

# From Beneficiaries to Economic Citizens

A qualitative analysis of  
recipient experience of  
electronic benefit transfers in  
Andhra Pradesh

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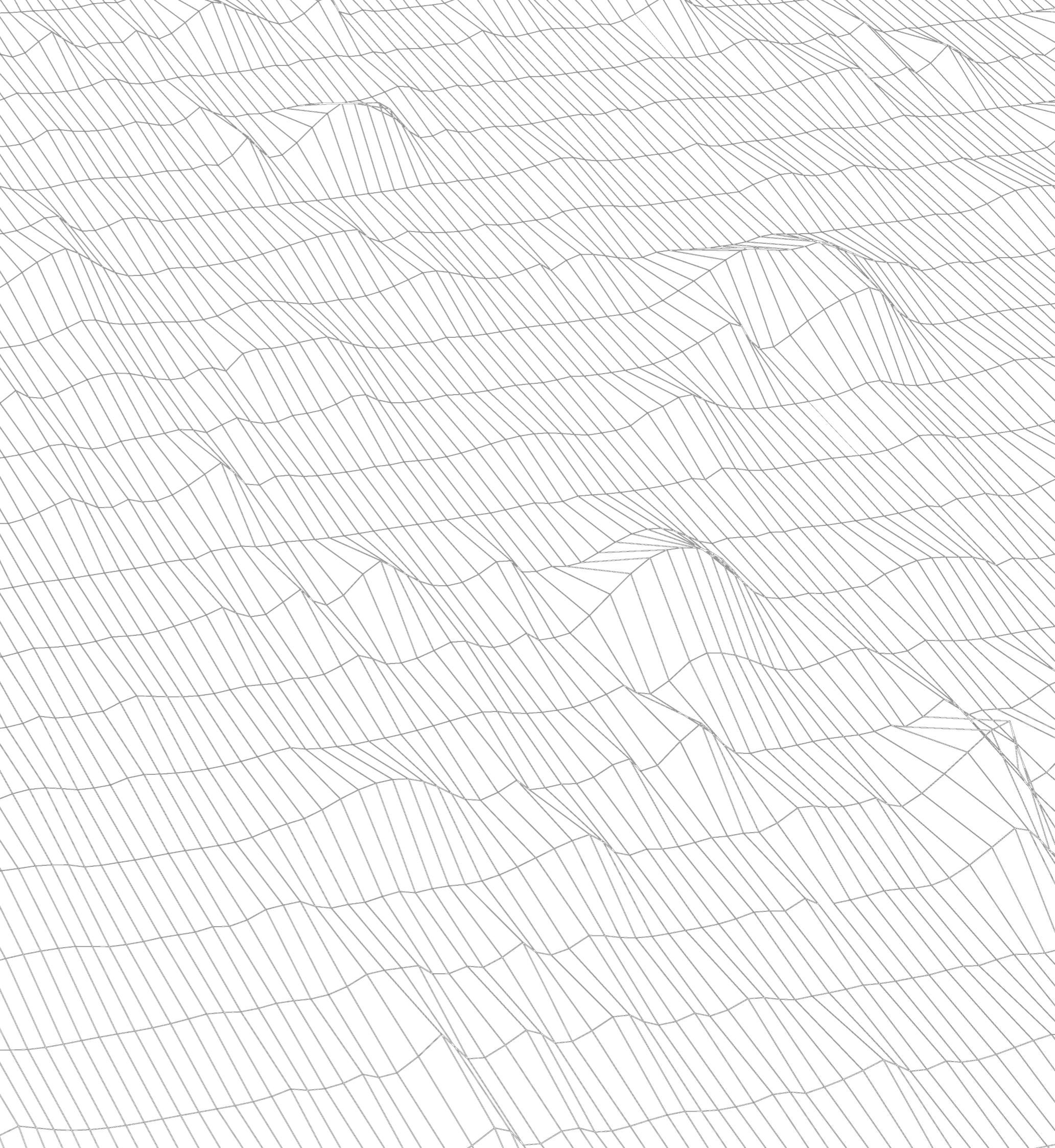
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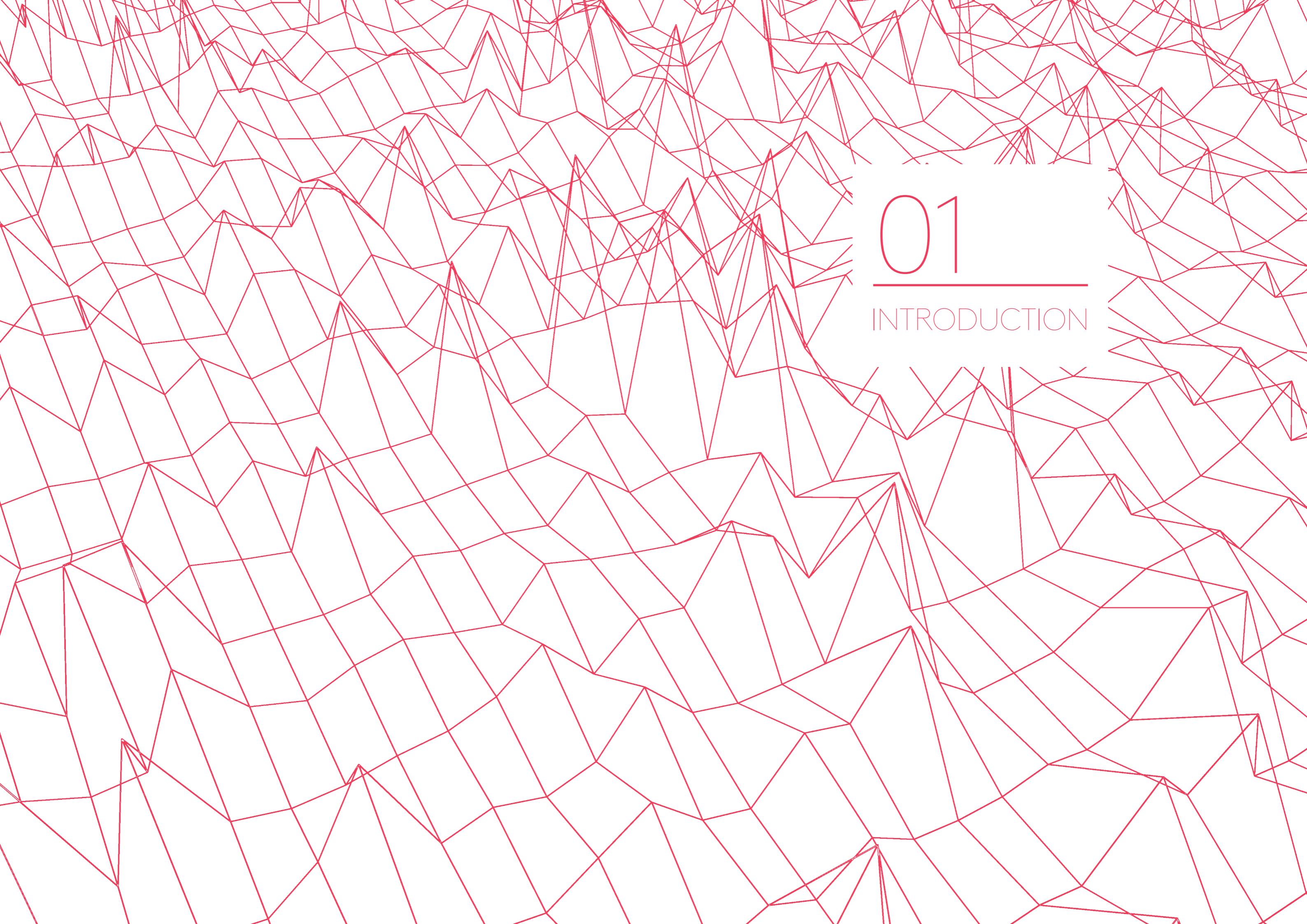
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Understanding the G2P System

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G2P & Financial Inclusion

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01

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## INTRODUCTION

## AIM

CGAP (Consultative Group to Assist the Poor) approached Quicksand to direct a research study that helps understand the manner in which direct benefit transfers from the government, enabled through technology platforms, impact the lives of end recipients. Given the emphasis globally on the use of direct transfers to advance financial inclusion (FI) goals, it is imperative that the understanding of this ecosystem is more nuanced and the solutions so designed are more responsive to the real challenges and needs of end beneficiaries.

The goal of the study was capturing a rich picture of the end-recipient experience using Andhra Pradesh in India as the research site and to suggest design responses that enrich the quality of that experience.

## STUDY OBJECTIVES

CGAP's Technology and Business Model Innovation Program has been working on understanding and evaluating the link between government to people (G2P) transfers and financial inclusion since 2009 - in particular investigating the long term impact of direct electronic bank transfers on population groups that were until recently unbanked. As technology platforms like electronic bank transfers, smart cards, mobile and PoT terminals become the medium of choice for transferring social benefits, there is a need to understand the gap between actual and stated benefits of these solutions for different stakeholders - primary amongst them being the goal of FI for the end beneficiary. While the evidence gathered from other countries that have adopted these technologies is promising in a few aspects, it remains inadequate in explaining the potential impact of similar solutions when implemented in fundamentally different geographies and contexts.

A case in point is the deployment of these technologies in India where the government is making an ambitious effort to migrate its welfare payments from a complex process involving several ministries, departments and private agencies to a single window electronic bank transfer directly to the beneficiary. The efforts are also linked to the government's unique identification program Aadhaar, enrollments for which are still underway.

Several pilots, involving one or more of the many technology platforms available, have been tried since 2007 by various state governments in India. The state of Andhra Pradesh (AP) in particular has been one of the most progressive administrations providing a well developed financial infrastructure that has both breadth and depth in its outreach. AP has also hosted several experiments enabling G2P payments through various technological means.

CGAP approached Quicksand to steer a research study in AP that provides an understanding of the Direct Benefit Transfer (DBT) system from the government to end-recipients, particularly of the technological platforms employed in doing so.

The study was designed as a series of research activities that not only provide a framework for understanding the context, but also for improving the end-user experience.

The four main activities can be categorized as follows:

► **Conduct an ethnographic study of G2P Digital Cash Transfer Recipients and Last-Mile Agents**

An in-depth understanding of both providers and recipients of cash transfers was necessary to create a frame-of-reference for understanding the challenges each face. A wide cross section of end-users and service providers was studied to provide a comprehensive account of both the recipient and provider experience.

► **Produce case studies of CSPs and other Last-Mile Agents in the Digital Cash Transfer Ecosystem**

Within the user and provider categories, case studies were prepared to share specific insights gleaned from individuals interviewed during the research.

These case studies further contextualize the findings by presenting individual voices, serving as a counterpoint to the categorical generalizations.

► **Summarize technology experiences for Beneficiaries and Last-Mile Agents**

Identifying the technologies used for facilitating benefit transfers and the resultant experience on both the provider and beneficiary's end is key to understanding whether the value created through use of technology is aligned to the original program vision. Evaluating these experiences from both the provider and recipient helps to ensure a balanced perspective without skewing it unduly towards one stakeholder.

# AREAS OF RESEARCH

The study identified several domains of inquiry necessary to provide an informed understanding of digital cash transfers in the AP context. These were explored keeping key questions in mind while interviewing both recipients and service providers.

## EXISTING FINANCIAL PRACTICES AND BEHAVIORS

- ▶ Understanding revenue streams - Perceptions and utilizations of different cash flows coming to the household (e.g., small jobs, primary work, welfare payments).
- ▶ Social and cultural constructs - What are the social and cultural linkages around money management and organization of expenditures (e.g. share of revenues and expenses in joint families, use of community chit funds, culture or religion based practices)?
- ▶ Planning for the intangible and unknown future - How do uncertainty and irregular incomes shape economic systems and lives? How are fluctuations anticipated and resolved?
- ▶ Understanding traditional versus modern financial practices - What are the informal financial instruments used and how has that changed over time (and why)? What's the use pattern and divide of formal versus informal products?
- ▶ Prioritizing unmet needs and aspirations - What are the critical needs and demands for financial services amongst the aid-receiving poor, and what if any are the asset building opportunities available to them?
- ▶ Mapping different formal financial products and various schemes (e.g., Kisan credit cards etc.) used and the reason for their uptake.

## MONEY FLOW

- ▶ Understand how money flows in the local economy: What are the points of transaction?
- ▶ How is money stored, accessed and spent?
- ▶ What is the value of physical money as opposed to virtual accounts?
- ▶ What is the transaction life-cycle (receiving money, safely storing it, spending it, saving it)?
- ▶ Who are the custodians of money in a family / community? What is the nature of transaction when money changes hands?

## USER EXPERIENCE OF AVALING THE SERVICE

- ▶ Map the service life-cycle – from identification of end beneficiary, enrollment, transfer and continued use of the account.
- ▶ Map the experience of the user at each stage of this life-cycle. What are the breakdowns, if any?
- ▶ What is the flow of information and money between the recipient and provider?
- ▶ What are the tangible artefacts of the service that the user remembers it by?

## RESPONSE TO NEW PRACTICES AND TECHNOLOGY

- ▶ Comparing erstwhile system of manual transfers with new technology based systems: Is it better and more convenient? Are there trade-offs involved?

## SERVICE PROVIDER PERSPECTIVE

- ▶ Understand the operations of the service provider.
- ▶ How does the institution and its agents engage with the recipients?
- ▶ What are the other stakeholders that the service provider has dependencies on?
- ▶ How does information flow between service provider and other stakeholders?
- ▶ What are the barriers and enablers of an effective service?

The background of the image is a complex, abstract wireframe pattern composed of numerous red lines forming a three-dimensional, organic structure that resembles a brain or a network of interconnected nodes.

# 02

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## METHOD

## STUDY LOCATIONS

The field research was conducted in 4 weeks between June-July 2013, spread over two separate visits. Mahbubnagar, East Godavari and Visakhapatnam were selected as the districts keeping in mind the diversity they provide as well as to align Quicksand's research with the provider side research and quantitative survey being conducted by IMRB (Indian Market Research Bureau) and MicroSave.

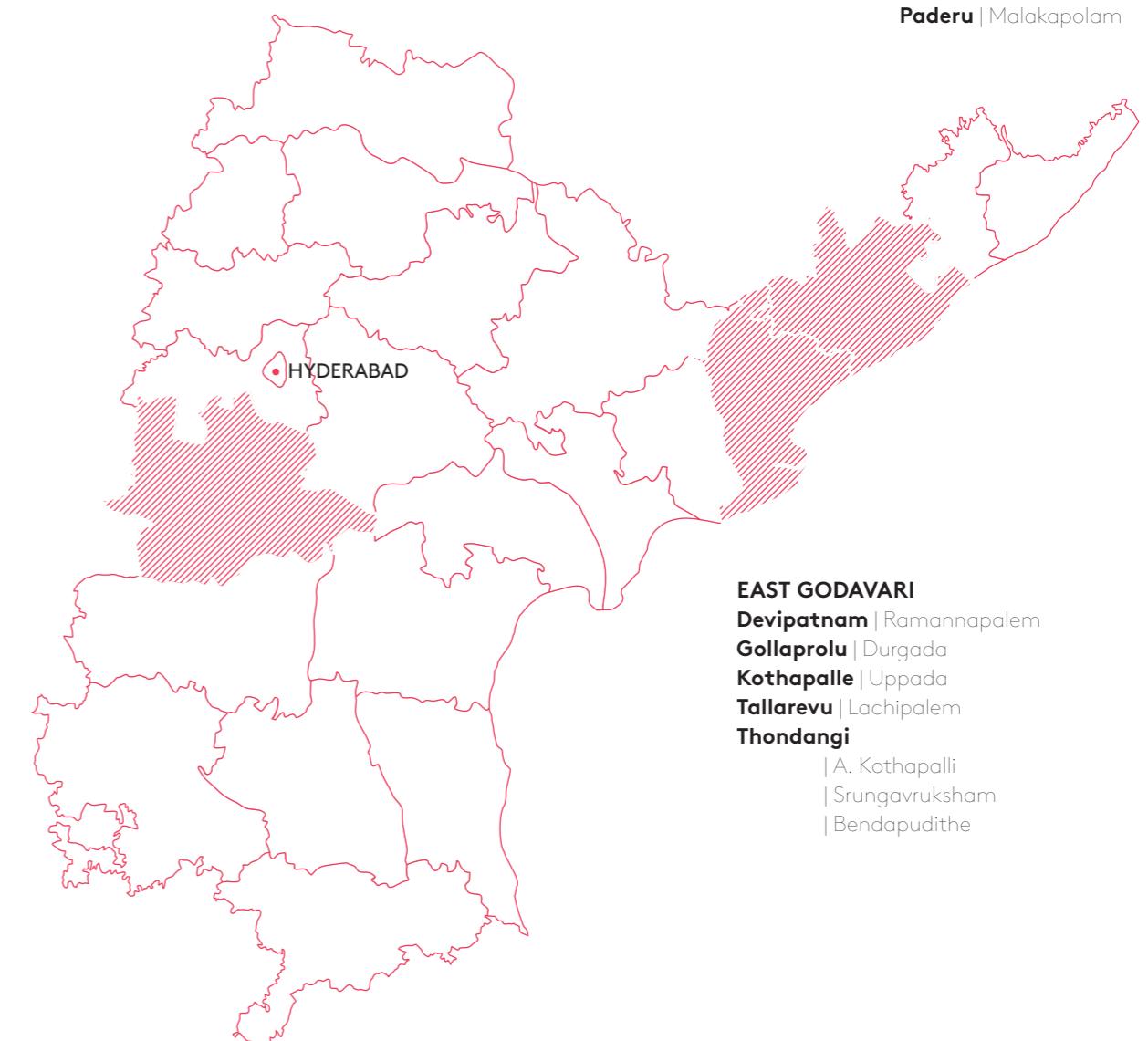
In each district, the team scouted for villages to include diversity in sizes and populations as well as main sources of income and primary occupations of the respondents. Another factor for selection was proximity of the villages to towns and urban locations that in turn influences the level of awareness and development of the community. Lastly, a key factor for selection was to cover the spectrum of technology platforms that are being used deliver the G2P benefits.

From the supply side perspective, Mahbubnagar provides a landscape that is operationally challenging because of the multiple banks and Business Correspondent (BC) model that exists for delivering G2P benefits. East Godavari is one of the first few districts in AP to have piloted DBT for National Rural Employment Guarantee Scheme (NREGS) and Public Distribution System (PDS), which employs the use Aadhaar cards and biometric based identification. The tribal belt in the north of Visakhapatnam district provides a unique situation to study the challenging political and operational landscape within which G2P benefits are delivered.

Most of the population in Mahbubnagar is centered in rural areas and agriculture is the main occupation. Drought is a persistent problem in the district, which makes income from agriculture even less dependable. Since income is irregular, there is high dependency on work generated through NREGS.

East Godavari is partially coastal, thus fishing and aquaculture, along with agriculture, are the main occupations in the district. This also adds diversity to the study. Other common occupations met with were those that were mobile in nature (peripatetics).

Remote mandals of Visakhapatnam, also known as ITDA (Integrated Tribal Development Agency) areas, provide the challenges of accessibility, heightened cash management risks and poor technology support and operational oversight leading to manual payments. Key occupation amongst the villages visited was subsistence farming and income is mainly generated from selling NTFP (Non-Timber Forest Produce) as well as craft-based products.



### MAHBUBNAGAR

**Amangal** | Kalakonda  
**Bhoothpur** | Amisthapur  
**Dhanwada** | Marikal  
**Hanwada** | Dhachakpally  
**Jadcherla** | Nagasala  
**Konduguru** | Ramachandrapuram

### VISAKHAPATNAM

**Araku**  
| Madagada  
| Malakapola  
| Iragai  
**Dumbriguda** | Podjela  
**G. Madgula** | Matyapuram  
**Paderu** | Malakapola

### EAST GODAVARI

**Devipatnam** | Ramannapalem  
**Gollaprolu** | Durgada  
**Kothapalle** | Uppada  
**Tallarevu** | Lachipalem  
**Thondangi**  
| A. Kothapalli  
| Srungavruksham  
| Bendapudithe

► IMAGE Map of Andhra Pradesh with study locations highlighted

## STUDY SAMPLE

Our research focused on approximately eighty interviews including recipients, service providers and related stakeholders. We spoke to individuals, families and groups in the villages who were recipients of one or more of the G2P benefits. These were supported with other interviews of individuals who were employed as CSPs, Mandal Coordinators (MCs) and other stakeholders, to build an understanding of the experience of the last mile delivery of G2P benefits.

For the purpose of finding a diverse respondent mix, the field team created typical user profiles whose lives exhibit financial mobility. The profiles varied in terms the formal or informal channels through which they accessed money, had different expenditure profiles and were at different stages of transition in their social and economic status. Added to this was a range of geography-specific profiles for coastal and tribal villages. The team consciously sought individuals and families who were outliers in the system and demonstrated unique financial situations.

### ► Examples of typical user profiles which aided respondent selection

#### **A FAMILY THAT HAS NEWLY RENOVATED THEIR HOME**

We looked for a family that has made new renovations to their home. They have done this to rent out a part of their house to earn a steady income.  
OR  
They have renovated their home recently to accommodate their newly wed son and daughter-in-law.

#### **A SHOPKEEPER IN THE VILLAGE**

A large family in which one of the members runs a shop along with his wife. He travels often to the nearest town to buy stock for the shop. To run the shop, they take loans from 2-3 informal and formal networks. Recently they have made a large expenditure to expand the shop.

#### **A LOAN DEFULTER**

We sought a family that has had to take loans often and has not managed to pay them back. As they have been defaulting, they have had to use many different sources to get loans, which are now unmanageable to pay off.

## PROCESS, APPROACH & TOOLS

The research team consisted of four design researchers from Quicksand as the core team. To supplement the field team, two local moderators from Hyderabad were hired to conduct the interviews in Telugu, the local language in AP. In addition, three students from TISS (Tata Institute of Social Sciences, Hyderabad) were brought on board to assist the research team in translation and, more importantly, to act as cultural guides to interpret local nuances and decode behaviours, traditions and customs. The team often split into three groups of at most two people each, to be less intrusive as well as to cover a wider breadth of respondents.

The team adopted an ethnographic approach in conducting the field research, with an emphasis on visual documentation. This approach translated to employing methods such as in-depth interviews and passive observations with recipients and last mile agents around the delivery of G2P payments. The other aim of these interactions was to uncover interesting and potentially inspiring stories of people in the villages and marketplaces covering a breadth of occupations, socio-cultural landscapes, as well as informal and formal financial practices.

The team also conducted interviews with domain experts to understand the larger context of G2P benefit transfer and FI. This included speaking with financial institutions, academics, grant making agencies working in the area of FI, and other players implementing innovative money transfer schemes.

Finally, the study objectives and outputs were progressively refined through interim check-ins with the Government of Andhra Pradesh (GoAP), CGAP and World Bank teams and the two other research agencies working on provider perspective.

# STUDY PROFILES

METHOD

METHOD



**RAMAIAH**  
Saree Weaver



**RAMESH RAO**  
Field Assistant



**RAMULUYYA**  
Agricultural Labor



**D.V SATYANARAYANA**  
FI-BC



**CHANDRAM**  
Fisherman



**G.S. VARMA**  
PDS Agent



**SUNANDA**  
CSP



**RAJU**  
B.Tech Student



**MANEMMA**  
Unskilled Labor



**FARIDA**  
Pensioner



**KAMALA**  
Trinket Seller



**PADMAVATI**  
Subsistence Farmer



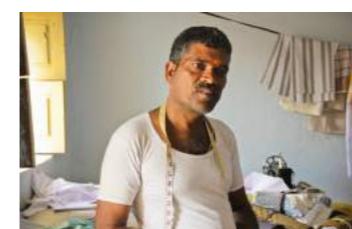
**SOMESHWAR**  
Shepherd



**SWARAJYA LAKSHMI**  
PoP CA



**KRISHNAYYIAH**  
Branch Post Master



**ANANTHA LAKSHMI**  
Tailor



**PRASAD**  
Mandal Coordinator



**PADMA, SRILAXMI, DEVI, DURGA**  
VO Leaders

The background of the image is a complex, abstract wireframe model of a mountain range. The mountains are rendered in red, with numerous thin lines creating a sense of depth and perspective. The peaks and valleys are defined by these lines, giving the appearance of a rugged, three-dimensional landscape. The wireframe pattern is dense and covers the entire background area.

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FINDINGS  
FROM  
THE FIELD

This section is a consolidation of the observations and interviews from the field research. These notes are detailed out under a few sections starting from more macro perspectives like location profile and occupational clusters to more specific aspects of the study in question such as G2P schemes and technology employed. Each section is collated based on the evidence collected by the field teams and is annotated with case studies.

## LOCATION PROFILE

Peri - Urban  
Rural  
Tribal

## OCCUPATIONAL NATIONAL CLUSTERS

Agrarian  
Fishery  
Artisan  
Job-Holder  
Peripatetic  
Pensioner  
Pastoral  
Entrepreneur  
Unskilled Labour  
Subsistence Farming

## FINANCIAL ECOSYSTEM

Informal Financial Practices  
Formal Financial Services  
Financial Facilitators

## G2P SCHEME

NREGS Wages  
Social Security Pension  
Public Distribution System

## LAST MILE AGENT

CSP  
Post Master  
FI - Business Correspondent  
PDS Agent

## PAYMENTS TECHNOLOGY

Front End - Recipient Facing  
Back End - CSP Facing

# LOCATION PROFILE

This section synthesizes the characteristics of the study locations to describe typical peri urban, rural and tribal villages in AP, to highlight some key features of each type as well as key differentiators.

## PERI-URBAN | KALAKONDA, MAHBUBNAGAR

Peri-urban villages are characterized by their nearness to towns and their access to services like hospitals, colleges, markets, pawn shops and money lenders amongst others.

In these villages, few people owned the land and most work as farm laborers on it with highly seasonal and fickle income patterns. Many of the study participants we met in these villages were unskilled laborers working on farms as well as earning daily wages in factories and warehouses in nearby towns, translating to a lower standard of living than most people.

Compared to NREGS work, manual work in towns, such as those in factories and markets, though more physically grueling and longer in working hours, pays Rs. 250-300 on a per day basis. Most often, middle aged and younger men would go to do labor intensive work in towns.

## RURAL | LATCHIPALEM, EAST GODAVARI

These are primarily villages with a high dependency on agriculture. Sharecrop farming is most common here, as the team found many instances of farmers leasing land from land owners who lived in towns and cities. Income was largely dependent on the crop cycles and in many cases payment for land was made through the crop produce.

Due to the proximity to towns, youth travel to urban centers for higher education. Young adults also tend to venture out to seek jobs or daily work. Very few people from the village have stable jobs in the town, such as that of a taxi driver or at a local business. Instead they have to travel to work on a daily basis sometimes choosing to stay in town for a long duration of time.

The field team observed that communities in these villages were not as closely knit as in tribal or rural settings. There were many instances, where the children were married and lived away from their parents. Even though they were much better off than their parents, there were rarely any instances of financial support that existed. There is a prevalent attitude of "each person for themselves" indicating that dependence on friends and family for financial support was much lesser. Instead people ended up borrowing from money lenders and pawn shops in towns, rather than from neighbors and friends in the village itself.

Since agriculture is key, there was prevalence of agricultural based government subsidies like Rythu Mitra\* for farmers. Most of the villagers invest in agricultural tools and implements and in many cases all family members work to support farming. Self Help Group (SHG) loans taken by women, were mostly used for supporting agricultural needs like seeds, fertilizers and equipment.

\* Rythu Mithra Groups (RMGs) were formed in AP to work on SHG lines to enable tenant farmers, share croppers and other lessees to obtain finance from banks and to serve as a conduit for technology transfer and facilitate access to market information.

The practice of barter (i.e., crops for services and vice versa) is prevalent amongst these communities. For instance, sharecropping farmers leased land from owners in exchange of the produce. They also barter crops in exchange for services like building and renovating houses or making furniture.

Another prevalent occupation was that of people who had started their own business or, more often, who worked in small groups as was the case with a group of young carpenters the research team met. This group of people usually travel to a few villages in the vicinity providing services in exchange for crops as well as cash.

These villages were reasonably self-contained, wherein many of their requirements were fulfilled through services coming to their village. People with small businesses that are mobile in nature frequent these villages to provide services like repair work, carpentry, cloth/sari seller. Visits to the town are infrequent and happen during festivals or for occupational purchases, such as tools. Entrepreneurs like carpenters and sari sellers travel to towns once in a fortnight to replenish their supplies. It is common practice for them to take supplies on credit which they then clear on a subsequent visit.

## TRIBAL | ERAGAI, VISAKHAPATNAM

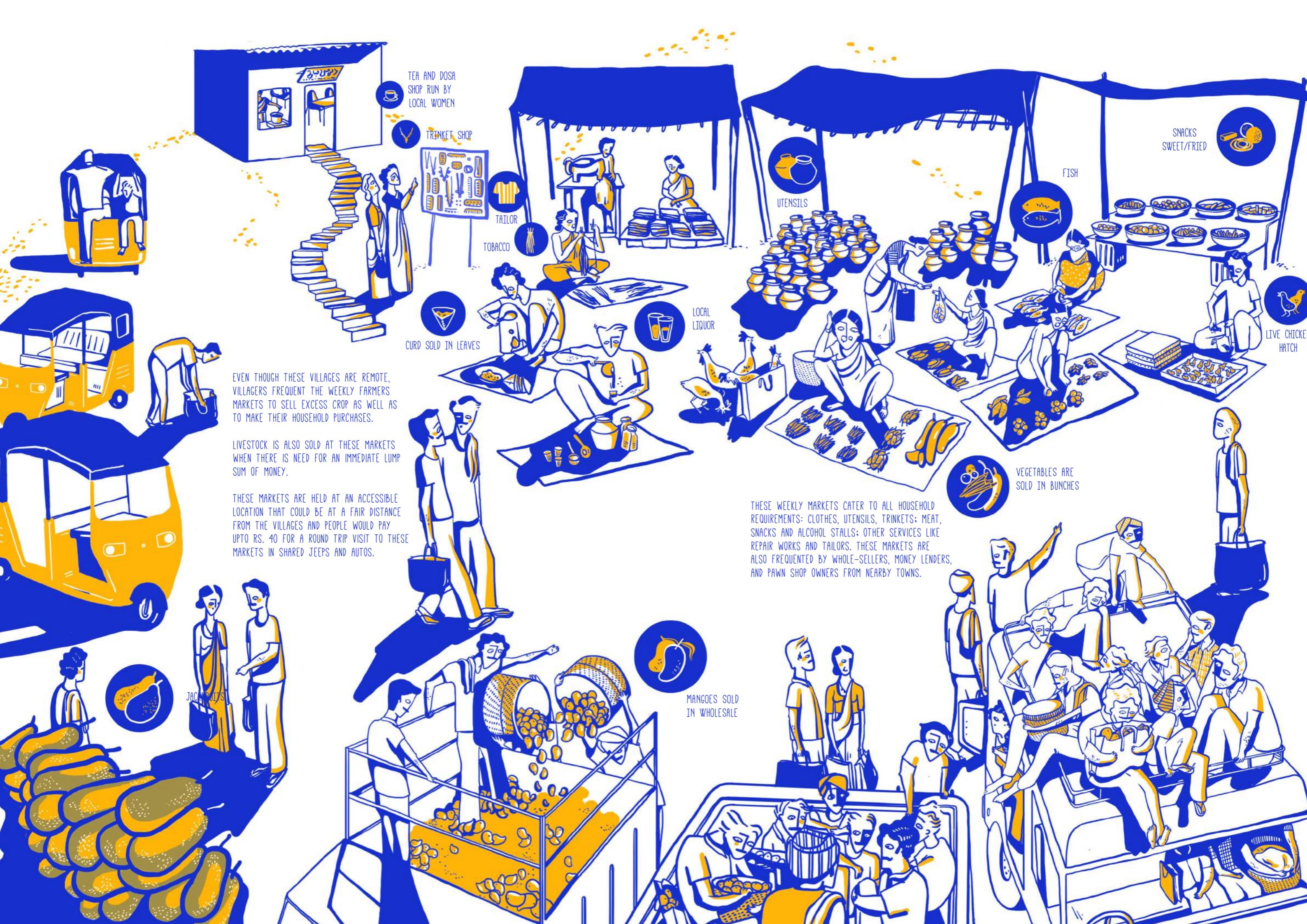
The tribal villages are characterized by a cluster of hamlets with a common practice of subsistence farming and a strong tradition of 'living off the land'. Most of the households own very small pieces of land which provide for their family's consumption. The government also provides infrastructural support like land and seeds for farmers to cultivate NTFP such as Coffee, Tamarind, Pepper, and Pulses, which farmers sell back to the cooperative shops. Another common practice is that of rearing livestock. This does not generate a substantial income, but is a trade that is passed down from one generation to the next. Families tend to have one member who takes care of livestock, while the others work in the farms. For the betterment of Tribal communities, the government supports crafts based occupations like pottery and Lac work, by providing training, tools, as well as other infrastructural support (e.g., shop space in a museum usually located in a nearby town). The team met a few artisans living in clusters within tribal villages. Since crafts-based work is time consuming and raw materials tend to be expensive, the amount of effort it takes to make a product is not commensurate to the income generated.

Given the meager and fluctuating income generated from these occupations, there is a high dependency on NREGS work in these villages to sustain livelihoods.

Tribal communities are close knit, and there is a high dependency on friends, family and community members for support in times of need. There is frequent informal borrowing from neighbors and other familiar members of the community, and there's a shared understanding

that the people of the village will help when one's in need. There is a strong sense of social cohesion within these communities, which is evident through some of the financial management practices. For instance, in the case of weddings, the community provides support by way of food and money, as well as help with the preparations. It is common to keep a record of all the gifts and money that may have been received on such an occasion, so that the favor is returned on similar occasions hosted by others.

The field team probed several respondents on aspects of village life that has changed significantly over the years. A common point they all made was that over the past few years, the younger generation has been leaving home to study after which they tend to look for work in nearby towns. Some of the youth were also doing NREGS work during their vacations, and said that they were trying to save money to find stable jobs. Another change that they spoke about was the openness of the community to intercaste marriages, which were becoming increasingly prevalent now.



# OCCUPATIONAL CLUSTERS

We met a variety of recipients to uncover distinctive financial behaviors and practices, that together provide a composite picture to evaluate expectations from a Digital Cash Transfer ecosystem. Outlined below are a few occupational clusters, described through stories around nature of work, family composition, life goals and financial behaviors.

## AGRARIAN

Agrarians are described as farmers who own land as well those who farm on rented or leased land (i.e., sharecropping farmers). In harvest season, when the workload is high, most agrarians work on another owner's land as well as their own and are paid a daily wage for the former.

Income for this cluster comes in few, but large, sums seasonally as crops. Crop-sharing farmers pay the landowners with the money earned from selling what is harvested and sometimes by bartering produce itself. This barter practice is common, leading to only a share of the produce being immediately sold as cash in hand. For instance, a farmer that the research team met gets his house renovated piecemeal every year. This year he was getting new doors and windows fitted in exchange for three sacks of *Dhan* (rice with husk).

Other relatively well-off farmers said that NREGS work did not pay as well as earning from working on another's farms and it was not dependable income, deeming it "*Chai-Bidi*" money (or petty cash). Another farmer stated, "*NREGS money is not for the future, it's for the present*". During the off-season, most farmers earn income through NREGS work, though this may be infrequent. Other government provided benefits availed by these farmers were rations through PDS shops.

Many farmers met during the study used banks a few times a year to deposit money in the landowner's and their own accounts. Most of them make investments in their houses or in gold since this segment earns money in few large sums. They also reported saving money for their children's education and wedding and felt that investing in gold was a safe option that would come of use when there is a wedding in the family.

For agrarian users, a large set of expenses incurred revolve around the crops themselves. These expenses include purchase and rental of farm equipment and other small and recurring expenses including seeds, fertilizer and livestock.

For agricultural equipment, landowners avail government agricultural loans and subsidies through RMGs. On the other hand, sharecropping farmers may borrow money from the owner of the land they work on and adjust the money during the next harvest cycle. Typically sharecropping farmers would individually take loans, then pool their resources to purchase and or rent equipment they would then share.

It was found that in the case of agrarian households, SHG loans taken by wives were also used for agricultural purposes and to supplement the family's income.

► **SUBBARAO K.**  
is a sharecropping farmer  
who is unable to access  
agricultural loans as he  
does not own land and,  
consequently, cannot provide  
security for loans.

I had some money and I recently  
got a pipeline for water to my field.  
This makes my work more efficient.  
If I didn't have the money at hand,  
I would keep debating whether this  
was important and if I should sell  
the gold or leave it and let my family  
continue to bring water.

## FISHERY

The fishing community is identified by their distinct geography. The team met with two kinds of fishing communities: one who were fishing in the river and the canals on a daily basis, and the other a seafaring community, fishing at high seas a few times a week.

## COASTAL COMMUNITY

Coastal/Sea fishermen work in groups of usually 10-12 people, with a boat owner and contractor. They go fishing 2-3 times a week, though not on a set, timely schedule; sometimes they go off for 4-5 days pursuing bigger catch in the high seas. The fishing contractor may also be the owner of the boat and pays for operational costs, such as fuel for the boat and fishing equipment like nets. The sales from the catch are split with one half for the contractor and the rest divided equally between the fishermen.

Coastal fishermen have an unpredictable income coupled with high occupational risk to life. Similar to unskilled laborers, the fishing community has a hand-to-mouth existence and most of their earnings are spent on daily household expenses. Educating their children, for whom they envision an employable status in mainstream society, is a priority.

Most of these families have a dormant bank account, and they avail subsidies such as rations through PDS shops. In spite of imminent needs for life insurance, they do not access the same because of a combination of past bad experiences, present fluctuating incomes, and general ignorance regarding such products.

Interestingly though, their contractor takes on other support functions one would expect from formal employers, such as providing work infrastructure, emergency hand-loans and an informal insurance arrangement that covers professional liabilities.

*"We're not fishing every day, but how can I do NREGS work? I'm never here for a whole week."*

Most of them do not engage in any NREGS work as their erratic work schedules do not allow for it, implying that they are primarily dependent on irregular earnings from fishing and on support provided by their contractor. In case of expenditures on unforeseen events, they end up taking interest-free loans from the contractor of up to Rs. 20,000.

## RIVERSIDE COMMUNITY

The riverside fishing community fish for smaller catch on a daily basis in the river and the canals near their homes. Some of them also work in traditional hatcheries, which are under threat from industrial growth and subsequent pollution. These fishermen have a similar work life, though not as high-risk as the coastal fishermen.

Riverside fishermen work independently or with other villagers, and not with a contractor. They sell the daily catch to a single wholesaler that comes to their village. The money is divided equally amongst all, but they earn a small income, up to Rs. 50 on a daily basis.

*"Our requirement is for smaller, frequent loans to keep the work going, a system of loaning like the SHGs will be good for us as well."*

THE COSTAL FISHERMEN WORK IN A GROUP OF 10-12 PEOPLE, WITH A BOAT OWNER AND CONTRACTOR. THEY GO OUT FISHING 2-3 TIMES A WEEK. SOMETIMES THEY GO FOR 4-5 DAYS AT A STRETCH, LOOKING FOR A BIGGER CATCH.



THE RIVERSIDE FISHER COMMUNITY FISH FOR SMALLER CATCH ON A DAILY BASIS NEAR THE SMALL RIVERS AND CANALS. THEY WORK INDEPENDENTLY WITH SOME OTHER VILLAGERS AND THE EARNINGS ARE DIVIDED EQUALLY AMONGST THEMSELVES.



The Kondakummaris have been deprived of availing government schemes because we are a Backward Caste. Pottery doesn't provide us with a sufficient livelihood anymore. That's why we have appealed to the government to change our status to Scheduled Tribe.

#### ► KASU

is a potter who does NREGS work as well as subsistence farming to make ends meet.

## ARTISAN

The artisanal clusters are identified by households where a large portion of the income is generated through a craft-based occupation. In most cases, a small community of artisans live together in a cluster within the village, as was the case in Araku's villages. Because of the seasonal demand for craft products and the rising prices of raw material, the income generated fluctuates and thus is not dependable. Most craftspeople and their families work on leased land as subsistence farmers while also doing NREGS work, such as leveling, digging, and building boundary walls. Some artisans also supplement their incomes rearing livestock.

Some artisans in tribal areas stated that the NREGS work they do is more remunerative as they get Rs. 100-150 per day as compared to the Rs. 100 for a piece of pottery that takes up to two days to make.

In tribal areas, artisans were also provided support by way of training, money and raw materials from the Tribal Development Board. In return, they supplied their wares to the Tribal Museum and were given space to sell their products to museum visitors.

Since their income is not stable, they loan money from SHG groups or in emergency cases, from their relatives.

## JOB-HOLDER

This cluster is defined by a paid position on account of regular employment. The primary source of income for this recipient group may be small but comes from a steady job. Chief wage-earners tend to travel out of the village to the nearby towns for daily work and other adult members of the family do NREGS work to add to the household income. While day-to-day expenses for the family are addressed with the salary, this group tends to take big loans for larger expenses like home construction. Also, these loans may be taken from different sources, due to their network at work and the fact that it is difficult to mobilize a large sum of money from one source. This group avails government subsidies in the form of PDS through ration shops.

There weren't many people the research team met who were job holders, but it's an aspiration that most people have. Once people are settled in their jobs, they might not be doing NREGS work anymore, but it is the transitional phase during which family members continue to do NREGS work while the chief wage earner works in a regular paying job.

## PERIPATETIC

The occupational cluster of people who travel and are based in various places for a short time to conduct their business are described as peripatetic. In most cases, this group relies on occupational skills that have been passed down over several generations but also includes other enterprises, such as watch repairer, cloth seller, knife sharpener, and tinker. The chief wage-earner usually travels and works alone but in some cases, wives and children also learn the skills and they travel together.

This cluster usually does not own assets like land and property, and may often live in a rented house, especially in the case of those living on the periphery of small towns serving the nearby villages. While the business at any one village may not be substantial every time, the customer base still needs to be maintained and so most service providers tend to visit the same village on a fortnightly basis. They also prefer to revisit villages as there is a certain sense of familiarity and comfort. Most users from

#### ► TIRUPATHAYYA

is a newspaper reporter, a steady job he's come into recently after trying his hand at different occupations over the years. He recently bought a camera so that he could report with photographs. Their biggest expenditure is in constructing their house, and for that he mobilized money from different sources. His wife is part of an SHG which provided them access to one loan. This sum was insufficient though, so along with the subsidy provided by the government housing scheme and a chit fund, Tirupathayya loaned money from his father, who in turn had to borrow from his employer. He says he would have taken the loan from the bank, if only there were fewer hurdles to get one, and it was a quicker process.

this group chose to not do NREGS work, for the fear that they may lose their business to competition.

Their biggest investment is on equipment for which they may borrow money and repay it from future earnings. Supplies are often taken from the wholesaler on credit based on trust and familiarity. These are paid back on a fortnightly basis when new supplies are bought. Recurring expenses, like travel, are paid for with the money they make on a daily basis. Other big expenses are children's education and weddings. SHG loans as well as moneylenders may be accessed for this. Since they are unable to show ownership of assets, they feel this makes it difficult for them to access bank loans.

SHEK FARID AND HIS FAMILY WORK AS TINKERS, REPAIRING AND MENDING UTENSILS.

REPAIR WORK IS INCONSISTENT AND SO THEY TRAVEL TO THE SAME VILLAGE ONCE EVERY FORTNIGHT, SUCH THAT THERE WOULD BE MORE UTENSILS TO REPAIR IN ONE VISIT.

MY SON WILL LEARN MORE USEFUL SKILLS IF HE WORKS RATHER THAN GOES TO SCHOOL.

BOTH OF SHEK'S PARENTS USED TO MEND UTENSILS, AND SHEK'S WIFE HELPS HIM AS WELL



WINNOWING FAN MADE FROM SCRAP STEEL



RICE CHAFFER MADE FROM SCRAP STEEL



BOX MADE FROM TIN CONTAINER



PATCHED BROKEN UTENSIL



DENT REMOVAL FROM UTENSILS

I WORK WITH MY HUSBAND. OUR FAMILY HAS BEEN DOING IT FOR GENERATIONS. HE TAUGHT ME HOW TO DO THIS LONG AGO, AND I'VE BEEN WORKING WITH HIM EVER SINCE.

ONE BIG EXPENDITURE THEY MADE WAS ON A SECONDHAND MOTORCYCLE, FOR WHICH THEY ARE PAYING IN INSTALLMENTS TO THE OWNER. ON THE ROAD, THEIR BIGGEST EXPENDITURE IS FUEL FOR THE BIKE. WHEN OUT ON THE ROAD, THEY CARRY ALL THEIR TOOLS, FORAGE FOOD FROM THE VILLAGERS, AND SLEEP IN PUBLIC SPACES.



I TOOK A 10,000 RS LOAN TO INVEST IN GOLD. FROM THE SALES I MAKE, I PAY BACK RS 1000 EVERY WEEK TO FINANCE COMPANY FOR A PERIOD OF 12 MONTHS.  
MY HUSBAND HELPS ME KEEP A TRACK OF THE PAYMENTS.

KAMALA TRINKETS SELLER

THOUGH I HAVE BANK ACCOUNT I WOULD NEVER BELIEVE IN THEM. A BANK WOULD NEVER CARE FOR A POOR MAN LIKE ME.

SAMIR SAHIB SARI SELLER



MOST OF MY CUSTOMERS ARE SMALL RESTAURANTS AND KITCHENS IN THE TOWN. I HAVE A JOB CARD, BUT DON'T REALLY DO ANY EGS WORK. IF I WORK THROUGH THE WEEK, I WILL LOSE MY CUSTOMERS.

BAJJI, A TRADITIONAL KNIFE SHARPENER



I'm old and I have fulfilled my responsibilities. I don't need to save anymore.

If I put Rs. 2,000 in a bank, I get Rs. 150 as interest in two years. Instead if I buy a lamb with that money, I can sell it in two years for Rs. 4,000. Banks will not give returns like these.

## PENSIONER

Pensioners are the cluster of elderly users whose main income is the pension subsidy provided by the government. They may also be working as daily wage earners, though people who are very old tend to avoid manual work like NREGS jobs. They may or may not be living with their children, but are often supported by them, if only in small ways. In the case of single surviving parents, the pension and ration share gets added to the household kitty.

Without the burden of life goals, and with support from their children, it was found that most elderly seemed to have a sense of detachment from money matters. In the case of solitary pensioners, only the bare necessities of survival come into play (except for medical emergencies), and dependencies on the immediate community sometimes increases and blends with charity.

It was observed in a few instances that there was confusion around eligibility for G2P payments, as well as around enrollment and delays. Resolution of these matters is further complicated because of limited mobility on account of age and hence the inability to persistently pursue unresolved issues.

### ► U.CHINNAMMA

U. Chinnamma is a widow. Her husband died 13 years ago and she was left alone with a young daughter. When her husband died, she sold off land to a Zamindar (landlord). She used some of the money to pay for his cremation rites and the remaining amount she kept for her daughter's wedding.

She used to work as an agricultural laborer, but can no longer do it as she is weak and unable to do physically exhaustive work, including NREGS work.

Chinnamma's daughter is married and lives in the same village. Since she is the mother of the bride, she says, "It's not appropriate for me to live with my daughter, even if I'm alone." She owns a small house, which she's renting off for Rs. 100 a month, while she lives in another village resident's home. They support her by sharing their space and in return, she helps with household chores, such as cooking and cleaning.

She avails ration from a PDS shop, part of which she gives to her daughter and is the only earning member in her family. The other half she gives to the family she lives with. While she earns very little now, she feels she's able to manage.

## PASTORAL

Households in this cluster are identified by their main source of income: buying and rearing of livestock and dairy farming. This trade is passed down through generations, but in many families the elderly and the parents seem to take on this role, while the younger adults are encouraged towards educational pursuits in order to obtain a more stable job, preferably one within the government. Rearing livestock is strenuous and time-consuming work, and does not pay well enough, implying that in most homes other family members tend to work as labor on farms, as well as do NREGS work and do subsistence farming to provide alternate income streams.

Livestock is also treated as an asset, and one that can be sold off as and when money is needed. Users tend to invest their money in livestock rather than bank savings, as, according to them, selling such provides better returns.

Big expenses of this cluster are household expenses, education, care for livestock as well as the initial capital required to buy livestock. In case of immediate requirement, they sell livestock at the weekly market, where everyone else comes to sell their produce and make household purchases. It is common for livestock rearers to sell to one wholesale agent, who buys from them at a set rate, which can be Rs. 4,000-5,000 for a year-old goat. It is common for livestock farmers to also have 2-3 cows or bullock which are mostly used in the farms for tilling and for the family's milk consumption.

### ► VENKATA RAMANA

is a shepherd, who rears both cows and goats. His wife and two children work as labor taking care of the day-to-day agricultural activities while he takes care of the livestock. His other two children are studying and live in a government-run hostel in town.

Their main sources of income are through selling livestock. Additional income is generated by selling small, in-season agricultural produce like vegetables and fruits, as well as from selling the harvest itself.

A more immediate large expenses for V. Ramana is his daughter's wedding. He says he's not worried about the wedding, as the village folk will help him. In case of the large sums like startup capital required to buy sheep, Venkata Ramana worked with a contractor at a construction site and was paid a lump sum amount, which he then used to buy sheep.

He doesn't have a bank account or insurance and says that none of his close relatives maintain bank accounts either. However he has taken two money back policies of LIC for which he is paying annual premiums of approximately Rs. 3,000 each. He says that he is aware that it is for risk coverage and that it will get him money at the end of its tenure.

# ENTREPRENEUR

This group of recipients is identified as being self-employed and/or owning a small business, which is their key source of income. This business may be based on skills inherited or learnt under apprenticeship, like carpentry, repair work, small merchant, or salesperson.

The nature of their job is such that most would tend to travel to nearby towns and villages to find work. They usually rely on a smaller professional network or collective of 3-4 people in their trade, and access them as and when the workload increases.

For this cluster, large expenditure is in the form of start-up capital or investment and smaller recurring expenses such as consumables and infrastructure that help their business. They feel that such investments enhance the perception of their trade and competence, which further boosts their client base and hence contributes to their progress. Most have bank accounts that might have been adopted by the experiences and advice of the people they have trained under, and are used in minimal ways for savings or transferring money to friends.

The practice of barter is common in this cluster. For instance, a potter we met underpriced his pots in exchange for clay. A washerman received grains in exchange for his services of washing and ironing clothes. He would sell these grains in exchange for cooking rations.

Users from this cluster most commonly did not engage in NREGS work. Some of the stated reasons for this were that NREGS work does not support their professional growth or that their mobile lifestyle does not allow them to be at one place for a whole week, or that they might lose their business to competition if they did NREGS work. Amongst other benefits, most access rations through PDS shops and might have members of the family availing a pension.

A common perception around banks and financial instruments was that they are currently designed for agrarian contexts and not for other occupations, such as their own.

## ► SRI HARI

learnt carpentry over a two year apprenticeship with a master carpenter. He then formed a group of 2-3 other carpenters doing woodwork for customers within his village and those nearby. They get business through word-of-mouth with customers they have worked for and their personal networks. The group recently pooled their resources to buy a table saw. He says this helps him improve the quality of his work as it saves both time and effort, and makes them popular with customers.

His trainer advised him to start a bank account to save money, though he transacts quite infrequently with it. He is the only child in the family supporting his elderly mother and is simultaneously also saving for his marriage so that he could invest in gold, house renovation, and gifts for friends and family. He feels that NREGS work is limiting in both payment as well as opportunities. He often lends money to his friends and his group, which for him is safekeeping similar to that of the bank. He spoke about the government not providing schemes for occupations like his unlike the ones that farmers have access to.

He is eligible for NREGS work, but does not do it because too many people in his community avail it, thereby reducing the wage capacity.

I LEARNT CARPENTRY OVER A TWO YEAR APPRENTICESHIP WITH A MASTER CARPENTER.

WE FORMED A GROUP OF 2-3 CARPENTERS WORKING IN NEARBY VILLAGES.

MASTER ADVISED ME TO START A BANK ACCOUNT TO SAVE MONEY, THOUGH I USE IT INFREQUENTLY.

I SOMETIMES LEND MONEY TO MY FRIENDS, IT'S A WAY OF SAVING



THE GROUP RECENTLY POOLED THEIR RESOURCES TO BUY A TABLE SAW.



NREGS WORK IS LIMITING IN BOTH PAYMENT AS WELL AS OPPORTUNITIES. HOW CAN WE BECOME BETTER BY DOING THAT WORK.



## UNSKILLED LABOUR

The main source of income for this occupational cluster comes from the daily wages they earn working as laborers (a.k.a. Coolies) on agricultural farms during high season and NREGS work during the off-season. NREGS payments are a lifeline to survival, even if inconsistent and often lower paying than other professional occupations. This occupational cluster is defined by unskilled manual work and fluctuating wages. In some families, the men travel out to the nearby towns to earn better wages (Rs. 250-300 per day). Laborers would often learn about these higher-paying opportunities from the youth in their community who work in these towns.

They usually either have no land ownership or own very small pieces of land, and depend on what is available to them for subsistence. They are often the poorest households in a village, and in most cases the whole family works as laborers. It is uncommon to find people in this cluster working more than one job to generate additional income since most of their work is physically straining.

Their living conditions are poor and the income only allows for addressing immediate expenses; savings are limited, if at all present. Help and support in the form of small sums of interest free loans comes from family and friends in the village itself. To undertake larger expenses, they most commonly access money lenders and chit funds. One of the key expenditures for this group is on building or renovating their houses with subsidies provided by the government. The other expenditure is on education for their children.

Most respondents did not have a bank account, nor did they understand the functioning of one. A perception that commonly exists amongst this group is that the ownership of a bank account or identification card automatically creates access to subsidies, schemes and loans. Having a bank account is seen as a stepping stone or conduit for other financial aspirations.

In most households, the wife contributes by working as a laborer on other people's farms as well as doing NREGS work. In cases where old parents are living with the family, their pension is added to the household's earnings and their expenses are taken care of by the chief wage earner. Most people the research team met had built their houses under the INDIRAMMA, a housing subsidy provided by the government. Other sources of benefits

and funds are those associated with BPL cards (Below Poverty Line) and loans availed from SHGs, of which most women are a part.

The team met some younger people, who were studying in college. They were also participating in NREGS work during the holiday period. One of the college-going respondents said that they were doing this work to earn some money to help find a job later, and so wanted to deposit the money in the bank. Despite this, they admitted they often ended up spending this money on daily household expenses as well as bigger expenses like festivals.

### ► MANNAPPA

is an agricultural laborer who does not own any land. His family consists of his wife and three sons; the eldest is married, the second has completed an engineering course and is searching for a job, while the youngest has discontinued his studies due to financial constraints.

#### Family Income

Source of income is mainly from farm labour, earning Rs. 200 per day for undertaking weeding, pesticide spraying and planting in fields. During off-season in farming, he does labour work for NREGS and earns Rs. 100 per day for three hours' work.

His eldest son also works as a labourer doing NREGS works. Though they don't pool money or spend jointly, they help each other in need.

#### Assets

He has a 2-room house with a kitchen and verandah, which the family built from money provided by the

**We lead a hand-to-mouth existence. Whenever I have work, the Chulha (stove) in the house will be lit, else we'll starve.**

State government as part of subsidized housing scheme during his father's time.

#### Expenses

Food is the main expense, with rice at Rs. 25-30 per kg being the main purchase. They don't grow any vegetable; buying often in the open market.

Another big expense is towards educating his second son who was studying B.tech. He had to incur Rs. 25,000 per annum towards books, transport, and related expenses.

A more infrequent expense is towards religious activities and festivals.

They are converted Christians

and celebrate festivals

by purchasing clothes,

household goods, and non-

vegetarian food, as well as

making a small donation of

Rs. 200 towards charity and

the church.

#### An unforeseen event and a cycle of debt

His second son met with an accident three years ago and had to be hospitalized for treatment of head injuries. As Mannappa had no savings, he took a loan of Rs. 20,000 from two rich farmers on interest rates ranging from 36% to 48% P.A. This amount has grown to Rs. 1 Lakh and he has repaid Rs. 50,000 till now and he is hopeful of repaying the balance amount in the next three to four years. He pays Rs. 3,000-5,000 every month towards his debt and says, "There is no scope for saving in my life as I spent everything on educating two of my sons."

He has not participated in any savings schemes whether formal like banks, insurance or even informal like chit funds. When it comes to financial advice, he says "There is no one in our community who is financially literate to advise us."

## SUBSISTENCE FARMING

Subsistence farming is a common practice among most of the users the research team met. This was especially the case with villages in tribal areas, where most families did not own large pieces of land and so depended on subsistence farming and farming on leased land. In the tribal areas of Paderu, paddy farming, along with vegetables like carrots, beans, and cabbage were cultivated. Since water to grow paddy is insufficient, paddy that is cultivated is usually kept aside for household consumption. The rest of the produce is sold in the weekly markets.

In tribal areas, farmers are provided support by government-run cooperative societies to cultivate certain crops like pulses, coffee, tamarind. The government

provided land as well as crop to farmers who are willing to cultivate, and in return farmers sell their produce at the cooperative shops.

They may also sell their produce in the village's fairs and markets or, in some cases, traders come to their village and directly purchase from them. The price at which these are sold is either learnt from newspapers or through word-of-mouth at the market.

Farmers working with the cooperative are also entitled to once-a-week ration from the Girijan Cooperative Society, where they are allotted a quota of produce, such as rice, pulses and sugar.

I keep saving, store it in different places. Once I've put money aside in savings, I never feel like touching it for expenses. It has to be for investing.

### ► CHINNI RAJU

Chinni Raju lives with his family of six in Podjela where the primary and only occupation is farming. They have taken land on lease and are cultivating vegetables like Beans, Coccinia, Tomato, Brinjal and millets like Ragi and Paddy. They grow paddy under rain-fed conditions, yielding 6 bags per acre for self-consumption. Growing vegetables is remunerative and they are harvested throughout the year, providing a somewhat regular cash flow. The other source of income comes from NREGS work.

Currently Chinni Raju's family has taken 5 acres on lease for cultivating on it. Landholding is less common amongst people of their village: only 2 families own land and the rest lease from these two farmers.

They give 20% of the produce to the landowners apart from an Rs. 5,000 annual payment as the lease amount.

Parents in the village are engaged in farming and are interested in educating their children. Chinni Raju recently got married and helps his father in farm work. He has completed B.Sc. (Chemistry) in Visakhapatnam, and his wife has completed M.Com and is looking for a job in the city.

Sources of loans include SHG loans, hand loans taken from friends and neighbors without any interest, or, in rare cases, borrowing from money lenders at high interest rates.

They currently have two bullocks and a goat. Earlier they had 10 goats but sold them to meet marriage costs

and other miscellaneous expenses.

They bought a ULIP\* from Bajaj Allianz on a relative's recommendation, who is working as a carpenter and is considered to be a well informed and knowledgeable person. However on probing further, they were unclear of the terms of the policy and had misunderstood certain parts of it. Other investments they said they have made were in an NBFC called AgriGold, though Chinni Raju himself was not aware of the amount invested nor its maturity.

They reported operating a savings account in SBI and undertook almost 3-4 transactions per month, either depositing or withdrawing money.

### ► V. RAMANNA

V. Ramanna, lives in Matyapuram with his wife and three children. Main sources of income for the household come from selling agricultural produce like turmeric, pepper and sericulture. He also cultivates paddy and millets for household consumption and procures fruits from the forest, such as custard apple, Tunikaaku, Jack fruit, and cashew nuts, to sell in the local market.

He started growing mulberry a few years ago when someone from his village informed him of a program supported by the craft board in Paderu. He now cultivates three batches of mulberry and rears 50 silk worms per batch. He sells the cocoons to the crafts board and earns Rs. 3,500-4,000 per batch.

He also got money along with designated land to grow coffee and pepper, and finds that this has helped him by providing additional, seasonal income. Guarding the coffee and pepper plantation is shared among villagers. One villager goes and take care of everyone's fields in the village on a weekly basis.

His biggest expenditure is on small household items repair and building of the house, and agricultural equipment.

This is followed by children's educational expenses, buying a motorcycle, and repaying loans.

He has a bank account with SBI, which he opened to receive the money from the government towards coffee and pepper plantation. He received Rs. 15,000 and

spent it on labor costs for plantation. After this, he has not used the account again.

He saves Rs. 300 monthly with a private investment company called Welfare Group, which he started after it was suggested by his village's NREGS group leaders.

The village has a support system to help other villagers. People who have money will help others in need and they will repay it without interest. Rarely do they have to resort to an interest-bearing loan from non-relatives (loans from family or friends rarely include interest fees). For occasions like marriages, people also help with gifts in kind, and not only in cash.

They give hens, goats, sheep, grain and other essentials needed in the marriage.

\* A Unit Linked Insurance Plan (ULIP) is a product offered by insurance companies that gives investors the benefits of both insurance and investment under a single integrated plan.

# FINANCIAL ECOSYSTEM

This section explores the financial ecosystem of recipients, highlighting instances of multiple services and instruments in use, along with the network of formal and informal financial intermediaries.

## INFORMAL FINANCIAL PRACTICES

### BORROWING WITHIN THE COMMUNITY

Borrowing money from family, neighbors and money lenders is common practice and was found to be quick, easy, and accessible as compared to getting a loan from a bank. While everyone in the participant group had different opinions and perceptions about borrowing from formal and informal sources, they were all borrowing from one or more sources at any one time. Borrowing from family usually translates to smaller sums of money that is paid back as and when there is cash, and are usually interest free, cash-in-hand loans. The understanding is that family and close friends will not take interest, and are able to provide small amounts of cash on a short term basis. Compare this to a money lender, who provides loans of varying amounts but in most cases will charge a high interest rate.

In Tribal villages, the research team found instances of higher dependency between the community. Financial support in times of need was initially sought from family, friends, neighbors and households would resort to borrowing from a money lender only in dire situations. As compared to this, in per-urban villages the team found more cases of people borrowing from money lenders rather than from family and relatives. A reason for this could be that respondents were more cautious of spoiling relationships within the family given relatively lesser interdependence and cooperation.

The team also met respondents who had frequently lent small amounts of money as a way of saving. A majority of participants felt that cash-in-hand was more likely to get used, and so it was better to lend it to someone they knew who was in need of the money then, and whom they could trust to repay the money.

### BARTERING SERVICES

The exchange of services for goods and vice versa is a commonly understood practice amongst the respondents. The team found this practice most prevalent in some of the agricultural dependent villages in East Godavari. There were instances of farmers using bags of *Dhan* (unhusked rice) in exchange for services such as construction and renovation of house, and building furniture for homes.

In one village, the team met a washerman who's services were paid for by some of his customers in sacks of *Dhan*, which he would sell as and when he had a requirement for cash. At one time, he took a loan of Rs. 2,000 from a farmer and in return provided free laundry services for a year to the farmer's family. Since he lives alone, one of his neighbors cooks food for him. In exchange for her services, he gives her his ration, which helps with her family's consumption.

### COMMUNITY REGISTER

The tribal communities in the villages of Paderu and Araku Valley, live in clusters of 20-40 households (some habitations could be larger numbering 100+ households as well). These clusters are a close-knit community, and families within them depend on each other for various needs.

Weddings, ceremonies and festivals in the village are celebrated with pomp, and all the families of the village, irrespective of caste, contribute. In case of weddings, villagers help with the arrangements as well as share the burden of the expenses. Each family contributes in cash or in kind with vegetables, rice, lentils, oil, vegetables, fruits and meats for the wedding feast.

Sometimes, weddings can be big with up to 2,000 people attending from the community and nearby villages. Furthermore, dowry is not customary within the tribal communities and the wedding expenses are shared by both the bride and the groom's families.

It is common practice in these communities for families to maintain a register to note people's contributions at a function. They would then repay each family with money or goods of equal or higher value at festivals or similar functions. Sometimes the list of people can be as long as 500 names and so this exchange of gifts is never fully realized.

## FORMAL FINANCIAL SERVICES

### SELF HELP GROUPS

Self Help Groups or SHGs represent a unique approach to financial intervention and enable women to grow their savings and access credit that banks are willing to lend. AP has the largest number of SHGs in the country which meant that a majority of women in the study sample were part of an SHG and as such were familiar with stages of bank linkages and the operations of these groups. Given the rotating nature of management in a group, many women have the experience of being either a leader, treasurer or the group's bookkeeper. These roles require the women to be active in collecting and saving money, as well as keeping a record of it by updating passbooks. Furthermore, one has to frequent the bank to deposit and withdraw the money. This active running of the group has made women knowledgeable about bank accounts, its functioning, and some of the services and products they offer.

As noted earlier, the ubiquitous presence of SHGs in AP ensured that the majority of households in the study were aware of several financial services provided by banks as well as of the technology needed to operate them (debit cards, ATMs etc). Even in remote tribal villages, like Eragai, where SHGs have not been as successful, people were still comfortable talking about banks, account opening, and use of technology.

### PREVALENCE OF BANK ACCOUNTS

A wide variety of government subsidy schemes like Rythu Mitra loans, INDIRAMMA housing, scholarships, and Girl Child Protection Scheme are available to the people in AP. The government authorizes the disbursement of these subsidies only through individual bank or Post Office (PO) accounts as a result of which many of the study respondents interviewed had opened bank accounts. These accounts are primarily used as a conduit to receive subsidies, post which they are rarely accessed and lie dormant.

With this as a backdrop and the general lack of communication on the features of G2P accounts, it was a common perception amongst respondents that the G2P accounts were only temporary conduits and not regular transactional accounts with other features and functions.

## FINANCIAL FACILITATORS

### VILLAGE ORGANIZATIONS

A village organization (VO) is a consortium created out of the SHGs in a village and their task is to address common issues faced by the SHGs. They also take care of training SHG members in bookkeeping and management practices.

The VOs are responsible for spreading financial awareness about government schemes and financial products available to SHGs and use easy-to-understand visual tools like posters and pamphlets to disseminate information.

The VO members also try to explain the negative consequences of improper financial planning and the pitfalls of taking indiscriminate loans to SHGs. The members do not get any payment for the services rendered, except travel costs incurred while attending meetings.

Interactions with VOs in East Godavari highlighted that being members of SHGs and participating in VO meetings has broadened their perspective and made them confident of bettering their lives and the lives of others. Their passive and lenient role, however might be limiting on some occasions, as explained by Chennamma from Kothapalle in East Godavari; *"The biggest challenge is to prevent people from falling into a vicious cycle of debt. We can tell them a hundred times about how to avoid it, we can make them aware of other favorable alternatives, but there are always some people who won't repay their loans or go to private moneylenders."*

### POOREST OF THE POOR -

#### COMMUNITY ACTIVIST (PoP-CA)

Swarjya Lakshmi works as the PoP-CA for the Indira Kranti Patham (IKP) office in A. Kothapalle, East Godavari, and she describes her job as "monitoring the well being of 100 families in her community". She collects and updates the baseline information consisting of demographic details, different account numbers and basic family information for households under her purview.

She also handles all the documentation for filling the application for pension accounts, loans and other utilities and ensures villagers get ration cards, insurance, loans and other utilities they require on time.

Her primary role is also to see to it that the beneficiaries repay the loan installments taken under various schemes. Most of the information she collects helps her assess the credit worthiness of the candidate in a holistic and contextual manner.

She takes lot of effort to work towards the betterment of her community members. Even though it is not an official responsibility she tries to pass on targeted awareness on various schemes after careful examination of a household's background.

While financial schemes are extremely tricky to talk about, she focuses more on education and training schemes that can prevent school dropouts or give deserving youngsters a chance to create livelihoods.

## G2P SCHEME

In 2006, Department of Rural Development, GoAP, started the Electronic Benefit Transfers (EBT) program to leverage technology in delivering government benefits in order to mitigate issues of fraud, leakages and delays in payments. They worked with banks to issue individual bank accounts and smart cards to access these accounts, and created a branchless banking infrastructure to deliver it at the beneficiaries doorstep. The architects of EBT also hypothesized that this system (over time) would act as a vehicle towards achieving FI for the rural unbanked.

From the beneficiary perspective, the process of receiving NREGS wages or Social Security Payments (SSP) payments under EBT is similar in some aspects to the older system of receiving payments through a post office savings account. It is also different in terms of the tools and intermediaries recipients have to interface with, to access these payments. One of the obvious differences lies in the technology (both front-end and back-end) used to access these payments which includes smart cards, biometric authentication and PoT terminals which most recipients had no experience of in this context. Also the community CSP as an intermediary delivering benefits directly in their villages or in a village close by, is a marked change from the previous system. The similarities however lie in the process wherein the payments are still mediated – what was earlier through the PO is now done by a CSP. Given the technology glitches and delay in payments, on an average the time spent by recipients to get their payments did not seem to be remarkably different.

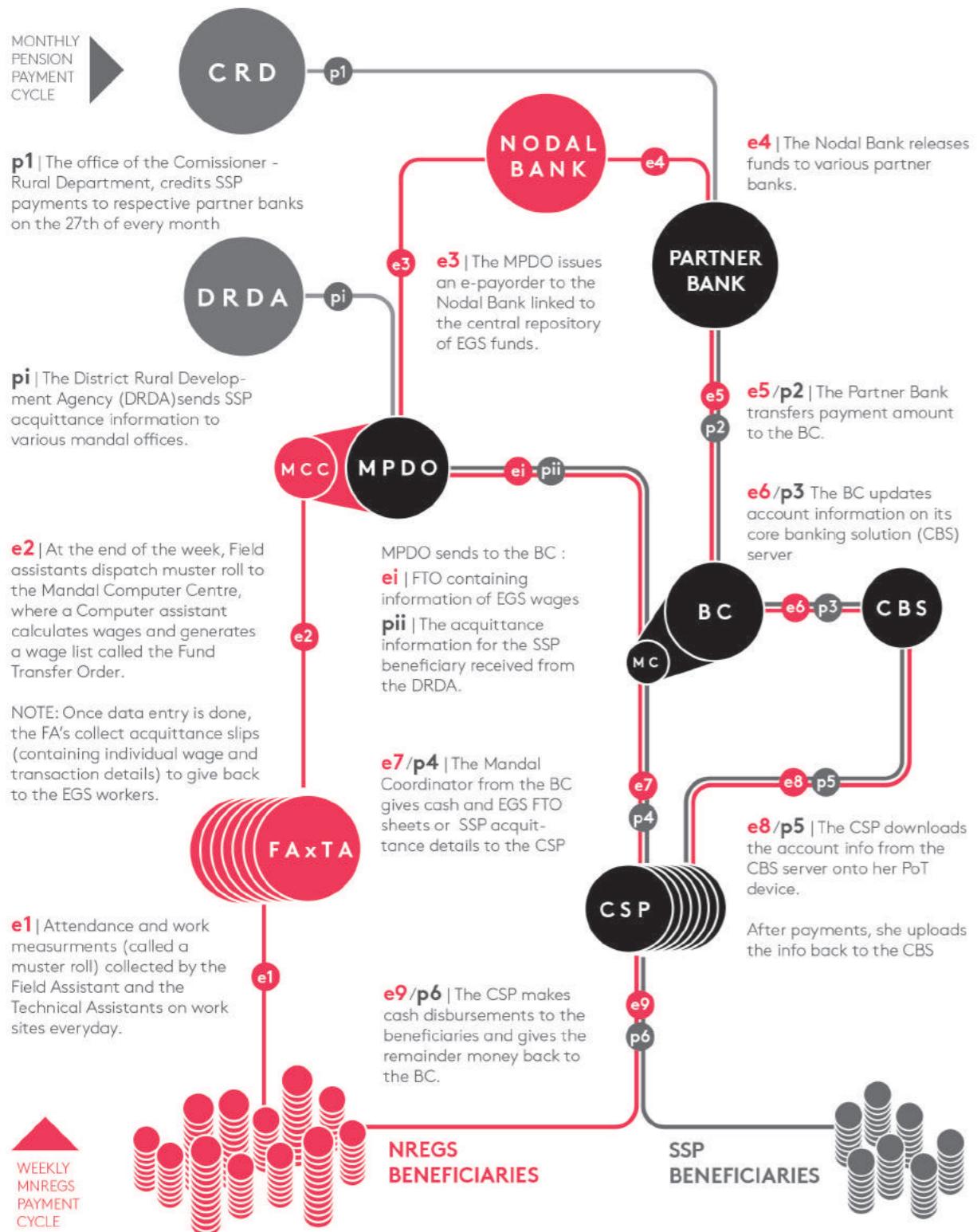
SSP payments happen in the first week of every month and understandably have more predictability due to simpler processing systems and a fixed amount that needs to be paid to every beneficiary. In the beginning of the month, the CSP calls a few villagers and informs them of the date and time of pension disbursement and the information spreads within the community.

The NREGA stipulates that the beneficiaries must receive their payments within 15 days of work fulfillment. In

many cases it was noticed that beneficiaries faced delays in receiving wages, ranging anywhere between 1 month (more common) to 3 months (more likely in tribal areas) since the job was completed. The delay is mostly attributed to long winded processes for data flow between many intermediaries, such as the field officers, technical officers, mandal office, business correspondent, technology service provider, and the financial institution.

With the absence of grievance redressal channels, any unexplained delay in payments erodes the dependency and trust that the recipient may have in the system. NREGS is perceived by some as a temporary solution to financial stability and hence recipients do not associate the same pride with NREGS payments as they would with opportunities in agriculture or entrepreneurship; many beneficiaries the team spoke with did not believe that it could grant them economic independence. Hence, any delay in payments dissuades beneficiaries from enrolling into NREGS work and prompts them to look for alternate sources of income.

In peri-urban and non-agrarian locations such as Mahbubnagar the dependency on NREGS wages to cover household income was quite high compared to households visited in East Godavari. However, payment delays force families to seek employment in nearby towns or take loans from friends or moneylenders, sometimes even just for monthly household expenses. In East Godavari, the dependency on NREGS wages for immediate needs was much lesser. A larger number



Even though sometimes we get our income after 2-3 weeks, at least now we get the correct amount, commensurate to the work we have done.

► **SHIVA KOTI DEVUDU**  
is an unskilled labourer from  
East Godavari

of households would use them to pay back loan installments or for secondary needs such as renovation, entertainment or personal expenses. In tribal areas, the volume of NREGS work in comparison is much lesser, and the processes for wage calculations and disbursement less systematized. In such a scenario, the beneficiaries' demands and dependencies on the payment system was observed to be quite minimal or nonexistent.

In tribal locations we noticed slight deviations in system of work & wage calculations and payment.

Instead of the Field Assistant (FA), a Village Resource Person (VRP) is in charge of updating the muster roll and sending it to the Mandal Computer Centre (MCC) at the end of every week. Many NREGS workers complained about the VRP not doing their job on time or with diligence, and that the negligence on the VRP's part was responsible for delays in wages.

Another deviation we noticed was in the case of payment disbursement, wherein the CSP would entrust payments to hard-to-reach areas to the VRP or the NREGS 'Mates' of the groups. On several occasions we heard instances of the NREGS mates equally distributing the payment amount amongst the team members and not taking into account different individual contributions. Some beneficiaries also complained about corrupt VRP's who would withhold payment amounts unless asked sternly.

## ► **IMAGE** Comparison of NREGS and SSP system

# LAST MILE AGENT

AP has a well entrenched last-mile agent network that acts as the human end of the technology-intensive G2P payment system. Their primary responsibility is to ensure timely and secure disbursement of G2P payments and act as a transaction point between the beneficiary and their bank account.

In the three districts visited, the team observed three different last mile agents\* :

- ▶ Community members as Customer Service Points (CSPs) hired by Section 25 companies like FINO, Zero Mass Foundation (ZMF) et al., also known as Business Correspondents
- ▶ Branch Post Masters and Sub Post Masters
- ▶ Financial Inclusion - Business Correspondent

## COMMUNITY CSP

The Electronic Benefit Transfer system was envisioned to allow the beneficiary more autonomy in accessing their entitlements and to increase accountability and transparency that the older system of manual payments lacked. The EBT scheme, as it manifests today, consists of a biometric identification Smart Card provided to the end recipient with a CSP(a trained female agent hired by a BC) connecting the bank account to the recipient through the use of smart card. In the districts visited, the CSP was responsible for doorstep disbursement of G2P payments. Despite certain process similarities, experiences and challenges faced by CSPs in tribal areas are quite different from that of non-tribal areas. Much of these stem from the differences in topography and the state of development of these communities.

### PROCESS OF SELECTION

AP is the only State to have mandated that only women be hired as CSPs. Along with that, the state government has created a unique criteria\* for hiring CSPs and all BCs are required to adhere to it.

▶ **The CSP should be a permanent member of the village**

This is done to ensure consistency in service and reduce chances of dropouts due to shifting or migration. It also establishes a personal rapport with the recipients of the village and the CSP. In case of candidates who are from other localities, they should be married into the village and should have been living there for at least 3 years.

▶ **The CSP should be a member of a SHG**

In many villages, the CSP had been informed of and persuaded to apply for the position by someone from the VO committee or the IKP (the local name for SERP) office in the Gram Panchayat. Association with a SHG can yield basic information about the nominee and help in informal vetting. Self-nominated SHG members are scrutinized by the VO and the BC is given 2-3 choices for candidates who are followed up with a formal interview. In case there are no volunteers, the VO usually nominates candidates that they think are appropriate to take on the responsibility of a CSP.

▶ **Member of Scheduled Castes / Scheduled Tribes (SC/ST) should be preferred for the role of the CSP**

Considering that a sizable portion of the beneficiaries come from an SC/ST background, this clause was probably introduced to ensure that the CSP does not exclude recipients based on caste biases. However, the study documented an instance of caste bias against the CSP where in she was

doling out payments from her home because she had an infant child to look after, and some higher caste beneficiaries refused to go to her house to collect the cash.

▶ **The CSP should have a minimum educational qualification of tenth class education**

The CSP has to possess basic English reading skills in order to interact with various technologies and carry out certain processes to make the payments.

▶ **The Point of Transaction (PoT) machine has operational instructions and input options in English.**

▶ **The Mandal Parishad Development Officer (MPDO) issues an updated**

Funds Transfer Order (FTO) list that has the NREGS group names against the wages owed to the members. The CSP has to be able to read this list to match beneficiaries and get their signatures or thumbprint against their name.

▶ **The CSP should not be affiliated to the Gram Panchayat Sarpanch\*\*, VO members, PO Official or the FA**

Considering that the new system was born out of a need to drive accountability and transparency, this clause tries to ensure that the G2P payment system is decoupled from any kind of political motivation or incumbent interests.

\* The research focussed on the community CSP in much greater detail in comparison to the other two last mile agents.

\* Vide the GoAP and RDD memo issued on Dec 27, 2010 ([http://www.rd.ap.gov.in/ssp/SSP\\_Cir\\_398\\_RD-SHG\\_Dt\\_20012010.pdf](http://www.rd.ap.gov.in/ssp/SSP_Cir_398_RD-SHG_Dt_20012010.pdf))

\*\* A Sarpanch, is an elected head of a village level statutory institution of local self-government called the Gram Panchayat (village government).

## RELATIONSHIP WITH BC

The BC has the final say in CSP recruitment and is responsible for training and payment. Other than the 2-3 day training procedure that is mandatory for all CSPs they have little interface with their employers. Their only link with the BC is their engagement with the MC who distributes cash at the time of payments and with the Technical Assistant (TA), primarily on phone, in case there are issues with the PoT terminal/payment system.

There are no formal channels of grievance redressal or feedback with most BCs. In many cases, the MC acts as an informal confidante and takes personal initiative to solve problems or assuage any frustrations or issues faced by the CSP.

*"This job has introduced me to many knowledgeable people like the MC. Outside of work related suggestions, I sometimes ask him for advice on matters relating to my husband's business and finances."*

Hemlatha is a CSP for ZMF

## PROCESS

The smart card - PoT enabled payment system requires a beneficiary to travel to a specified location within the village on a particular time informally advertised by the CSP through FAs and NREGS group leaders also known as 'Mates'. Pension beneficiaries have a more defined window of time (the first week of every month) to receive their payments, the exact details of which are also spread by word-of-mouth. All the transactions that the research team encountered required the beneficiaries to collect the entire amount in their account for both NREGS wages and Social Security Payments.

### ► BEFORE PAYMENTS

When the MC gets funds for a new round of payments he intimates the CSP who in turn intimates the community of probable disbursement dates through her informal networks. Preparations for payments involves downloading information on which beneficiaries should be paid what amounts from the CBS (Core/Centralised Banking Solutions) server onto the PoT machine which is first done by the MC and then transferred to the PoT machine operated by the CSP. The CSP also gets two sets of printed FTO sheet from the MPDO. Lastly, she goes to the mandal to receive cash from the MC. In many cases, the MC travels to the villages on his bike on the day of disbursement and hands over the cash to the CSP.

### ► DURING PAYMENTS

The CSP's primary role is to dole out physical cash to the recipient pending biometric authentication and to get them to acknowledge the payment by signing two sheets. If the system is

running smoothly, each transaction takes no more than 2-3 minutes to complete.

### ► AFTER PAYMENTS

Once the CSP has done several rounds of payments and covered everyone under her jurisdiction, she reconciles the transaction details and the balance amount with the BC. This step is literally called 'emptying the PoT'. It entails uploading all the data on the PoT machine onto the server and handing the remaining cash back to MC.

The EBT system in most research locations wasn't seamless or near perfect. The CSP had to navigate many glitches on a continual basis and sometimes may not have the agency or the knowledge to resolve some of them. Over time, the CSPs create workarounds to sort most of these issues on their own, resorting to the TA only when the problem is unique or not solved by slight tinkering and adjustments.

## MOTIVATIONS AND AMBITIONS

The CSPs interviewed across the three districts were young (ages between 22-30) educated women who displayed a high sense of allegiance towards their village and community. This was the first salaried job for a majority of them while some others had prior experience working in social organizations (ASHAs\*, volunteering at health camps etc) or established offices (receptionists, peons). Most of them took the responsibility because they wanted to feel empowered and contribute towards their household's finances. Getting access to village level discussions and having their opinion sought on issues was immensely valued. Many perceived this as a position of respect and a way to increase their social capital within the community. Promises of better pay and increased responsibilities cemented their resolve even if the initial salaries were not commensurate to the effort put in by them.

The role is perceived to be challenging and there is a lot of pride attached to the resourcefulness involved in making the system work despite all odds. They are extremely motivated in sticking through the hard times in the promise of something bigger and brighter coming their way in the future.

### ► JAYAMMA

Jayamma is a 30 years old CSP working for the BC, ZMF in Ramachandrapuram, Mahbubnagar. Other than disbursing payments, she is involved in village meetings to give suggestions for NREGS and is proud that her opinions are being sought by officials visiting the GP.

Jayamma and her husband provide shelter to a young disabled boy, who along with her husband, helps in disbursing payments by managing crowds, matching accounts.

### ► HEMLATHA

is a 26 year old CSP from Durgada, East Godavari. When she was enrolling as a CSP, she was assured her salary would escalate to Rs. 3000-4000 a month. Its been 3 years and she only earns around Rs. 800-1000, a figure that according to her is not commensurate to the amount of effort she puts into the job.

*"I agreed to this responsibility because of all these assurances, otherwise I would have never done it."*

When asked why she is still doing the job, she shrugs defeatedly "Jo chal raha hain, usse chalne do" (Let things go on as they are).

### ► SUNANDA

is a CSP who lives in the tribal village of Mallakapolam in

Paderu district. She has been working as a CSP for 3 years and is extremely proud that she, a high school pass-out was chosen over a graduate candidate.

While the job is demanding and her salary payments are intermittent, she is still positive. She says, *"If I thought only of the money, I wouldn't get to meet interesting and knowledgeable people like the MC or the other FINO employees. Also this can only lead to better things."*

\* Accredited Social Health Activist or ASHAs are local women trained to act as health educators and promoters in their communities.



WHILE THE FORMAL JOB DESCRIPTION STIPULATES NOT MORE THAN TEN DAYS OF WORK ON AN AVERAGE, BEING A CSP IS A FULL TIME JOB.

MOST CSP'S ARTICULATED A 'SOCIAL WORK' OR 'GOODWILL' ASPECT TO THEIR RESPONSIBILITY WHICH PUSHES THEM TO PERFORM BEYOND THEIR CALL OF DUTY.

BEFORE I GOT THIS JOB I WAS MEEK AND COULDN'T TALK TO ANYONE. NOW I MANAGE MY OWN FINANCES AND HAVE LEARNT MANY INTERESTING THINGS ABOUT THE WAY BANKS AND OTHER GOVERNMENT SCHEMES WORK. BECOMING A CSP HAS CHANGED MY LIFE.

► **HEMALATHA**  
is a CSP from Kalakonda,  
Mahbubnagar

### SUPPORT STRUCTURE

While the formal job description stipulates not more than 10 days of work on an average, being a CSP is a full time job. The resources available to her are not conducive for efficient operations, but majority of the times it was observed that the CSP would solicit assistance from various stakeholders.

- FAs, help spread the news of disbursement dates among the community members.
- MCs provide ongoing technical assistance whenever there are system breakdowns that are beyond the CSP's troubleshooting capabilities.
- Male family members and, sometimes the NREGS Mates (mostly in tribal areas) help in payment disbursement especially during peak payment times when the sheer number of people to be serviced becomes unmanageable.

The role of the partner can sometimes become a primary one as observed in cases of CSP's who were pregnant or new mothers, and can offshoot any issues that the CSP might have in dealing with the stress of servicing people.

### SOCIAL STANDING AND IDENTITY

The CSP is the proverbial 'Bahu' (Daughter-in-law) of the village – a reticent individual who goes out of her way to accommodate the needs of others. By association with the G2P payments, she is perceived to have affiliations with the government and hence shares blame when the wages are not disbursed on time and, in turn, is

When the payments are not credited on time, people get irritated and sometimes take their frustrations out on me.

expected to provide recourse. Most people interviewed were thankful for the services rendered by her and vocal about her diligence, but were very quick to point out that their expectations from her didn't go beyond receiving payments. They are aware of her limitations with technology and grievance redressal, but the frustrations of not getting the simplest of answers can be overwhelming. Most CSPs articulated a 'social work' or 'goodwill' aspect to their responsibility which pushes them to perform beyond their call of duty.

### REMUNERATION

Different BCs have different models for calculating the CSP's salary. Some BCs give a fixed monthly salary to the CSP while others give a standard amount for SSP (ranging between Rs. 300-500) and a variable amount that is dependent on monthly volume of NREGS wages disbursed or number of electronic transactions facilitated.

Frequency of wage disbursement fluctuates widely; delays of a month or two was observed to be normal. In a few cases, particularly in tribal belts, certain CSPs reported receiving six months of pay together. While delay in wages is a huge frustration for them, CSPs were still continuing with their jobs, most times out of a sense of responsibility to the community and sometimes at the behest of the MC.

## DIFFERENCES IN TRIBAL AREAS

The process of selection, remuneration and other procedures in tribal areas is similar to other regions in the state but there were some context specific differences that make the CSP situation in tribal belts very unique when compared to their non-tribal counterparts.

### ► Workload

In non-tribal areas, the CSP is responsible for one village, usually the one that she is a resident of. In some cases she may have to travel to one or two smaller satellite villages nearby (most of which are not more than 2-3 KMs away). In tribal villages, owing to a more distributed geography and a smaller size of habitations, she is mandated to service several habitations. Habitations in tribal areas are separated by stretches of pastoral lands, fields, and forest cover. One of the CSPs the team interviewed in Vantalamamidi had to look after almost 18 habitations. A few of the habitations were distant and unreachable by motorbike, requiring her to hike uphill for 4-5 hours and on some occasions staying overnight.

This untenable workload often forces the CSP to improvise when it comes to performing her duties comprehensively. In the case of this particular CSP, the 'mates' of the NREGS group come to a nearby market and are delegated the duty of disbursing payments to their group members. The process

completely overrides the biometric authentication and not necessarily due to technical / network related failures.

### ► More operational barriers due to network unavailability

Feeble network coverage adds another level of complexity to the CSP's operations. While certain pockets in the plain areas have intermittent access, the hilly areas could have several blind spots where network access is patchy or not available.

Despite the odds, most CSPs have tried to figure out a system to ensure that the payment process does not suffer. One CSP found a network spot near her village, a 20-minute hike to the main road, where she would go once a day to see if she has received any messages from the MC on probable dates for disbursement.

People traveling back and forth from the nearby town where the MC is located also act as informal messengers. In another case, a CSP who had to inform a certain habitation, far removed from her village, of a payment date would go to the town market or

the PDS shop frequented by the villagers and ask one of them to relay the message back to the entire community (most PDS shops are situated in centrally located villages that may have other markets/commerce points and are at a lower altitude).

Network issues also affect the CSP's ability to carry out mandatory processes. The accounts that need to be updated on the PoT machine require GPRS connectivity. In many cases, the CSP would have to finish one batch of payments, find network connectivity to upload information on payments already processed on the PoT before resuming payments.

### ► Cash management

In most non-tribal villages, the MC would drop the cash off at the CSP's village or place of payment (except for one village in the study where the CSP would go to the town to withdraw money from an account set up by the BC, Coromandel). Even after acquiring the money, the non-tribal CSP would have to travel short distances within her village. In tribal areas, owing to greater geographical expanse

and access limitations, the incidence of CSPs traveling to the mandal headquarters to take cash from the MC are much higher. Most CSPs have spoken of the security risk that they have to shoulder while transporting the money back to the village and onwards.

On one of the research trips, the team met the leader of the postal workers union, who mentioned that, while the BPM's role is a temporary one, there are other incentives they can avail to augment their salaries. He gave the example of the postal insurance policy – the sale of one policy entitles the BPM a sum of Rs. 500. However, he also said that most BPMs don't see themselves as financial agents instead aspiring for a permanent tenure and a government officer's status.

## BRANCH POST MASTER

### PROFILE

The Branch Post Master (BPM) is in charge of the rural outpost of the post office in a GP. The job is a temporary one, mandating 3-5 hours of work per day and the core responsibilities include managing beat maps of post men, management and organizational duties, paying out postal insurance premiums, and disbursing G2P wages of beneficiaries in the area.

The BPMs interviewed by the team, were very vocal about stretched work hours, lack of assistance and incommensurate incentives. One of the BPMs in Mahubnagar spoke about how he would have to work for 6-8 hours during peak payment dates as they can't tell people who had travelled long distances to return empty-handed.

Like the CSP, the BPM is completely unaware of actual reasons for payment delays and can't do much except ask people to return after a few days. Because of his official status, he is capable of assuaging people's frustrations but there are always a few beneficiaries who refuse to leave without an argument. Hence this institutional identity sometimes comes with greater answerability and accountability. In one of the research locations, a few NREGS workers whose accounts hadn't been updated, held a small Dharna (protest) outside the PO, refusing to leave until they received their pay.

The BPM first tried reasoning with them by telling them why he couldn't process their payments, and then, in response to their refusal to cooperate, started shouting at them until the group was reduced to just one or two people.

In the research sample, the beneficiaries who availed payments from the PO did not possess a smart card – they only carried their NREGS acquittance slips along with the PO savings passbook. The BPM has to punch in the beneficiaries account number on the PoT machine, get a biometric verification and check if the figure on the screen matches the amount on the acquittance slip. No FTO sheets or receipt acknowledgements are required.

### SOCIAL STANDING

The BPMs were experienced staff with age and authority on their side. Most of them had participated in a one-day training for EBT payments and found the technology interface extremely easy to operate.

The BPM's institutional identity is evident by the beneficiaries expectations of accountability and recourse from them. When compared to the CSP, a BPM is perceived to have more troubleshooting agency and information about the system and its operation. In the locations visited, the beneficiaries would argue and heckle the BPMs and demand more information from him / her.

While the technology employed and certain processes are similar to that of a CSP there are some nuanced differences between her and the BPM.

### PROCESS

Unlike the CSP who disburses payments at the village, beneficiaries have to travel to a Branch Post Office (BPO) or a Sub PO in order to receive their entitlements.

A BPO services several villages within a certain radius, the farthest one observed being 3 KMs away. Recipients had spent anywhere from Rs. 10-30 for a round trip depending on the distance of their village from the PO.

Probable payment dates for NREGS wages are conveyed to the villages through FAs. The POs visited in the study did not disburse SSP payments. Since it is quite inconvenient for senior citizens or disabled beneficiaries to travel to the BPO, the payments were being disbursed by a Panchayat member from the village.



THE BRANCH POST MASTERS WERE EXPERIENCED STAFF WITH AGE AND AUTHORITY ON THEIR SIDE. MOST OF THEM HAD PARTICIPATED IN A ONE-DAY TRAINING FOR EBT PAYMENTS AND FOUND THE TECHNOLOGY INTERFACE EXTREMELY EASY TO OPERATE.

UNLIKE THE CSP WHO DISBURSES PAYMENTS AT THE VILLAGE, BENEFICIARIES HAVE TO TRAVEL TO A BRANCH POST OFFICE OR A SUB POST OFFICE IN ORDER TO RECEIVE THEIR ENTITLEMENTS.

## FINANCIAL INCLUSION - BUSINESS CORRESPONDENT (FI-BC)

The FI-BC was a chance encounter on one of the research visits. While the agent was not a part of the G2P or EBT ecosystem, it was learnt in subsequent interactions with experts that this was a newer role envisaged by several banks to further their FI mandate. The FI-BC interviewed in East Godavari was hired by Chaitanya Godavari Grameen Bank (CGGB). CGGB along with their technology service provider, Coromandel has been running pilots in larger mandals in East Godavari where they have hired small shop owners as 'FI Agents' – stakeholders than enable account withdrawals and deposits for CGGB account holders.\*

### PROFILE

The FI-BC in East Godavari, Satya Narayana, was a small shopkeeper in the town, Sungavruksham, part of a GP called A. Kothapalle, which also has a CGGB branch. A frequent visitor to the bank, he caught the attention of the bank manager, who, impressed by his financial literacy and acumen, offered him the job of the FI-BC. At first Satya was hesitant, but on the Manager's insistence went and met another BC in Gokavaram, a GP not too far from his. He was awed by the respect and reputation the job had brought for the BC and decided to accept the job.

### RESPONSIBILITIES

The FI-BC's responsibilities do not have any intersections with the G2P or EBT system. The FI-BC equated his role to that of "banking at the doorstep", with his job entailing opening bank accounts and enabling transactions for the account holders. In his 3 months of operation, the BC had opened around 1,000 bank accounts and would have carried out an average of 50 transactions every week.

Running the retail business often requires the BC to travel to the main GP frequently, for cash and other supplies, thus making it more viable for the bank to dovetail cash and ledger management activities of the BC without extremely large overheads.

Although there are a gamut of services that don't currently come under his purview, the BC said that the bank manager promised a greater set of responsibilities

(e.g., selling financial products, more cash holding limits) in the future.

A majority of the account holders that the BC enrolled, were aware of banking services and didn't need to be convinced about opening a bank account. They were most likely financially secure and not from the economically marginalized segments that are a focus of the study.

### PROCESS

The BC has a cash holding limit of Rs. 10,000. In case of unusually large withdrawal amounts like LIC insurance payouts, account holders give the BC a day's notice and an intimation of the amount they need to withdraw. The BC then travels to the bank the next day and withdraws cash from an overdraft account created for him by the manager.

The account holder comes to his shop with a Smart Card issued by the bank which is inserted into a PoT terminal and, after a successful biometric verification, the desired amount of cash is handed over to the customer. The process is exactly similar to the G2P payment done by the CSP but for a different purpose. An account holder can deposit or withdraw a maximum of Rs 5,000 and is allowed only 2 transactions per day.

All the withdrawal and deposit data for different accounts are stored on the PoT terminal. At the end of every week, the BC goes to the bank branch and reconciles the transaction details in the PoT machine against the withdrawals from his current account. This process, according to the BC we interviewed, is extremely simple and is mostly done by the manager.

### IDENTITY

The BC we spoke to felt like he was an extension of the bank's operations, that he was like a representative of CGGB and that his service affected the bank's reputation. In some cases he would go out of his mandate and responsibilities if it ensured a consistent, seamless experience for the bank customer. For example, there was an instance when the bank branch didn't have enough cash and there were around 2-3

\* More on the exact job description and roles of the BC here: <http://119.82.71.21/fi/download/circular%20for%20BC%20Policy.pdf>

Before the biometric system, the process took very long. I had to do quite a bit of paperwork. Its much easier now as I can keep the stock updated.

► **G.V. VARMA**

is a PDS shop agent in Gollaprolu in East Godavari.

withdrawal requests on the particular day. The BC, afraid that this might tarnish the service experience, made the payments with money from his shop's reserves. "Sometimes when there is no cash in the bank, I give money from my shop earnings. Why spoil the relation the person has with CGGB?", he says.

He often gave goods on credit to the village residents and hence has a favorable standing amongst them. He told the team that this also helped him build trust and get faster acceptances for opening bank accounts.

### SALARY AND INCENTIVES

The BC had been working for around 4 months and said that he was initially promised a salary of Rs. 1,200 per month, but eventually ended up getting only around Rs. 800. He said that the salary is quite less for the amount of work he puts in opening accounts and the eventual services he renders, specially when compared to the income he makes through his retail store. He says that, a business minded person would wisely choose not to take up the BC role, but he continues doing it with the hope that in the future more responsibilities might make his job financially lucrative. There were indirect benefits of the job that he identified with as well – such as more visibility for his shop and himself and bringing in new customers for his retail business.

#### ► PDS AGENT

G.V. Verma has been rationing supplies to the homes in the village for the past 15 years. Every month, beneficiaries are entitled to 20 Kgs of rice at Rs. 1 per kg and a ration 'hamper' consisting of pulses, oils, condiments and spices at a subsidized price.

#### Process

The PDS shop agent usually informs the villagers about potential date of distribution in advance. The beneficiaries come to the shop with their Aadhaar card and BPL card. Their account details are punched in and after the biometric verification the PoT terminal displays an itemized list of all the food supply the family is entitled to. The beneficiary has an option to select a particular good, but several beneficiaries claimed to take all the ration at one go, except if an item or two weren't in stock.

Once the selection is made, there is an audio message of the goods and their quantity. Once the payment is made, the beneficiary receives a bill of the transaction, that contains the details of the ration given.

#### Troubleshooting

Sometimes signal issues might hamper the distribution process. If the network connectivity is weak, the agent carry out any transactions and will tell beneficiaries to come back another time.

If there are technical issues in charging or booting the PoT device, the agent either tries to fix it himself by resetting the system or tinkering with the connecting wires, or if the problem still persists, call an authorized mechanic from the town nearby.

# PAYMENTS TECHNOLOGY

## THE FRONT END | RECIPIENT FACING

For both NREGS and social security payments, the beneficiary travel to the point of payment with his and or her smart card (the payment point could be the local Panchayat office or the patio of another community building such as the school). On the day of the payment, the CSP's entry into the village creates a flurry of relayed messages announcing her arrival. The beneficiaries start gathering around at the payment point and CSP tends to them one-by-one.

The CSP inserts the beneficiary's smart-card in the PoT, takes their fingerprints on the biometric reader on the terminal itself, and, following successful identification, disburses the amount listed on the device screen if it tallies with the beneficiaries' acquittance slip (acquittance slips are issued to NREGS beneficiaries by FA after the job and muster attendance calculations).

After a successful transaction, the PoT machine automatically generates two printed receipts, one of which is handed to the beneficiary and the other one retained by the CSP. The beneficiary is asked to acknowledge the payment on two sets (one goes to the BC and the other to the mandal office) of FTO lists with a signature or their thumbprint.

In AP, two models of hardware technology were observed for disbursing payments:

► The Smart-Card and PoT terminal based (in case of PO payments the smart card was not needed)

► The mobile phone with Near Field Communication (NFC) fingerprint reader

Other than a few differences in process (these are explained in detail in the following section), the two technologies don't have a significant difference, in terms of recipient experience. The mobile phone and NFC device based system doesn't require a smart card – at the time of payments the recipients have to carry only their acquittance slips with them.

THE BENEFICIARY GATHER AROUND THE PANCHAYAT OFFICE FOR PAYMENTS.

FOR THE PAYMENT THEY BRING THEIR



SMART CARD

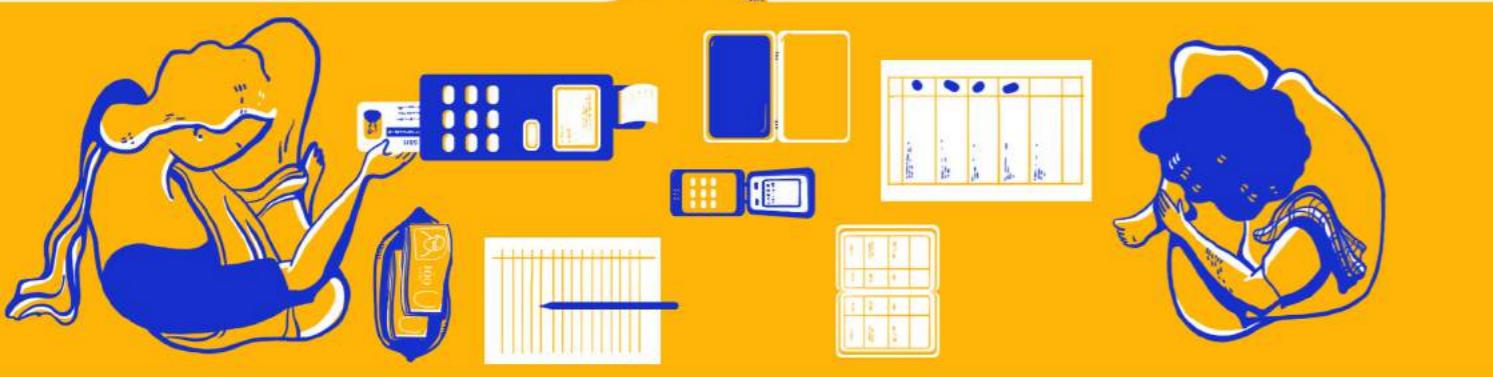
ACQUITTANCE SLIP (NREGA)



AADHAAR CARD



ACCOUNTS BOOK



THE CSP INSERTS BENEFICIARY'S SMARTCARD IN THE POT TERMINAL



IN CASE OF MOBILE NFC/POST OFFICE PAYMENTS, THE ACCOUNT NUMBER IS ENTERED IN DEVICE



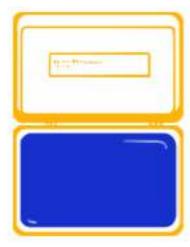
THE CSP TAKES BENEFICIARY'S FINGERPRINT FOR BIOMETRIC IDENTIFICATION



THE POT MACHINE GIVES OUT TWO PRINTED SLIPS, ONE OF WHICH IS GIVEN TO THE BENEFICIARY.



THE CSP ALSO MAKES A TRANSACTION ENTRY IN A NOTEBOOK MAINTAINED BY THE USER.



THE BENEFICIARY IS ASKED TO ACKNOWLEDGE THE TRANSACTION OR THUMBPRINT ON 2 FTO SHEETS.



THE CSP HANDS OVER THE PAYMENT TO BENEFICIARY.



## THE BACK END | CSP FACING

On a normal non-work day, the CSP is busy with her chores as a home maker. She would usually wait for the MC to message or call her about potential dates for new payments or simply to check up with him in case she hasn't been contacted in a while.

Once the lump-sum money is approved by the GoAP and released through the Nodal Bank, the partner bank issues a cheque to the BC, who then updates the individual bank account information on their CBS server based on the FTO sheet provided by the MPDO. The FTO has details of payment amounts pertaining to individual accounts / job card numbers.

Once this data is updated on the CBS server, the MC informs the CSP and account information on her PoT terminal is updated. The successful completion of this step relies on GPRS connectivity and hence is affected by the quality of mobile network. Most PoT machines have 2-3 SIM card slots, to enable the CSP to toggle between different networks, in case one service provider fails or if the signal of a service provider is comparatively stronger in a certain area. Some CSPs also reported that they had observed that the mobile signal was particularly strong at a certain point in the village or at a certain time in the day and hence would try updating the PoT machine accordingly. In case none of the workarounds are effective, the CSP can also take the PoT machine to the mandal office and do the transfer via a phone line.

Once the account information is updated on the PoT terminal (this process is exactly the same for SSP and NREGS), the cash is handed by the MC to the CSP both physically and digitally (by updating the cash handed out on the PoT) and the CSP is then ready to start

the process of disbursing payments. It is the CSP's responsibility to inform the village about the payment dates and she relies heavily on informal networks to get the word around. The disbursement date therefore is contingent on a series of well coordinated activities between the CSP, the MC, and the beneficiaries of the village – what makes it difficult and unpredictable is the reliance on informal means and workarounds. In tribal areas it was more prevalent for the CSP to travel to the mandal office to collect payments from the MC, given large distances making it virtually impossible for the MC to deliver payments to all CSPs (traveling times, including walking and public transport, in many cases would easily add up to 4-5 hours one-way).

Once the payment process starts, the CSP has to select the type of payment (SSP or NREGS) and then follow a sequence of steps that would lead to a successful transaction.

## IDENTIFICATION

In the case of the smart card system, the first step involves the CSP inserting the beneficiary's smart card, which contains the biometric information and other details such as his / her name and account number.

In the case of card-less systems (PO or the Mobile Phone and NFC reader system), the BPM or CSP inputs the account details on the PoT device or Mobile phone through the numeric keypad. Most beneficiaries do not remember their account number and have to rely on a physical artefact like a saving pass book or acquittance slip for those details.

## BIOMETRIC AUTHENTICATION

Once identified, the CSP takes a fingerprint to verify and match the beneficiary to that particular account. In the smart card, the biometric information is stored on the card itself, whereas in a card-less system it resides on the PoT device or the mobile phone. The mobile phone receives and authenticates biometric data from the finger print reader through NFC - a contact-less radio communication enabled by keeping the 2 devices in proximity. In the case of Aadhaar-enabled DBT, the biometric information resides on the Unique Identification Authority of India (UIDAI) servers and has to be accessed through GPRS during every transaction. Most of the research locations in East Godavari with DBT pilots in action had adequate mobile coverage, implying that the authentication process was seamless if comparatively longer than the offline alternatives.

Verification failures are commonplace and a contributing factor for manual overrides. Many CSPs observed that the occurrence of failures are quite high in aged beneficiaries and the only recourse is to repeat the process until a successful input is received. In one

particular case a CSP in a peri-urban location told the beneficiaries whose verification had failed to wait aside while she took care of the burgeoning, restless crowd. After she was done with most of her payments she patiently retried each beneficiaries' fingerprint at least 7-8 times, asking them to wipe or clean their hands with a cloth. Some cases showed a positive verification, and in the others, she did a manual payment.

In tribal areas, the CSP delegates some of the responsibility of disbursing payments to the NREGS group leaders a.k.a. mates, thus completely overriding the biometric authentication part. Sometimes it is done to expedite payments in situations where the beneficiaries start crowding and growing restless and sometimes when the location is extremely far or difficult to traverse.

## PAYMENT VALIDATION

After successful authentication, the PoT screen shows the beneficiary's account details, which the CSP or BPM then matches to the acquisition slip to verify that the two amounts match. It was noticed that a sizable number of beneficiaries turned up with multiple acquittance slips pointing to payments that they couldn't receive because they weren't in the village or because there was a delay in the payments reaching their accounts. In case of multiple slips, the CSP quickly adds up the figures using a calculator or pen and paper and if it matches with the number on the screen, she processes the cash payment.

Sometimes the screen might show a zero account balance due to uncredited payments or an improper data download. If the frequency of empty accounts is higher, the CSP may try to figure out a pattern to explain the occurrence by checking the date of issue of the acquittance slips or try to rectify it by rebooting her

device and trying to download the information again. If that doesn't solve the problem, the CSP or the BPM usually ask people to come back again the following week.

In tribal areas where downloading the CBS data is a bigger challenge because of connectivity issues, most CSPs disburse the payments even when the account balance is zero, based on the amount provided on the FTO sheets.

## CASH DISBURSEMENT

Once the amount on the PoT screen and acquittance slip/s are a successful match the CSP will distribute cash to the beneficiary. Managing change is a minor inconvenience for the CSP. Most payments are usually in odd figures and require the CSP to create a system to keep track of change owed. For example, if a beneficiary is owed Rs. 2,473, the CSP will ask them to get Rs. 27 in change and make a note of the payment as an entry in a notebook. When the beneficiary comes back with the change the CSP will hand over Rs. 2,500 to them and get them to sign against their payment entry.

## PAYMENT ACKNOWLEDGEMENT

Upon completion, the CSP keeps one of the transaction slips with her and gets the beneficiary to sign against their payment on the FTO form. Some CSPs might ask the beneficiary to maintain a tiny notebook where she writes down the date and transaction amount. This book then acts as an informal repository of the beneficiary's transaction history. In case of the BPM, the transaction is entered onto the beneficiaries' PO savings pass book.

The CSP has to be very efficient in managing the payments when the crowd around her starts to grow.

It was noticed that a few CSPs would devise ways to engage people over 2-3 sub-tasks, so that their interaction with each beneficiary was optimized.

After the CSP has processed the payments for the day, she takes a stock of beneficiaries she might have missed by going through the FTO list and informs others to tell them to come to her to receive their payments. She would continue to deliver payments at other villages under her purview and reconciles the transactions she has carried out afterwards. She syncs her PoT device to the BC's CBS server and hands over the remaining cash, transaction receipts and FTO sheets to the MC.

## TECHNOLOGY ISSUES IN TRIBAL AREAS

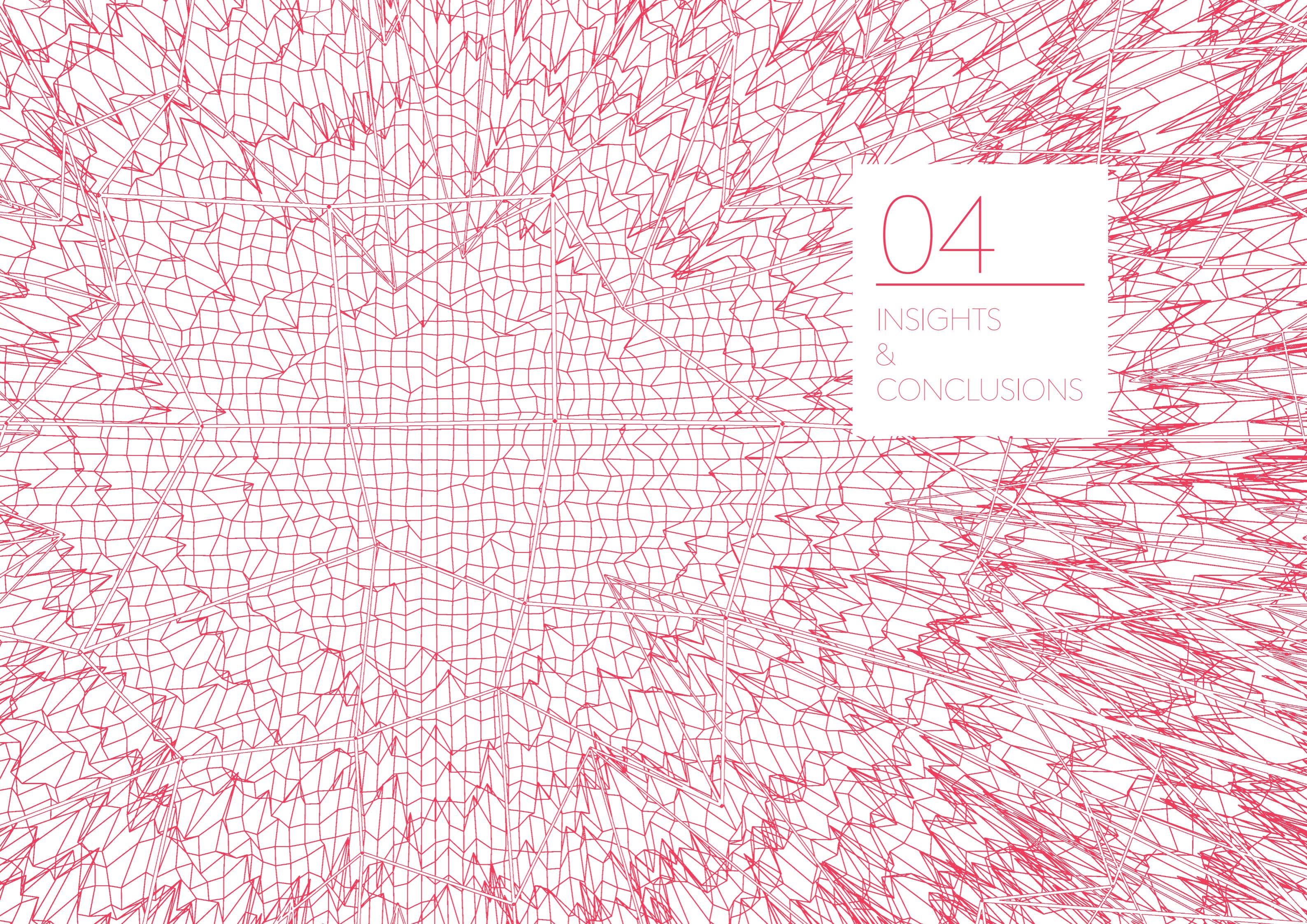
Other than the issues highlighted during the process of payments, the tribal CSPs also face other technology related problems:

### ► Limited charge capacity of PoT device

Households in tribal areas get limited electricity supply (a few hours in a day). The charge on the PoT device lasts for a very short time (about 150 transactions), and the CSP may not have access to electricity during the time of disbursement.

### ► Limited transactions

The PoT devices currently in use can only hold data for up to 200 transactions, after which the CSP has to go sync it with the BC's CBS server and start anew. Mobile connectivity issues make it virtually impossible for the CSP to do that mid-payment, especially if they are located away from the main GP. This is another reason wherein system breakdowns force the CSP to do manual transactions.

The background of the image is a complex, abstract wireframe pattern composed of numerous red lines forming a three-dimensional, crystalline or mesh-like structure.

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INSIGHTS  
&  
CONCLUSIONS

The G2P payments in the state of AP provide an excellent backdrop to understand the opportunities and challenges that are inherent in direct transfer of benefits to end recipients. Some of these lessons are unique to AP, given the advanced state of technology and financial infrastructure and a deeply entrenched community welfare model, while some others can be more universally applied. Summarized below are some key insights from the preceding sections which have direct implications on improvement of the payment system and its evolution towards a financially inclusive one.

## UNDERSTANDING THE G2P SYSTEM

### USER INTERACTIONS WITH TECHNOLOGY

#### ► INCIDENCE OF TECHNOLOGY IN EVERYDAY LIFE

Much like the rest of the country, the technology infrastructure, especially as it pertains to mobile communications, is ubiquitous in AP. Even amongst the remote, hard-to-access locations that the research team visited, mobile networks, even though at times patchy, could be found at specific spots in the village or town. Other everyday technology artefacts that have made deep inroads are broadcast satellite dishes. Closer home to the financial services sector, are bank accounts and associated debit cards that people have received through other government schemes like scholarships or housing subsidies. (Note: this may be unique to AP given the high prevalence of social welfare schemes administered through IKP).

However, the more fascinating aspect of this ubiquitous access is the relative ease with which people are able to operate these technologies. Be it mobile phones or debit cards, the technology is intuitive enough for users of all ages, gender and levels of education to operate them. Even more interesting are the workarounds people employ to make the piece of technology relevant and useful for themselves. For example, the elderly may not be direct users of a mobile phone but will, more often than not, have children in the house to assist them. The absence of mobile network in the village implies that the user walks a short distance to the nearest road at least once a day to download important messages that she and or he may be expecting. The manner in which people remember numbers does



#### ► IMAGE

*This card is like a signature, that's all. Without it I won't get my payments - Chandrakala, Unskilled Labour, Mahbubnagar*

not necessarily depend on the directory provided in phones but instead on a written diary that people still maintain.

It is important to note that technology rarely, if ever, is a barrier to use. It is evident that as long as people find the technology utilitarian, and it provides a direct, tangible benefit, they would find ways to adopt it in their everyday lives.

#### ► POORLY LEVERAGED TECHNOLOGY FOR G2P PAYMENTS

In sharp contrast to the point made above are the suite of technologies being deployed to facilitate benefit transfers to end recipients. Amongst the most prevalent technology seen by the research team was the smart card used for availing benefits and on which biometric data of the recipient was stored. In most cases, users would carry the smart card to the payment point and hand it over to the CSP to authenticate the identity of the recipient and make the payment. When compared to other technologies (such as the mobile phone, satellite broadcast dishes) that are now essential everyday tools, the smart card's utility is extremely limited to the point of being used merely for identification. There may be several reasons for this – lack of a perceptible change in the payment process which can be directly attributed to technology and which is seen by people as adding value to their

lives; the technology itself being limited in terms of scope and potential, as currently it is valid only at a particular payment point and is being used only for authentication. The smart card, and equivalent technologies such as the NFC, therefore have limitations, several of which are linked to the back-end system design and to how users interact and use them.

#### ► LACK OF AGENCY IN USING G2P TECHNOLOGY

An aspect that is closely linked to how technologies get adopted and accepted by users is the level of control they have in using it and the ability to predict outputs on the basis of certain inputs provided by the user. In the case of G2P systems, this interaction between the user and technology is almost always mediated by a CSP and at a time and place which the user has no control over. Once the smart card is handed over to the CSP, she reads it on the PoT terminal, does the biometric authentication, and goes through a series of instructions displayed on the PoT which the end recipient is completely oblivious of. As a result, over time, the recipient has built no knowledge of how the system works and has no incentive to learn it. This has also created a technology "blind box" wherein any breakdowns go unexplained and the resulting recipient experience ends up being only marginally different from what was previously deployed.

#### ► NEED FOR INFORMATION

Linked to the lack of agency and the point made above about technology becoming a 'blind box', is the question around access to information. Several aspects of the end recipient experience, as it stands today, are compromised because of poor information access. These include information on whether money has been credited into their accounts, the reasons for delays, an expected date by which payment is likely to be received, payment particulars like basis for the amount paid, and period for which it is paid, among others. In a few instances, it was noticed that a payment receipt was printed by the PoT terminal and handed over to the beneficiary. However, in some cases, especially in the tribal belts, the money paid was different from what was mentioned on the receipt – a discrepancy that the research team found no explanation for other than the fact that the amount paid in such an instance was on the basis of figures mentioned in the acquittance register. Information gaps of the kind mentioned above reduce the credibility of the system in the eyes of the end beneficiary.



#### ► IMAGE

A beneficiary stands aside, unable to receive her payments as her account balance hasn't been updated

## HOW CAN TECHNOLOGY TRULY EMPOWER PEOPLE?

If one of the long term goals of the current G2P payment is that it becomes a vehicle for financial inclusion, then empowerment of people is a prerequisite and one which the technology deployed presents an incredible opportunity to drive and enhance. Technology provides the means to drive transparency and accountability and can empower users in a way that they can take decisions on matters that directly concern their well being.

#### ► Help users access key information about their payments

- An SMS based system of accessing the status of payments, key information such as date of work, number of days, payment amount

#### ► Re-envision the system allowing users more flexibility in withdrawing and depositing payments through the smart card provided to them albeit at points of transaction that are not tied to the CSP

#### ► Allow recipients to authorize another person from their own family to collect payments on their behalf through the use of mobile technology and smart cards

#### ► Reduce waiting time at the disbursal point by breaking up the process into sub-tasks some of which are non-critical and can be done by someone other than the CSP



#### ► IMAGE

*Even though I have studied only till class tenth, I have realized I can do a lot for my family and my community, as a CSP - Shanti, CSP, Paderu*

### CSP AS A PAYMENTS CHANNEL

While the study covered different CSP channels, the woman community member as a CSP is a model that is unique to AP because of the history of SHG movement in the State and the rules that have guided the deployment of this channel in AP. It is also a channel that is rich with opportunities and challenges especially as they pertain to scaling and replicating this model in other parts of the country. The section below attempts to capture some key aspects that stood out:

#### ► COMMITTED AND PROGRESSIVE

Across all study locations it was observed that the woman selected to be the community CSP was an educated and ambitious person mostly between 20-25 years of age. In most instances, she had found out about the position either through the SHG of which she was a member or through word-of-mouth. For a majority of women, this was their first formal job and one in which they took immense pride. Given the close association SHGs have had with social welfare schemes of the State, the social disposition of the CSP themselves was evident and manifested in several ways. For example, several women CSPs in the tribal regions of the State spoke about how they would travel large distances to deliver payments for the elderly and infirmed. Some women had recently become mothers but would still try to accommodate payments within their busy household routines. Almost all of them were operating without much field support while handling large volumes of payments stretched over the better part of the month.

In spite of a seemingly large work load and an inadequate and fickle compensation, the women were motivated and saw this job as a stepping stone for better career prospects. They also recognized the importance of the role they were playing in making benefits available to fellow community members. For some, the pride in being able to handle a new technology and process, and then pass that knowledge on to others, was unmistakable and irresistible.

By leveraging the credibility that SHG and its constituent members enjoy within the community,

and using that to set up a state wide BC network, the State level policy has helped build a motivated network of CSPs who have high social integrity and drive. This is possibly one of the biggest strengths of this model.

#### ► COMMUNITY TRUST

One of the direct outcomes of selecting a CSP from within the community has been the level of trust that community members have in the selected agent. With a payment system that is still to be optimized and streamlined at several levels, and, in its present form, comes with a huge risk, the absence of any reported cases of consumer fraud testifies to the faith people have in the CSP. While the CSP often faces the brunt of people's frustrations stemming from systemic failures, she is still perceived by most to have integrity. It is a valuable lesson for deployment of a new system that is likely to have several teething issues and during which a credible last mile agent is essential for mitigating consumer grievance.

#### ► SEEKING A SUPPORT SYSTEM

At an operational level, the CSP from the community was mostly working without any field support from the BC institution. Given the volume of payments, the number of habitations, and the number of beneficiaries that each CSP had to manage, it was observed that she would enlist the support of her family members (primarily her husband), or sometimes of other community members, to distribute payments. This was necessitated by the following factors:

► At peak transaction times, the crowds would surge to an unmanageable number. Without a formal, organized physical infrastructure for making payments (most CSPs would make payments from the patio of a closed school building or from their own home), and with no institutional support forthcoming, she sought the assistance of someone familiar and trustworthy

► As a lone woman managing large amounts of cash, and traveling to far-off habitations especially in tribal geographies, the risk of the cash getting mishandled also prompted her to secure the presence of a male member

► The technology and the back-end system on which G2P payments are made is still error prone. As a result, she would often have to seek trouble shooting assistance on phone from the MC or the TA

CSP's efforts at organizing a support system for herself are indicative of the need for resources, both physical and human, that would make her task easier. In absence of institutional support, the system runs a high chance of getting compromised by allowing payments to be made by an unauthorized person, while also demotivating the CSP to the point of attrition.

#### ► PROCESS AND TECHNOLOGY GLITCHES

In addition to a wanting physical and human resource infrastructure necessary for smooth operations, the CSP also has to negotiate several technical and process glitches without a clear error resolution mechanism for either. Some common errors pertaining to the PoT terminal are:

- Limitation on the number of transactions that can be stored on the terminal which therefore requires her to periodically upload transactions already done to free up space on the terminal. In areas with poor network, this could imply walking out to the nearest point where a network is available thereby delaying the payments, sometimes by an entire day
- Device running out of charge and non-availability of reliable power
- Biometric authentication failure which requires the CSP to repeatedly keep trying with the same user thereby causing delays and frustration

On the process front, the glitches are related more to the system back-end but with implications on both the CSP and the end-recipient experience:

- The most common consumer grievance faced by the CSP, and for which she is often expected to have an answer, are delayed payments. The reasons are unknown to her and impossible to trouble shoot at her level. As a result, she has to mostly turn down the recipient without assigning any reason
- The CSP incentives are linked to the number of electronic payments made. The salaries are often delayed and transferred without any intimation to the CSP about the basis of calculation. If the delay is significant, the CSP has no way of keeping a tab on payments she made months back and hence if the salary amount is accurate
- In spite of high levels of self-motivation, these glitches can potentially erode the faith that both the users and CSPs have in the system

#### ► IMAGE

A CSP solicits the help of her husband to shoulder some of her responsibilities. They are helped by a physically challenged orphan boy from the village, who also assists them during payments.

## CAN THE COMMUNITY CSP BE INSTITUTIONALIZED?

The community-based CSP model is rich with opportunities to make it more robust and credible. One of the biggest advantages of this system is the trust that is inherent in it and the extent to which it mitigates end recipient's anxieties and frustrations. However, institutionally it lacks a credible backing and is in dire need of systems and processes that make it more integral to the BC institution and more aligned to the long term vision of G2P payments.

- Help CSP keep track of electronic versus manual payments and access transaction logs
- Design interventions that help the CSP:
  - Managing operations at the time of disbursement through a "starter toolkit" comprising of basic collaterals that can smoothen the process like queue managers, ledger books, cash box, physical token system, portable chair, etc.
  - Managing cash flows by allowing CSPs to access cash through existing points of commerce in the village such as ration shops, retailers, etc.
- Motivating the CSP network through more systematic programs around rewards and recognition program, and career progression)
- Designing simple collaterals that help establish a formal identity such as a badge, uniform, backdrop





#### ► IMAGE

A CSP divides the tasks amongst the mates of various NREGS groups, to handle large crowds. This overrides the electronic verification system. - NREGS Disbursement, Araku

## SYSTEM EFFICIENCIES & BREAKDOWNS

#### ► AN EASY-TO-USE TECHNOLOGY

The PoT terminal, also called a micro-ATM in some instances, is the most prevalent piece of technology being used by CSPs for effecting G2P payments. While there are deficiencies in the technology, some of which have been pointed in previous sections, there are also visible advantages in its current design. The capability to work offline becomes extremely useful in geographies where network access is erratic. Even in places where network connectivity is good, the research team observed that the connection would drop within certain parts of the village or at the location where the CSP makes the payment.

Once the biometric authentication is through, the ease with which the CSP is able to operate the machine also speaks of its user-friendly design. On the other hand, since the language of instruction was English, most CSPs sequenced through them as a force of habit without really understanding the various options that the user-interface presented.

The on-boarding process for most CSPs involves a 2-3 day training period which is meant to familiarize them with the technology and the process of making payments to end recipients. In some cases, the CSPs were directly put on job and had to make sense of the technology without formal training. Testimonials from these CSPs about having little difficulty in learning on the job also indicates the ease of use.

#### ► INFORMAL WORKAROUNDS

The unique circumstances and geographies in which the G2P payments happen, lay bare some of the inadequacies of system design. However, the research team observed several informal workarounds used by the CSPs which could either be factored or addressed in future builds of the system.

In tribal areas, for example, communication between the MC and the CSP often becomes a challenge because of network connectivity. One of the CSPs the research team met, would walk to the nearest point to her village where network connection was available, to check whether she had received an SMS from the MC. During the weeks when payment has to happen, she would end up doing this several times in the day. However, an interesting phenomena typical to tribal regions is the manner in which information moves around in absence of ubiquitous connectivity. Often the MC would pass the message through a jeep or a person on a motorcycle traveling in the direction of the village where the CSP was located. Another way would be to leave a message with the ration shop owner in the nearby village where network connection is better; the information would eventually reach the CSP.

Another challenge is the manner in which the CSP would communicate to residents of other habitations about the payment date. In one instance, we heard the CSP talk about how the PDS shops are extremely useful in getting the message across. Usually ration shops have a well established informal system of spreading news of fresh stock arrival. The CSP would get the payment information also spread through the same networks and would use the ration shop as the cash delivery point – making it easier for residents to collect ration and payments at the same time.

#### ► LACKING ACCOUNTABILITY

While some of the workarounds mentioned above are advantageous, some others seen during the field immersions clearly violated basic accountability measures. As previously mentioned, the volume of payments managed by the CSP often resulted in large, unmanageable crowds of recipients turning up together. In most of these cases, the CSP would turn for help to either a family member accompanying her or to one of several mates of respective NREGS groups. In tribal areas where authentication failures or zero balances were seen to be more prevalent, most payments were made through a manual system, meaning that, once the recipient was manually identified, the payment was made on the basis of the amount mentioned in the acquittance register, with payment being acknowledged by the recipient through a thumb impression or, in rare cases, a signature. The problem of accountability becomes

particularly acute when manual payments happen through a person other than the CSP.

In some cases, it was also observed that the mate of a particular group would collect the entire money on the behalf of his or her group, and then distribute to each group member their share separately. This would happen completely unsupervised, and often the money would be equally divided within the group members even though individual shares, as on record, could vary.

Managing change while doling out payments to end recipients is another challenge that most CSP's face. Since the amount is usually an odd number and the recipient may not have the necessary change for the CSP, the research team often saw the CSP maintain an informal record of how much money she owed to whom. Although fraught with the risk of these small sums of money going unaccounted for, this was accepted by most recipients as a reasonable solution to the problem.

Outside of payment related breakdowns, erroneous enrollments pose a completely different problem related to fraudulent entitlements. It was observed that some beneficiaries had multiple identity records, or had an EBT smart card with an misreported age that entitled them to payment benefits which they were not eligible for.

#### ► RISK PRONE

One of the major risks in system design, as it stands, is that of cash management. The research team has interviewed MCs who have reportedly distributed payments to the extent of Rs. 18-20 million in a month in tribal areas where cash has to be delivered on motorcycles over distances as far as 50-60 KMs. Often the MCs would have to go on foot to villages that are difficult to reach, carrying large sums of cash in unsecured bags. Besides the money moving from the MC to the CSP, there is an additional risk associated with the CSPs moving money to different habitations, almost invariably on foot and having to stay overnight if the village is far.

#### ► POOR TROUBLESHOOTING CAPABILITIES

A recurring phenomena across all research locations visited was that of poor or nonexistent troubleshooting and/or grievance redressal capabilities either at the CSP's end or for the system as a whole. The most common reasons

cited for nonpayment was that of funds not being credited to the beneficiary's account. For the more remote habitations, EGS payments due from 3 months back had not been paid still. Less acute delays of around one month or thereabouts was common for most habitations.

As the face of the system, the CSP was expected by most recipients to explain the reasons for delays. On the other hand, the CSP had no window into the system, either directly or through her respective MC, thereby causing frustration and anger amongst the recipients, for whom there was no alternative to turn to for redressal. It was also hard to diagnose the exact cause of delay, which could be one of multiple reasons:

- Work not validated
- Records not updated
- Information not transferred from MPDO to BC
- Payments not initiated

In sharp contrast to NREGS, the SSP payments happened with more predictable periodicity and without unexplained delays. One of the reasons for this may be attributable to the relatively simple and independent pension system as opposed to a complex interdependency that exists between the NREGS payments and the employment generation and validation system.

## IS THE SYSTEM DESIGNED TO ADDRESS AND LEARN FROM BREAKDOWNS?

At its most basic level, the business processes and workflows need to be overhauled to make them more predictable and reliable. Certain basic measures – such as increasing accountability, providing customer grievance redressal, introducing trouble shooting measures and making workflows more transparent – are absolutely critical if the system is to be scaled and replicated in other constituencies. It is also important from the point of view of preventing its credibility from getting eroded in places where it is already in effect.

► Designing an appropriate grievance redressal system for recipients to record and address customer complaints in the event that:

- Payment is not received in their accounts
- Biometric authentication fails
- Account balance does not match the amount in the acquittance register

► Maintaining system log to record errors in technology

► Making more robust PoT terminals in terms of longer lasting power (through either solar energy or higher capacity batteries) and increasing data storage capacity can increase the efficiency of payments and mitigate incidence of manual payments

► Training the CSP so she can address and troubleshoot issues as they occur

► Allow CSPs to enlist support of community members in managing certain non critical tasks in disbursements without compromising accountability

# G2P & FINANCIAL INCLUSION



## ► IMAGE

A subsistence farmer from a tribal village in G. Madgula shows a private company bond he invests in.

## ACCOUNT USAGE

### ► FAMILIARITY WITH SAVINGS PRODUCTS

With a deeply entrenched SHG network, the state of AP is probably unique in the prevalence of savings behavior amongst its citizens. Except for the tribal areas, almost every household visited during the field studies had benefited from the bank linkage scheme, some having availed third and fourth level linkages. The awareness of SHGs and its mode of operation provided a great backdrop for talking to people about savings. People were often aware that an SHG member would travel to the nearest town to deposit the group's savings – as a consequence their own knowledge of bank accounts and the technology to access and operate those was quite well developed.

People had also got bank accounts through other government schemes (e.g., housing and scholarship schemes) which necessitated the recipients opened an account to claim the benefits. Mostly these bank accounts would become dormant once the money under the scheme was utilized. In addition to bank accounts, the incidence of other formal products such as ULIPs were also observed.

Amongst the informal financial products, chit funds were a universally common instrument used by people with a higher prevalence of it in the rural and peri-urban districts. A particularly interesting informal financial behavior observed was the contributions a household got from friends and family during important events like a wedding or daughters becoming adolescent. People would maintain an elaborate register noting down every contribution they got. The family would then keep

S. NO.	Name	Father	Madagada	500/-
1.	P.M. Ajus		—DO—	116/-
2.	K. Goverdhan		—DO—	116/-
3.	B. Chenna Buddu		—DO—	100/-
4.	A. Buddu		—DO—	120/-
5.	B.b. Nageshwar Rao	Teacher	—DO—	200/-
6.	K. Buddu (Teacher)		—DO—	50/-
7.	M. Appenna		—DO—	100/-
8.	B. Buddu		—DO—	50/-
9.	G. Venkatesh Ramana		—DO—	200/-
10.	D. Varahalur Bebu		—DO—	50/-
11.	K. Addu		—DO—	50/-
12.	G. Ghosimath Rao		—DO—	50/-
13.	G. Sriniv		—DO—	50/-
14.	K. Jagga Buddu		—DO—	50/-
15.	D. Ramannar		—DO—	50/-
16.	A. Omur		—DO—	100/-
17.	K. Somare		—DO—	100/-

#### ► IMAGE

A common practice in tribal villages, a register containing details of contributions made by the villagers towards a wedding in the family - Madagada, Araku

track of the households to whom they had returned their share of the contribution through a reciprocal event. In general, the households visited by the research team showed a high level of sophistication in managing their finances.

#### ► DORMANT PAYMENT ACCOUNTS

For G2P payments, CSP is the only transaction point for recipients to claim their benefits. Even though the smart cards issued to people displayed the name of the bank and the BC institution on it, there was no communication or recall amongst the recipients of the features of the bank account they had been issued. Field observations indicated that recipients accepted the payment that was told to them was their due without asking any further questions. The ability to withdraw and deposit payments at will was not available nor acknowledged by people.

On the other hand, the CSP was directed to pay the amount in full to the beneficiaries, in some instances on the basis of what was mentioned in the acquittance register while for others, based on the electronic receipt generated.

As a result of what appears to be largely system driven constraints, it is not surprising that the payment accounts are mostly dormant with little or no transaction history associated with them.

## CAN THE PAYMENT ACCOUNTS BE DESIGNED TO ENCOURAGE SAVINGS?

In its current design, it is evident that the G2P payment system is meant only for funds disbursal at a frequency that is determined topdown. Given the level of sophistication that already exists around financial behaviors of the poor, there is an opportunity to make incremental changes to the system that allows more flexibility to end users in how they manage the benefits.

#### ► Incentivize users to leave money in the payment accounts by:

- Developing products that help users divert a portion of these seemingly "non-dependable" sources of income such as NREGS into "dependable" long-term investments
- An "opt-out" mechanism for simple insurance or deposit products

#### ► Allowing flexible access to payment accounts and making them interoperable across locations can make these more viable for occupational groups like peripatetics and fishermen

## ► IMAGE

'Shandies', a weekly market in tribal areas, is the center of trade and finance. Every week, residents from habitations from as far away as 25 KMs come here to buy and sell - Sunkarmetta, Araku

## FINANCIAL ECOSYSTEM

## ► VIBRANT ECONOMIC EXCHANGE

The local economy in rural and tribal settings appeared to be thriving in terms of the level and frequency of financial exchange, the number of stakeholders actively transacting amongst each other, and the range of financial instruments used varying from cash transactions and borrowing instruments to more traditional barter systems.

In the tribal areas visited by the research team, economic activity was centered around weekly markets, also referred to as "shandies". Residents of habitations from around a 25 KM radius would bring their wares to the nearest town and set up day-long shops. Groups of men, women and children belonging to a cluster of villages would travel together to sell fruits, vegetables and other forest produce. This would also be the time for households to procure their weekly ration and other agriculture related inputs such as seeds and fertilizers. The weekly markets therefore become a focal point for trade and monetary exchange with several people transacting in cash and kind.

Other examples of contained but highly self-sufficient economic systems were found in certain vocational clusters. The fishermen community is an example of one such cluster where the financial needs of the fishermen are fulfilled almost entirely from within the community. Financial products like insurance, credit, and savings are available to these individuals informally from their employers. For example, individuals can procure fishing nets from their employers and have the money adjusted against earnings from the daily catch. In the case of high seas fishing, any risk to life is compensated by the employer through a dole given to the individual or his family.

The range of formal and informal financial instruments availed by people, as discussed before, also testifies to the vibrancy of the local economy and the opportunity it presents to be integrated into the payment system.





#### ► IMAGE

*This card only helps me receive payments. When I need to save money, I keep it away at home or loan it to a friend - V. Ramanna, Sharecropping farmer, East Godavari*

#### ► ISOLATED PAYMENT SYSTEM

To avail G2P benefits, recipients are required to make time outside their everyday routines. Payments typically happen over a few days, the frequency of which could vary because of the delay in processing at the back end. On to day of the payment, beneficiaries start arriving in the morning and could spend anywhere between 30 minutes to a few hours to get their dues. For some others, who come from neighboring habitations, the total time spent including commute could be longer. In the event of money not getting credited, the recipients would have to come again and hence end up losing the time they invested on that given day.

Outside of a separate routine that the current G2P payment necessitates, it also has no linkage to existing bank accounts that beneficiaries may have. As mentioned earlier, these accounts would have been opened for other government schemes availed by the recipient. On the whole, G2P payments appeared to be a completely separate system with its own infrastructure, processes and workflows.

## ARE PAYMENTS INTEGRATED WITH THE FINANCIAL ECOSYSTEM OF THE RECIPIENT?

In order to allow benefit payments to be better utilized and managed by end recipients, it is incumbent to find linkages between existing financial behaviors and the new ones that payments can potentially introduce. The long term goal of financial inclusion will be hard to achieve unless pro-active counsel is provided to end-recipients while simultaneously presenting opportunities that make the transition seamless and requiring minimal effort.

- Provide last mile accessibility to payment accounts at commercial "hotspots" like weekend markets
- Allow virtual transactions through payment accounts within a closed group of local merchants and beneficiaries for a particular region
- Use payment accounts to help users access SHG bank linkages by allowing them to transfer a small sum of money into a designated SHG account



#### ► IMAGE

*I am always concerned about having to carry and store so much cash - Anusuya, CSP, Mahbubnagar*

## CHANNEL ATTRIBUTES

#### ► CASH LIMITATION

While cash management in the community CSP model is one of the major risks to be addressed, the research team encountered other channels where cash management was a more intrinsic capability. One such channel was the FI outreach of Chaitanya Godavari Grameen Bank (CGGB) in Srungavruksham, East Godavari. CGGB has recruited local shop keepers as its BCs selling low ticket financial services to customers in its immediate catchment. Although not designed to handle G2P payments, the shop keeper was able to manage reasonable volumes of cash withdrawals and deposits for individual savings accounts.

The PDS shops are another transaction point having deep outreach and a regular frequency of consumer contact. In some cases, the CSP would use the PDS shops to spread information about the date of payment and physically as the payment point.

Mobile network is a ubiquitous asset and in most locations, village residents would go to the nearest town for recharging their accounts. Telecom agents are therefore a universal phenomena and a transaction point for most rural and tribal residents.

POs are also a prevalent and a well recognized point for financial transactions in the community. A pertinent observation with regard to POs being used as a G2P payment channel, was the ability of the BPM to manage payment operations, ranging from crowd control to cash transactions.

#### ► FINANCIAL LITERACY & INFORMAL SERVICES

While the need for more sophisticated financial instruments and their prevalence amongst consumers was well documented, it was also evident that in certain cases mainstream financial products had been mis-sold to end consumers. For example, one of the consumers interviewed by the research team in Podjela, District Paderu, spoke about how he had invested in a ULIP product on

his brother's advice, but on closer look appeared to have misunderstood the policy. Similarly there were others who had bought company deposits but with no clear understanding of the ensuing terms and conditions.

On the other hand, informal financial instruments like chit funds, community contributions or even extensive borrowing and repayments to friends and family betrayed a high level of user sophistication and understanding of the merits and demerits of these products. Users were a lot more comfortable and trusting of these instruments, and spoke about the relative ease with which they could access and negotiate these, even if sometimes lopsided in their terms of engagement.

Sophisticated products that can address some of the fickle and unpredictable economic conditions of the poor are a well-qualified need for most consumers. However mainstream institutions must learn from the intimacy and accessibility that some of the informal channels provide.

#### ► INFORMAL CHANNELS

For most beneficiaries, the nearest town was a highly frequented point for multiple reasons. As described earlier, weekly markets are a thriving center for economic activity, often the only place where village residents would get their weekly supplies. Basic services like mobile recharge, banking, postal services, and access to medical care for more serious health related issues would necessitate a trip to the nearest GP. The nearest town or GP also became relevant for any issues that would require interfacing with the government.

In terms of mobility, people would mostly travel on motorcycles, bicycles or shared taxis. While infrequent in some of the remote parts of tribal territories, these were also available on call and people in a small hamlet would occasionally come together and request a taxi to take them to the nearest town.

In terms of accessibility, therefore, a predictable, albeit slightly more distant, transaction point located in the nearest town or GP may not be beyond the remit of a convenient and viable G2P system.

## ARE PAYMENT CHANNELS DESIGNED TO ACCOMMODATE INCREASE IN SCALE AND SCOPE? AS IT IS IMPLEMENTED ACROSS THE COUNTRY? AS IT BEGINS TO ADDRESS MORE SOPHISTICATED AND COMPLEX NEEDS OF RECIPIENTS?

As the system is scaled, some of the challenges related uniquely to channel design have to be addressed. These range from issues such as cash related risk to others that are more pertinent to human resources such as competence and financial literacy. It is incumbent to think of ways in which the current channel can be strengthened through capacity building while also leveraging strengths of other complimentary channels.

- Allowing CSPs to access cash through existing points of commerce (such as ration shops, retailers) will ease the burden and make the process more efficient and safe
- Recognizing certain asset classes as viable forms of security and or collateral – such as livestock, occupation related tools and equipment for small business entrepreneurs, fishing nets and boats amongst coastal communities – can open doors to financial access and inclusion for these communities
- Leverage payment account to cross-sell other financial products
- Enhance financial literacy of recipients through better training of CSPs and leveraging the inherent trust that exists between them

## ABBREVIATIONS

**AP** Andhra Pradesh

**BC** Business Correspondent

**BPL** Below Poverty Line

**BPM** Branch Post Master

**BPO** Branch Post Office

**CBS** Core / Centralised Banking Solutions

**CGAP** Consultative Group to Assist the Poor

**CSP** Customer Service Point / Provider

**DBT** Direct Benefit Transfers

**EBT** Electronic Benefit Transfers

**FA** Field Assistant

**FI** Financial Inclusion

**FI-BC** Financial Inclusion - Business Correspondent

**FTO** Funds Transfer Order

**G2P** Government To People

**GoAP** Government of Andhra Pradesh

**GP** Gram Panchayat

**INDIRAMMA** Integrated Novel Development in Rural Areas and Model Municipal Areas

**IKP** Indira Kranthi Patham

**MC** Mandal Coordinator

**MPDO** Mandal Parishad Development Officer

**NFC** Near Field Communication

**NREGS** National Rural Employment Guarantee Scheme

**NTFP** Non-Timber Forest Produce

**PDS** Public Distribution System

**PO** Post Office

**PoP-CA** Poorest of the Poor - Community Activist

**PoT** Point of Transaction

**SHG** Self Help Group

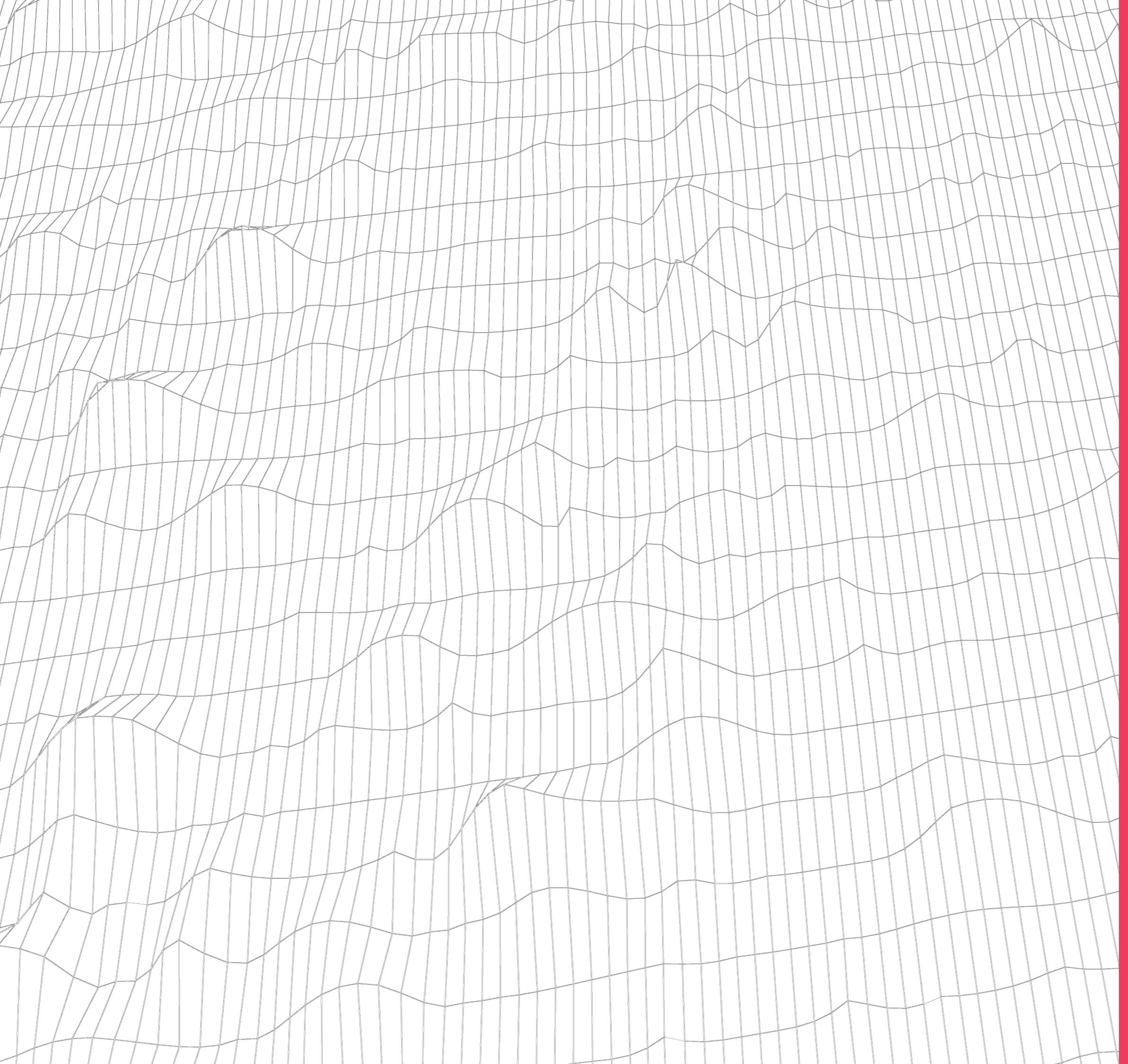
**SSP** Social Security Pensions

**TA** Technical Assistant

**VRP** Village Resource Person

**VO** Village Organization

**ZMF** Zero Mass Foundation



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Quicksand is a multidisciplinary design research and innovation consultancy working at the intersection of business, development and culture. Quicksand has worked extensively in the development sector by connecting the best practices of design & business with development programs to address the pressing and complex issues of public health, water and sanitation, education, livelihoods and financial inclusion.

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