2006; Harris, McCord & Sony, 2013). These new generation programs pay officially declared minimum wages, often in cash rather than food rations, build durable community assets, provide vocational training and skills development, involve the stakeholders in bottom up designing and managing projects, and they provide vocational training and skills development. In all these programs, there is a clear recognition that job creation programs is an important policy intervention aimed at reducing unemployment and underemployment among youth and protect them from macroeconomic shocks or natural disasters that threaten livelihoods and require interventions to enhance off-season incomes. The innovative feature of India's NREGS is that it offers guaranteed employment as a right of citizenship, direct transfer of wages into bank accounts, and transparency in reporting through websites on the financial and operational transactions of NREGS work at GP level.

Early studies in financial market, assessed the role of market imperfections regarding human and physical capital accumulation and occupational choices. For example, financial exclusion from banking services limit opportunities to borrow and invest money for physical and capital accumulation. In cross-country regressions, Beck, Demirguc-Kunt, & Levine, 2007 found that financial inclusion alleviates poverty and reduces income inequality. In theories stressing entrepreneurship, lack of access was found to limit the talent of the poor to initiate economically viable projects, and create local jobs. The countries with large population without access to financial services are associated with higher prevalence of poverty ratios measured by both national and international poverty lines (CGAP, 2009, p.14). Thus, the evolution of financial

development, regional growth, and intra social group income dynamics are closely related. Extending access to finance is seen not only a way to render social justice to those previously excluded but equally to improve the efficiency of resource allocation throughout the economy. Financial development is part of virtuous cycle reinforcing more inclusive economic growth. Financial inclusion is considered to be part of intensified effort to poverty alleviation efforts (Karmakar, Banerjee & Mohapatra, 2011).

METHOD AND DATA SOURCES

Research Design

This study used a mixed-method approach for data collection and analysis. Our choice is based on the desire to collect a broad range of perspectives that may help to form a holistic perspective. Since our motivation of the study is to contribute to improvement of NREGS, mixed method approach fits well with pragmatism. The study uses quantitative methods to supplement and improve qualitative understanding of the realities. It is important that such a study collect high quality quantitative data first hand to describe operations of NREGS in a specific context.

Data Collection

The use ICTs by NREGS beneficiaries and its impact on financial inclusion was examined by conducting a survey of 118 NREGS beneficiaries in Chamoli district. The NREGS beneficiaries were identified at random with the help of a local community based organization working for nearly twenty years in the Chamoli district of Uttarakhand, India. Beneficiaries were interviewed at their houses and work sites. Six focused group discussion was also conducted to elicit the views of NREGS beneficiaries, members of elected village council, government officials, and ordinary villagers. Two key informant interviews were conducted with a NGO leader and a Block Development Official. Extensive use of the NREGS website was made to collect information related to Chamoli district⁷. Data was collected in the month of February and March 2017.

Study Area: Chamoli District

India is a large country with great deal of heterogeneity in level of development. An aggregated picture at national level is at best diffuse, blurring many of the finer nuances of reality as witnessed at lower administrative unit level. To deep drive into NREGS experience, this study has chosen to focus on Chamoli district in Uttarakhand, one of India's 250 most backward districts. The district lies in the northeastern part of Uttarakhand state, bordering Tibet. The geographical area of the district is 8030 sq. km. Entire area is mountainous with agrarian economy. Forest cover (58.38%) is the main land use. The total population, of the district, is 370 359 and population density is 46 persons/sq. km. The male, female sex ratio is 1000:1015. The overall literacy rate is 64.08%.

⁷ http://mnregaweb4.nic.in/netnrega/all_lv1_details_dashboard_new.aspx

In general, studies on impact of NREGS in Uttarakhand are few (Kharkwal & Kumar, 2015; Singh & Nauriyal, 2009, and Singh, Dhanai and Parmar, 2014). There is none that has examined financial inclusion per se in detail in the mountainous regions⁸. The existing studies have primarily focused on assessing the creation of assets under NREGS and impact on poverty alleviation. Kharkwal & Kumar, 2015 found that participation of poor households is decreasing in NREGS works in Uttarakhand. This may be due to lower wages available in NREGS compared to other works.

The district has 132 bank branches, 78 Business Correspondents, and an estimated 35 functional ATMs. The district has 8 post offices. To put this in perspective, each of the 140 bank and post office branches caters to on an average a population 2645 persons in the district. There is a bank or post office branch every 57 square kilometers. Most of the bank branches and settlements are located around major towns of Gairsain, Gopeshwar, Joshimath, Kanprayag and Gauchar. Physical access to bank branches in Chamoli is constrained by thin banking network and the distance one has to travel.

The Business Correspondent (BC) mechanism in Chamoli has not taken off. Low volume of business and low rates of commission on various services makes BC operation not remunerative. The district also has a credit: deposit ratio of 30%. Credit creation is one of the highly paying banking service. Since the demand for credit is low in Chamoli, BC have very few options to augment their income. In the last two years, 15% of the BCs close down their business, denting customer confidence in the BC mechanism⁹. Given that one in three households in Chamoli have phone, mobile phone banking holds great promise in service delivery.

In Chamoli, NREGS is operational in all the nine blocks. In 2016-17, 8324 households were provided 131,832 person days of work. This works out to be a mere 15 days of work per household, much less than the promised 100 days of work by the Act!

Sl. No.	Block	Total attendance		Work Completed			
		Household employed	Person days generated	Indian Toilets	Farm Ponds	Compost pit	Total
1	Dasholi	1039	21255	174	5	0	179
2	Dewal	238	3115	132	2	2	136
3	Gairsain	1932	23603	435	11	2	448
4	Ghat	2263	45187	186	60	14	260
5	Joshimath	359	5924	439	0	1	440
6	Karnaprayag	536	5855	214	3	0	217
7	Narayanbagar	290	4283	256	12	2	270
8	Pokhari	1605	21489	333	0	0	333
9	Tharali	62	1121	519	7	106	632
10	Total	8324	131832	2688	100	127	2915

Source: Compiled from NREGS Chamoli district website

⁸<http://stage.3ieimpact.org/en/nrega-systematic-map/>

⁹ Personal communication by Mr. Girish Dimri, social activist in Gairsain.

The actual expenditure on various work incurred in the Block in 2016-17 is Rs. 214.18 million (US\$ 3.3 million). Under the Scheme, the Central Government bears 100% of wages for unskilled manual work, 75% of material cost of the schemes including payment of wages to skilled and semi-skilled workers. The State Government shares 25% of material including payment of wages to skilled and semi-skilled workers cost. The established norm is for the State Government to transfer all payments to the Block office within 15 days of release of funds by the Central Government. However, this is rarely followed. For wage payment, the Gram Panchayat and Block Office verifies the genuineness of muster roll, and prepares a Fund Transfer Order for the Department of Rural Development in the State capital city Dehradun approve and instruct banks to make a direct transfer to individual accounts of the beneficiaries. For the last one year, there has been no release of funds to meet the expenditure incurred on wage heads in Chamoli. As a result of which wage bills have remained unpaid, causing great social and economic discontent among the labour class and undermining the transparency and reputation of NREGS.

Table 2: Actual Expenditure on NREGS in Chamoli Block 2016-17 (in million Rs.)						
Block	Unskilled Wage	Semi-skilled and Skilled Wage	Material	Tax	Administrative Expense	Total
Dasholi	15.74	2.27	15.84	0.007	0	33.86
Dewal	14.36	6.25	16.86	0	0	37.47
Gairsain	8.86	0.12	11.2	0	0	20.18
Ghat	8.81	5.47	4.01	0	0	18.29
Joshimath	12.16	0	5.14	0	0	17.30
Karnaprayag	9.85	0.2	3.56	0	0	13.61
Narayanbagar	8.51	9.95	10.69	0	0	29.15
Pokhari	<u>5.9</u>	4.9	7.28	0	0	18.08
Tharali	7.83	3.78	4.05	0	0	15.66
Total	92.02	32.94	78.63	0.01	0.00	203.60
Coordination					10.6	10.6
Grand Total	92.02	32.94	78.63	0.01	10.60	214.20

Source: Compiled from MGNREGA Chamoli district website

In 2015-16, Rs. 299 million and Rs. 139 million was disbursed to 59,625 bank and 27,820 post office accounts to NREGS beneficiaries. However, in the last two years, the trend is to abandon post office accounts in favor of banks.

The NREGS District Coordination Centre (DCC) in Chamoli has a robust IT system for capturing data right from job card creation, worker registering demand for work, to work allotment, to finally issuing fund transfer order for payment of wages. The DCC also organizes independent on the site

verification to update job cards¹⁰. The DCC has direct links with the Uttarakhand Rural Development Department, which is the State nodal department for the implementation of the Scheme. The Department is responsible for managing relationship with the banks and transmitting the wage list electronically from NREGASoft and ensuring transfer of payment to the workers' accounts in a secured manner. The Department is also responsible for making available online reports at various levels of disaggregation. A weakness in NREGASoft is its inability to match individual job card data and fund transfer order. Figure 2 illustrates the work flow process which is currently captured in NREGS MIS.

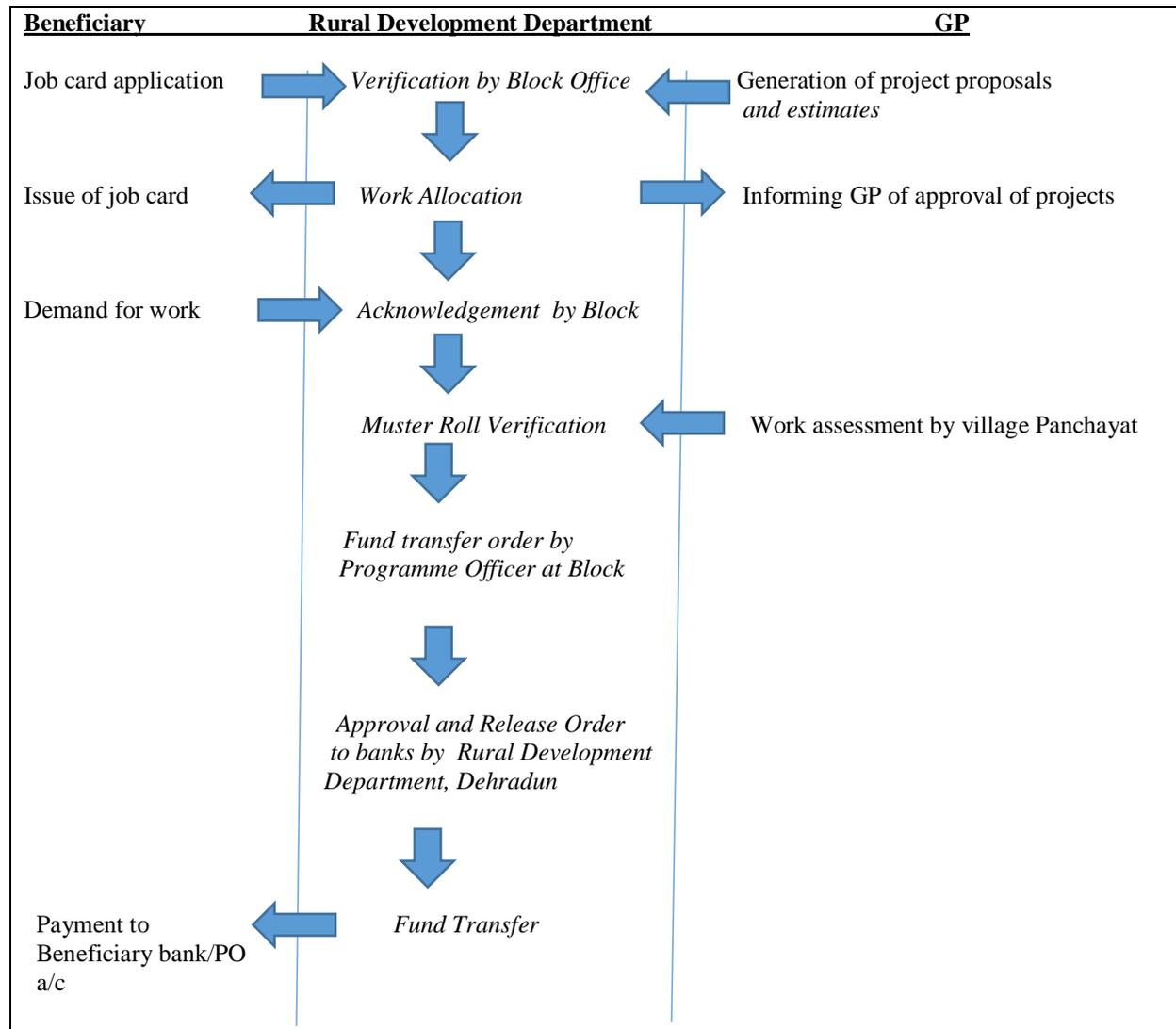


Figure 2: NREGS Workflow Process

RESULTS, ANALYSIS AND DISCUSSION

¹⁰ There has been a sharp fall of number of households seeking MGNREGA work. According to Mr. Kailash Chandra Joshi, Block Development Officer, Gairsain, nearly 10000 bogus job cards have been cancelled in the last one year in the district (personal communication dated 25/5/2017).

Descriptive Statistics

Data was collected from 118 NREGS beneficiaries, of which 79% were women. 45% of the beneficiaries belonged to households that are officially categorized as Below Poverty Line. 72 percent of the surveyed households were literate.

Illiterate	Can Sign	Pass 5	Pass 8	Pass 12	Graduate & Above	Not Available
6 (5%)	31 (26%)	24 (20%)	19 (16%)	21 (18%)	2 (2%)	15 (13%)

19 beneficiaries reported that their household did not have any source of income. The remaining, 99 households had more than one sources of monthly income. Agriculture was the main source of household income for 50% of respondents, followed by daily wage labor at 36% (See Table 4).

Agriculture	Daily Wage Labor	Artisan	Petty Trade	Pension	Service
59 (50%)	42 (36%)	3 (3%)	3 (3%)	14 (12%)	11 (9%)

Around 40 percent of beneficiaries had monthly income between Rs. 1001 and Rs. 5000. 62 beneficiaries constituting nearly 53% of the sample mentioned the same range as their monthly expenditure (See Table 5).

Range (Rs)	Monthly Income	Monthly Expenditure
(0) 500-1000	7 (6%)	13 (11%)
(1) 1001-5000	47 (40%)	62 (53%)
(2) 5001-10000	34 (29%)	27 (23%)
(3) 10000-15000	23 (19%)	13 (11%)
(4) Greater than 15000	7 (6%)	3 (3%)

NREGS, Financial Inclusion and Use of Mobile Phones

Number of Days of NREGS Work

As many as 58 beneficiaries constituting around 49 percent of the sample were registered as NREGS workers in 2005-06 and the rest in the subsequent years. In the year 2015, the average number of days employment was provided was 36.2 days, much below the stipulated 100 days (See Table 6).

Year	1-15	16-30	31-45	46-60	61-75	76-90	91-105	106-120	Average

2013	43	35	27	9	3	0	1	0	25.3
2014	42	36	24	8	5	2	1	0	28.8
2015	30	42	9	22	3	7	4	1	36.2

Findings 1: NREGS promise of 100 days of work on demand has remained a distant dream for workers in Chamoli.

Use and benefits of Bank/PO Accounts

106 respondents received their wage payments via banks while only 12 respondents received through post office accounts. 101 beneficiaries had joint accounts with their spouses or children. 85 respondents, nearly 72% of the sample, opened the bank/ post-office account specifically to receive NREGS payments. This corroborates the findings of similar studies that NREGS is the first step towards attaining financial inclusion via opening of bank / post office account. Other reasons mentioned by beneficiaries for opening bank / post office accounts includes – saving money(27%), receiving other government benefit payments (18%), taking a loan (16%), and receiving remittances (7%). 110 accounts were linked with Aadhaar.

67 beneficiaries mentioned that the ability to save money and make fix deposit as the key benefit of having a bank or a post-office account. Fifty-three considered bank accounts as the best way to receive payments from the government, while 34% believed that it enabled them to avail small loans whenever required. Only around 6% of respondents thought bank account provided easier option of receiving remittances and getting a general purpose credit card. 37 respondents mentioned being aware of such benefits even before opening the account for NREGS

103 (87%) of the respondent beneficiaries withdraw money including NREGS payments through the bank counter. 69 of them said that they can operate the account on their own, while the remaining mentioned taking help from others, including banking correspondent. 4 respondents had ever used the ATM to withdraw cash and only 2 had ever used mobile banking.

Findings 2: Most beneficiaries use basic banking service for withdrawals and deposits.

Financial Deepening

Only nine households have ever borrowed or taken a loan in the last 3 years. Among them, three have taken their loan for education and business from formal bank because of less interest and easy access. 5 beneficiary households had borrowed from friends and relatives, and remaining one from the local money lender.

The uptake of financial products and services among the NREGS beneficiaries was low (see Table 7). While 22% of the sample had insurance, it is less than 10% for other services. In contrast, nearly 89% of the NREGS beneficiaries had both Aadhaar and Voter ID card. At household level, Aadhaar was linked to multiple public services. Also 5 beneficiaries responded to using AEPS for making financial transaction. Further, the number of respondents with ration card and BPL card

was 89 and 48 respectively. Thus, one cannot say that social, political and administrative inclusion necessarily leads to financial deepening.

Product/Service	Count (Percentage)
Bank/PO savings account	57 (48%)
RSY insurance card	27 (23%)
Bank debit card / ATM	9 (8%)
Bank/PO Recurring deposit	6 (5%)
Bank credit card	4 (3%)
Bank KCC card	2 (2%)
Bank/PO loan account	0 (0%)
Bank/PO fixed deposit	0 (0%)

Findings 3: Financial deepening particularly use of credit and insurance products have not taken off. None of the Jan Dhan Yojna account holders among NREGS beneficiaries sampled have received overdraft facility on their accounts even after six months of satisfactory account operation. Jan Dhan Yojna account holders are eligible for overdraft facility after six months of account opening.

Use of Mobile Phones and Debit Cards for Banking

None of the beneficiaries use mobile phones to conduct financial transactions. 51 beneficiaries (43%) use debit card for vendor payment and cash withdrawal.

The bank accounts of 78 NREGS beneficiaries (67%) are linked to a mobile phone number. Since only 41 households owned phone, the remaining 37 have used others phones to link their bank accounts. On the whole, 32 beneficiaries (27%) mentioned using mobile phone to access bank account, receive message of transaction by SMS.

A much sought after information by the beneficiaries is when NREGS payments would be deposited in their accounts. Since NREGS officials does not inform beneficiary of the payments, they rely on banks to update on receipt of payment. Only 10 beneficiaries responded that they come to know about NREGS payments have been credited to their account via mobile SMS. Otherwise, as many as 63% of respondents actually visited the post office or bank branch to find out if the money has been transferred or not. 30% of them get to know from the village head or the secretary.

Findings 4: Beneficiaries trust face to face banking, rather than doing transactions through connected devices. Also, most have basic phones. With the spread of smart phones, and better internet connectivity in Chamoli, mobile phone banking is likely to increase.

Impact of NREGS and Financial Inclusion on Households

The impact of participation in NREGS and opening of individual bank accounts has greatly boosted the self-confidence, dignity, and sense of worth among the beneficiaries. The demand for jobs under NREGS as a right – not charity – increased awareness about beneficiaries’ sense of rights and responsibilities as a citizen. In focus group discussions, the ability for all villagers to participate in selection of works to be undertaken by the Panchayat under NREGS was much appreciated. The change in perception is visibly in the responses to questions by the respondents about how they compare their personal situation before and after their participation in NREGS (see Table 8). A note of caution: all the changes in perception cannot be singularly attributed to NREGS. There are larger changes happening in the society such as relentless campaign on girl child education, which are having impact on all, particularly on NREGS beneficiaries who are looking for new avenues of social mobility.

Compared to start of my involvement in MGNREGA, today	No. of respondents	As a % of total (n=118)
• I have more money to spend to meet household needs viz food, health, clothes	41	35%
• Because of MGNREGA wages, I am able to send my children to school	78	66%
• I can access loans from banks	36	31%
• Compared to pre-MGNREGA days, my savings is more	55	47%
• My borrowing from moneylenders and others is less today	60	54%
• My ability to cope with crisis in family (e.g. loss of main earner, business loss) today is more	64	51%

Findings 5: NREGS and financial inclusion initiatives positively contributes to social capital formation, and increasing sense of self-worth and dignity among NREGS beneficiaries.

CONCLUSIONS AND RECOMMENDATIONS

A subaltern view from one of the most backward districts of India points to sub-optimal functioning of MGNREGA Scheme. Households seeking work are not able to get more than 36 days of work. This is too low to have any meaningful impact on the income of the households and generate a surplus for savings kept in banking channels. At the minimum, the number of work days offered should not be less than 100 days to coincide with lean agricultural period. To generate enough work, the allocation and actual release of approved budgets must match the demand for work conveyed through GPs.

Currently, the delay in paying wages extends between six months to one year. This delay is the greatest source of demotivation among the working households. It is recommended that the government should not undertake any work if it is not able to pay the wage workers within a fortnight. The Government must pay punitive interest charge of 18% per annum on any wage bill remaining unpaid beyond the stipulated time of 14 days.

There is an issue of ghost NREGS clients. Our focus group discussions indicated that it may be as large as 20% of the registered beneficiaries in the district. Aadhaar seeding of all Job Cards and

bank/PO accounts would minimize the instance of fraudulent payments. The Fund Transfer Orders issued should automatically match job card and Aadhaar card details for proper identification of the beneficiary. GPS-tagged photos of assets created along with expenditure incurred by NREGS may be posted on the NREGS website to improve transparency, and allow voluntary inspection by citizens.

Currently, there is a long chain of command spanning the GP-Block-district-State capital- and Central Government involved in preparing, verifying, authorizing and disbursing earned wages of unskilled workers. Since Central Government pays 100% of this labour component, it is suggested that Programme Officer of NREGS in the Block Office issues a fund transfer order (FTO) for payment to the beneficiaries. Instead of the wage bill making its loops to the district and State capital, the bill could go straight to the Ministry of Rural Development, Government of India. After doing necessary security tests, NREGAsoft can instruct the concerned banks to make the transfer direct to beneficiary accounts. This change in administrative process should reduce bureaucratic red tape, and introduce accountability in case of any delay in payment. The FTO itself can be uploaded on the NREGS website for ease of tracking at the level of individual beneficiaries. Courier companies and e-retailers are able to continuously monitor and report on the movement of merchandise to the customers. The software is available and ready for bringing same level of transparency in dealing with NREGS wage payment.

Mobile phone banking has not taken off. Phone banking works best with good Internet connectivity and smart phones. Internet is not yet reliable in Chamoli. Most bank users cannot justify investing in a smart phone just for occasional banking.

The prerequisite to successful implementation of employment guarantee schemes require robust end to end computer enabled MIS, backed by streamline administrative procedures. Without good administrative practices, ICT in isolation cannot ensure delivery of citizen friendly services.

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