Ensuring Entitlements to Poor: MERComs Mobile Social Audit Application

Authors: Vijay Pratap Singh Aditya[1], Rohit Magotra[2], K Sasikumar[3], Mansingh Durga Prasad Nayak[4]

Lead Author Address: Ekgaon Technologies, E-142 A, Lower Ground Floor, Kalkaji, New Delhi – 110 019, India, Tel: +91 11 40551490, Fax: +91 11 40551491

Author Email: vijay@ekgaon.com[1], rohit@ekgaon.com[2], sasi@ekgaon.com[3], wosca@rediffmail.com[4]

Abstract:

Poor governance and lack of monitoring mechanism leads to poor delivery of social welfare programme to poor populations across developing countries. Lack of infrastructure and corruption further compounds the problem, endangering livelihoods security of poorest people depending on welfare programme entitlements for survival.

India is the world's second most populous country, ranked 128th out of 177 countries on Human Development Index, with an estimated population of 1.13 Billion in 2007. According to UNDP, 28.6 % of these 1.13 billion people live below poverty line and in terms of absolute nos. it is a staggering 323 million people.

Odisha is one of the poorest states in India and regularly suffer from natural catastrophe leading to further suffering to vulnerable and resource poor populations. A staggering 18.5 million people (49% of the population) earn less than 10 rupees (0.16 Euros) a day – it is hard to comprehend how people can survive on such a pittance. Of course it is a fact that many do not, or have to take extreme measures in order to meet their most basic requirements. Stories of this despair from Kalahandi (Odisha) formed the headlines in media for years.

Against this backdrop of extreme poverty, the Government of India has sought to introduce a series of Social welfare schemes and programmes to provide minimum support for its poorest citizens such as Old age/disability/widow pension, food from Public Distribution System, Mid Day Meal Programme in schools etc. The latest such scheme is the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) which provide 100 days employment to each rural household that demands it. For poor households these social security schemes can provide a vital safety net. Unfortunately most of these programmes, schemes and services have not achieved their objectives owning to poor implementation as well as corruption in the programme delivery system.

Regular audits and studies have identified that there is a need for greater transparency at all levels of programme delivery to ensure due entitlements reach the needy. To raise their voice against corruption people were lacking information and knowledge. This leaves them in a very disadvantageous position in developing themselves with no bargaining power whatsoever. Monitoring Entitlements for Rural Communities (MERComs) is a third party mobile phone based monitoring system for social audit, allowing tracking delivery of entitlements to rural poor.

Concern Worldwide, an Irish non governmental international development agency, is working in Odisha and partnering with several development organisations including Women's Organization for Socio Cultural Awareness (WOSCA), Centre for Youth and Social Development (CYSD) and Prakalpa under its Governance and Livelihood with an endeavour towards achieving its strategic objective of promoting responsible governance.

Ghatagaon and Banspal blocks are the two most backward blocks of Keonjhar District in Odisha state. Banspal block spreads over a geographical area of 1191.07 sq. km. and consists of natural dense forest and hills. Ghatagaon block is spread over an area of 547.29 sq. km. Both these blocks are home to a large tribal population, of which more than 80% live below the poverty line. The tribal population includes Bhuiyan and Juanga, which have the status of Primitive Tribal Groups. WOSCA works with these tribal communities to ensure delivery of social entitlement benefits to the communities.

Monitoring of Entitlements of Rural Communities (MERComs) framework developed by Ekgaon allows central tracking and monitoring of rural entitlements programmes and its status through decentralized field based moni-

toring units and partners using mobile phone based application.

The system captures the transactions, payments, status, availability, value etc. which stands as evidence for the delivery made respectively from / to the entitled members, viz. all the persons being covered or are eligible to be covered under the MGNREGA, Public Distribution System (PDS) and various Pension schemes such as the *Madhu Babu Pension Yojana.*

The system has facility to generate wide range of reports for user-defined period, which are shared at various levels of governance of programme and schemes. The solution informs and empowers the people to capture information in real time and push for corrective measures, thus ensuring rights of the people.

The system has been in operation in Keonjhar since 2008 and helped over 2,50,000 members across 45,000 households to get benefits from social welfare programmes of government.

1. Introduction

Poor governance and lack of monitoring mechanism leads to poor delivery of social welfare programme to poor populations across developing countries. Lack of infrastructure and corruption further compounds the problem, endangering livelihoods security of poorest people depending on welfare programme entitlements for survival.

Despite double-digit growth, global takeovers by Indian firms, India continues to be home to one third of the world's poor. It is the world's second most populous country, ranked 128th out of 177 countries on Human Development Index, with an estimated population of 1.15 Billion in 2010. According to UNDP, 25% of these 1.15 billion people live below poverty line and in terms of absolute nos. it is a staggering 325 million people. It boasts the dubious record of having one of the highest infant mortality rates and maternal mortality rates in the world. On top of this 2.2 million infants die every year from preventable causes (one fifth of global child deaths).

Women's Organization for Socio Cultural Awareness (WOSCA) has been working with tribal and marginalized communities of some of the poorest districts of Orissa. WOSCA visualizes a society full of peace, joy and happiness where there will be no poverty, ignorance, diseases, suffering, hunger, exploitation, injustice and which will be saturated with solidarity, integrity, fraternity, non-discrimination, brotherhood and prosperity.

WOSCA is involved in social audit process in four Gram Panchayat's (GPs) where women Self Help Group (SHG) members are exposing corruption in MGNREGA implementation to a greater extent. With an objectives to strengthen the grassroots governance WOSCA is involved in capacity building of Panchayat Raj Institutions (PRI) members on their roles and responsibilities to make more accountable to people. Leadership training to PRI members, MGNREGA facilitation and model GP facilitation are the ongoing capacity building program of WOSCA.

The poor people living in the WOSCA's project area identified for monitoring delivery of entitlements is unorganised, are deprived from legitimate entitlements and that leaves them in a very disadvantageous position in developing themselves and no bargaining power whatsoever. Due to lack of education and outside exposure they had the tendency to accommodate with all sorts of exploitation and are suffering without putting any resistance & efforts to improve the situation. To raise their voice against corruption they were lacking information and knowledge.

To empower the poor and women both socially and economically, WOSCA undertook awareness drives, provided hand holding support to people in getting information through Right to Information (RTI) from block offices, facilitate social audit process, used community media for exposing corruption. Owing to its efforts Public Distribution System (PDS) and MGNREGA work have been streamlined in two GPs and 1478 House Holds (HHs) are getting all benefits regularly. Information sharing is taking place among village institutions in a regular manner. This prevents corrupt people to enter in the development activities. This also prevents block officials from doing malpractices in development works. Due to RTI campaign 26 Indira Awas have been completed in Purumunda and Pandapada GP of Ghatagaon block which were pending since 2005 and the final bill was taken by contractors. 128 people in this GP got back their Job cards, which were kept by Panchayat, and more person days were entered against real working days.

Concern Worldwide, an international NGO headquartered in Dublin, has been working in Orissa through its country office in Bhubaneswar since 2002 on improving the lives and livelihood of the poor and marginalised. Its partnership with WOSCA dates back to 2003. The Tracking Entitlements project was supported by Concern World-

wide in August 2008 under its Governance and Livelihood programme as an endeavour towards achieving its strategic objective of informing and empowering the poor. The project presently is looking at exploring options for a revenue model by expanding the services and geography of the project.

2. Project Location

The project was implemented in Banspal and Ghatagaon blocks of Keonjhar district in northern Orissa bordering Jharkhand. Although the district has very rich mineral reserves with huge deposits of iron ore, it still remains one of the most underdeveloped districts of Orissa. It has a large tribal population constituting 44.52 percent of the total population of the district. While vast majorities of the target population lives below the poverty line (76.96 percent), the literacy rate of this district is 44.73 percent, which is low in comparison to most of the other districts of Orissa. A majority of the population depends on agriculture and forest produce as their major source of livelihood. Since the earning from these sources is inadequate to meet both the ends, seasonal migration and sometimes cases of acute starvation are common phenomenon among these communities. Ghatagaon and Banspal blocks are the two most backward blocks of Keonjhar District. Banspal block spreads over a geographical area of 1191.07 sq. km. and consists of natural dense forest and hills. Ghatagaon block is spread over an area of 547.29 sq. km. Both these blocks are home to a large tribal population, of which more than 80% live below the poverty line. The tribal population includes Bhuiyan and Juanga, which have the status of Primitive Tribal Groups.

The project is a first of its kind initiative where mobile technology has been used to monitor the entitlements of the rural communities. In the initial years there are some benefits that the communities have been able to get. The benefits that can accrue from this initiative is future is huge but the whole system has to be tested for a longer duration for its accuracy and most importantly whether it will result in ensuring entitlements to the marginalised. The two blocks were selected because WOSCA and its two other partners Centre for Youth and Social Development (CYSD) and Prakalpa, have been working there since long, in partnership with Concern Worldwide India. All organisations also have ongoing initiatives in the area, which are working towards ensuring rights and entitlements to the rural communities through community mobilisation. All partners have good knowledge and understanding of the area and good field presence to follow up on issues, which the mobile tracking outcome bring out with local officials in administration.

3. Problem Statement

The project too whole village as the development unit and all the persons being covered or were eligible to be covered under the MGNREGA, Public Distribution System (PDS) and Pension schemes are considered part of the target group. However, the project laid special emphasis on the vulnerable households especially those who were not getting the basic welfare facilities and lack bargaining power to demand the same from government. The project laid strong emphasis on addressing the needs of the women and landless poor towards their empowerment.

As is clear, a large majority of the population comprises tribal and Dalit groups who are living a life of insecurity and are barely able to make two ends meet. They depend only on agriculture and forests for their survivals and at times with any failure of the crop, which is largely rain fed, their lives is at stake very often. There are no savings or alternative resources to fall back on and wage labour is available in some seasons but at very exploitative terms and conditions. The problems of the poor and the marginalized have not gone unnoticed by the government in India and there have been many schemes and programmes, which if implemented properly could have resulted in bringing about significant changes in the lives and livelihood of these people. The major programmes are:

Public Distribution System

The Public Distribution System (PDS) in India evolved as a system of management of scarcity and for distribution of food grains at affordable prices. Over the years, PDS has become an important part of Government's policy for management of food economy in the country. PDS is operated under the joint responsibility of the Central and the State Governments. Under PDS presently the commodities namely wheat, rice, sugar and kerosene, are being allocated to the States/UTs for distribution. The families living below poverty line are entitled to 16 kgs of rice every month @ Rs. 4.75/kg and an additional 9 kgs is available @ Rs.6.30/kg. Under the Antyodaya scheme the poorest of the poor households, which includes all primitive tribal groups as well as some other categories fully, are entitled to 35 kgs of rice every month @ Rs. 3 / kg. These are highly subsidized prices and if the implementa-

tion is proper, it can provide a big relief to the poor.

However it is observed that the programme lacks proper monitoring and updating of records and some populations though entitled do not get access to PDS services. Distribution of PDS supplies and products is also an issue, besides corruption, delays and procedural bottleneck act as hindrance for provision of this entitlement in time to the beneficiaries. Sometimes even after allotment the material finds access to black market and is not received by beneficiaries. Government of India has officially recognized that in some states PDS corruption is upto 90%.

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)

Mahatama Gandhi National Rural Employment Guarantee Act (MGNREGA) ranks among the most powerful initiatives ever undertaken for transformation of livelihoods in rural India. The MGNREG Act guarantees 100 days of employment to all rural households and is a demand driven programme. The radical provisions of MGNREGA signal the possible inauguration of a new chapter in rural governance. But a radically new programme also makes dramatically new demands from the system. A bureaucracy that has its hand full with a whole host of pre-existing responsibilities can hardly muster the imagination and energy required by MGNREGA.

The scheme in spite of having exemplary transparency measures has suffered on many counts. The problems include - Job cards are not handed over to the people, muster rolls are fudged, false entries made in the job cards, delayed payments, pending work applications, continuing hold of contractors and many more. Orissa has been in the limelight on MGNREGA for both the wrong and the right reasons. It is one of the two states where people have been paid unemployment allowance and it is also the state where according to an independent study almost 70% of the Rs. 7.3 billion spent under the scheme in 2006 – 07 was allegedly siphoned off by a corrupt system.

Madhu Babu Pension Yojana

There are schemes, which provide support to the old aged, differently-abled, widows, HIV infected and their widows in monetary form every month. The Orissa government, in 2008 beginning, brought all the pension schemes under one scheme called "Madhu Babu Pension Yojana" which provides Rs.200 every month to all the eligible persons. The scheme has had its share of implementation problems and many destitute persons have not been getting their entitlements. Problems include persons eligible but not on the official, persons on the official list but not getting their pensions and irregular and improper payments.

Causes of Problems

There are a number of reasons for the continued failure of the government programmes including the above-mentioned three programmes but the experience over the last two years has shown that the main factors are:

- Lack of awareness amongst the poor of their entitlements and benefits from the different government schemes, programmes and services. It is often in the interests of the government officials to maintain this level of ignorance.
- Lack of accountability of public officials and little pressure on them to perform and deliver. Monitoring and evaluating the performance of public servants is virtually nil. People lack information and confidence to challenge the government and government officials lack the political will to improve performance.
- Corruption is rampant and in many cases is institutionalized; it occurs at all levels and each official will be expected to take their cut leaving very little for the intended beneficiaries. In Orissa in 2006/07 it was estimated that out of Rs.7.33 billion spent under MGNREGA, around Rs. 5 billion was siphoned off by government officials.
- Inadequate Corrective Measures - Most efforts to improve delivery of services have focused either on the supply side (structural or public sector reforms) or have been post facto events (audits, enquiries and commissions) both of which have met with only limited success. Whilst post facto audits can contribute to improving the efficiency of delivery by pointing out gaps and bottlenecks (as well as at times implicating individuals), these reports are very rarely accessible to the pubic and certainly not accessible to the illiterate rural poor. There is often very little political will or public pressure to address the failures identified in the enquiries,

audits, commissions meaning that there is little done to really change the system or root out the corruption.

4. Solution to the problem: MERComs

In order to capture actual information and generate a live database for a real time tracking of the entitlements of the rural communities it is necessary to develop a mobile phone enabled Management Information System (MIS). WOSCA, CYSD and Prakalpa with support of Concern approached Ekgaon Technologies for evolving the working model and provide the technology support for the project. Ekgaon developed an open-framework for a modular, Management Information System (MIS) for rural service and information delivery. MERComs MIS framework developed by Ekgaon allows central tracking and monitoring of rural entitlements programmes and its status through decentralized field based monitoring units and partners. The solution informs and empowers the people to capture information in real time and push for corrective measures, thus ensuring rights of the people.

5. Technology Framework

The MERComs framework provides a way to efficiently aggregate data from paper-based records in the field using mobile phones. The mobile phone has been described as the most likely modern digital device to support economic development in developing nations[1]. Several of its features (battery operation, solid-state memory, wireless connectivity, affordable price) make it a better-suited device for rural developing world conditions than a conventional PC. The lower cost of wireless infrastructure, deregulation in the telecommunications industry and the plummeting cost of handsets is putting mobile telephony in the hands of billions of people around the world.

Mobile handset models developed by several manufacturers provide an open application development platform and significant computing capabilities. However, current mobile software platforms are difficult to use, to develop for, and make the assumption of ubiquitous connectivity. MERComs is a framework for developing and deploying mobile based systems for monitoring tracking of rural entitlements.

In many rural places, wireless connection is not available. Using SMS, MMS and other SMTP-based methods, MERComs application is able to communicate asynchronously. Whenever data is collected, the SMS is cached in the phone's outgoing message queue. The message will automatically be sent when the phone gets connectivity (for example, when the field officer returns to the highway on her/his way to the next village). When the server receives the SMS, it sends back the appropriate response also as a message. The phone will automatically download the message when it is connected. The code for the application is cached on the phone for offline use. Application data is also stored in the phone's local memory, which serves as a cache of the server database.

MIS for MERComs is a modular, expandable and localized (in English, Hindi, Oriya) Management Information System (MIS) for NGOs, INGOs and volunteers for monitoring rural entitlements. MERComs MIS allows central tracking and monitoring of rural entitlements and its status through decentralize field based monitoring units and partners.

Features of the MIS for MERComs

The MIS monitors entitlement of the rural communities as given through identified government programmes to reduce corruption and increase access to services who have not been covered under the programmes due to access of "updated" information. The sub-modules for tracking and monitoring progress of various programmes are:

Mobile Data Entry Screens

The system captures the transactions, payments, status, availability, value etc. which stands as evidence for the delivery made respectively from / to the entitled members.

Sub Module I: Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)
Sub Module IIa: Old Age Pension
Sub Module IIb: Widow Pension

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[1] The real digital divide. *The Economist*, Mar. 2005.

Sub Module IIc: Disability Pension
Sub Module IId: HIV/ADIS Pension
Sub Module III: Public Distribution System

Figures 1-4: Screenshots of MERComs Mobile and MIS application

Reports

The system has facility to generate wide range of reports for user-defined period and save them as a pdf file, which can be viewed in any version of Adobe Acrobat Reader. These reports are as follows:

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). All report for Village, Panchayat, Block, District and State

• Registered MGNREGA Job Card holders
• BPL Population
• BPL population not having MGNREGA Job Card
• Status Report – Work Application
• Status Report – Unemployment Allowance
• Status Report – Work Days

- Status Report – Wages payment
- Status Report – Health, Crèche & other services
- Status Report - Work report as per GP Plan

Old Age Pension

- Registered Old Age Pensioner
- Population Database – Age wise
- Month wise pension status

Widow Pension

- Registered Widow Pensioner
- Population Database – Marriage wise
- Month wise pension status

Differentially Able Pension

- Registered Differentially Able Pensioner
- Population Database – Differentially Able
- Month wise pension status

HIV/AIDS Pension

- Registered HIV/AIDS Pensioner
- Population Database – Diagnosed with HIV/AIDS and dependents of HIV/AIDS
- Month wise pension status

Public Distribution System

- Registered PDS Card Holder and Supply entitlements
- Registered PDS – Distributors and Supply entitlements
- Status Report - Date wise distribution of supplies and quantity
- Status Report – Supply and sale at PDS Centre
- Status Report – Entitlements for various scheme types

6. Project Activities

A. Development of Entitlements Database

- Primary survey information of entitlements of all households under MGNREGA, PDS and Pension schemes of Banspal and Ghatagaon blocks
- Official entitlement lists for the three schemes collected from the two blocks and compared with the primary list for discrepancies
- A database for management of primary and secondary data and integrated with Mobile Phone Enabled MIS
  Identified anomalies between the primary and official entitlements lists

B. Real time tracking of MGNREGA, PDS and Pension programmes through a Mobile Phone enabled MIS

- Generation and sharing of status reports on regular basis on MGNREGA, PDS and Pension programmes with the concerned government departments
- Sharing of status reports at individual and community level with the rural communities in the targeted blocks

C. Interface with the Government for ensuring Entitlements

- System set up for timely delivery of entitlements through issuance of alerts to government departments

- Interface of rural communities and concerned government departments organized every month for sharing of status reports and grievance redressal.
- Joint Project Steering Committee at state and district level to ensure follow up action on the status reports' findings

Steering Committees

The real time tracking of entitlements will serve any purpose only if there is corrective action taken by the concerned government departments. Interface meetings are a means of making that happen and the government officials have to closely involve in the whole process through an institutional arrangement. Project Steering Committees are formed at the state and district level to review the functioning of the system, review the progress of the schemes in the two blocks and take steps to address the problems. The committees meet every quarter and review the action taken on the issues raised in the interface meetings.

Liaison and Co-ordination with the Government and other Actors

There has been regular and close interaction with the district administration and the concerned departments, which include the Panchayati Raj Department, Food Supplies and Consumer Welfare Department and the Women and Child Development Department. Regular interaction has also been organized with other civil society organizations to share the experience and take suggestions.

7. Risks and Assumptions

- Government will cooperate fully and adopt this initiative as its own programme
- Community will act on the information provided to them regularly.
- Vested interests will not pose a threat to the field staff.
- The government's close involvement in the programme is must as the risks to the implementing agencies especially for field staff is apparently high.

8. Potential Returns

The project presently benefits 45,000 Households and is covering a population of 250,000. The project aims to cover a population of almost 400,000 people (approx. 72,000 households) out of which 95% are eligible for MGNREGA, almost 70% live below poverty line (BPL) 15% can be classified as 'poorest of poor' and 12% are eligible for pension (old age, widow, disabled, HIV positive)[2]. Taking these numbers and percentages the benefits that this population is entitled to is over 459 million India rupees per annum. Therefore assuming that real time tracking is able to eliminate all corruption and leakage under these three social security schemes the potential return on investment is almost 100 times. That means an investment of 1 Rupee is likely to result in a return of 100 Rupees to a poor family, this simply by getting the system to function effectively.

Advocacy

The poor have suffered as they have little knowledge of their rights and entitlements and lack the collective strength to raise their voices. The project is focusing on informing them about their rights and entitlements and empowering them through regular interface with the government to push for corrective measures. People centered advocacy with strategic inputs at the appropriate levels by the civil society organizations will help in ensuring the streamlining of the selected programmes.

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2   This is calculated as per the state averages for the geographic locations and population groups that we are proposing to work with.

Community Participation

Community is at the centre of this initiative and they are fully involved in tracking their rights and entitlements with the help of information updates shared with them regularly. The interface meetings provide them a space to raise issues and put pressure on the administration for corrective measures. The village level cadre already promoted by the three implementing agencies are closely involved in tracking and following up on the issues.

Rights of Women and other Disadvantaged Groups

The database which has been developed in the project has information down to the individual level which helps in tracking the benefits that are flowing to the disadvantaged groups. The follow up on issues identified through tracking clearly prioritizes the marginalized groups. The Financial Return matrix is as under:

Entitlements	No. of HHs/Population, eligible under the scheme.	Per House-hold entitlement per year	Amount of entitlement per year (Million INR)
MGNREGA – 100 days of employment @ mini-mum Rs.70/day to all rural HHs every year	45000 (100% coverage of rural HHs)	Rs. 7,000	280
Targeted Public Distribution System – BPL Families get 25 Kg of rice per month at an average price of Rs.5.525 / kg (Market price of same is Rs. 11/kg so there is a subsidy of Rs. 5.475 per kg)	28,000 (70% BPL HHs in the target area)	300 kgs per annum with a subsidy of Rs. 1,642.50	46
Antyodaya Anna Yojana – 35 kg of rice to poorest families per month @ Rs.3.00 per kg, saving Rs. 8 per kg (Market price of same is Rs. 11/kg)	6000 HHs (15% of total Households)	420 kgs with a subsidy of Rs. 3,360	20.16
Madhu Babu Pension Yojana – Pension of Rs.200/month for aged (above 60), Widow irrespective of age, physically challenged person, HIV+ patient	20,000 persons (10% of population including all categories)	Rs. 2,400	48
Total			394.16
In Words	Three Hundred Ninety Four Million Rupees		

9. Impact & Future Plan

MERComs identified discrepancies in records of entitlement delivery, this included 1398 NREGS Job Card held by contractors, 127 bogus PDS cards identified, 19769 Households got their full quota of PDS and 334 differentially able persons identified applied and received entitled pension, while 3962 beneficiaries of pension were identified not receiving benefits by the system and are now receiving pension regularly.

It is clear from the very initial results that the potential gains are massive; the technology can help to ensure the efficient functioning of the system and ensure some of the gains are met. There will also be significant benefits to government in terms of the efficient management of their social security systems, the flow of resources and funds becomes easier to manage, leakage is reduced and inefficiencies removed, under performers would not be able to hide and government can monitor its personnel more effectively. Given the relative simple framework there is a great potential that this pilot can be adopted by the government and scaled up across the whole state of Orissa and other states in India for ensuring social security system deliver livelihood support to populations.