



**Monday, October 5, 2015**

**Revisiting IMTFI Researchers: Introducing the 2015 India Field Report**

An IMTFI blog series in India by [Liz Losh](#)



(Seated left to right: Mani Nandhi, Liz Losh, Mrinalini Tankha)

In March of 2015 IMTFI arranged for a comprehensive visit to India to gather updates on four of their sponsored research projects. These four case studies examined a broad range of financial inclusion issues for specific targeted populations that differed by region, gender, and occupation. These studies included in-depth long-term field work with Delhi rickshaw pullers, rural women in Bihar, fishermen in Kerala, and silk workers in Karnataka.

As an observer, I was conscious of visiting the country at a time of dramatic changes. The government of Prime Minister, Narendra Modi had promised the country twenty-first century foundational technological transformations: biometric authentication, big data government, smart cities, mobile money, branchless banking, digital markets, shortened supply chains, and disintermediation of all kinds.

Although many of the research subjects participating in IMTFI studies often had access to cell phones and other communication technologies, and some maintained bank accounts, the access was uneven, and literacy gaps often played a role. In this context, empowerment efforts could have unintended consequences, the loss of local intermediaries was often mourned, and many reasons existed for people to prefer the informal sector over the formal one.



For many years now, I have covered the annual IMTFI conference as one of their official bloggers. This involves sitting in an air conditioned conference center at a high-tech research university in front of my laptop and trying to synthesize the statistics, diagrams, and photographs in the rapid-fire presentations to create stories that both accurately reflect the claims of the scholarship and emphasize the human interest questions that the yearly gathering of researchers raise. As one of the co-facilitators of [FemTechNet](#), a research hub for scholars of technology whose work is informed by feminist theory, I thought I understood the material, the embodied, emotional, labor-intensive, and situated character of interactions with money and technology. However, to a certain extent, from the vantage point of the university, I could only vaguely comprehend the IMTFI research in a mostly abstract way. Of course, these researchers based in the Global South, who had overcome visa hurdles and jet lag to get to UC Irvine were people I had gotten to know a bit over the years. But I was only familiar with them in their roles as accomplished and articulate scholars. I didn't have the opportunity to see their empathy, humor, introspection, curiosity, frustration, and generosity as human beings until I traveled to the places where they did their field research.

During my visit, I spent time with four remarkable women who were IMTFI Fellows and principal investigators. Among them were a human rights advocate and journalist who was serving as a research assistant to one of the PIs (see her "[What I Learned in India](#)" for more), [a postdoctoral scholar based at IMTFI](#) who grew up in Delhi, two female photographers, and eight field surveyors. It was an almost entirely female group that represented many different disciplines: anthropology, engineering, political economy, marketing, sociology, design, journalism, and nonprofit administration. I visited researchers in field sites, offices, and conference cities all over the country. I shooed away dogs and goats, ran across highways rumbling with trucks, tromped down mud paths inaccessible to automobiles, shuttled through mazes of back alleys and side yards, and navigated around industrial, animal, and human waste. I tried to be attentive and at the same time was anxious to avoid the possibility of disrupting the trust that the researchers had built with their subjects, sometimes over the course of many years.



Liz Losh with Nithya Joseph at the silk factory

I had been to India before -- to do research on [hashtag activism](#) in the wake of the notorious [2012 Delhi rape case](#), but much of that time had been spent in the familiar territory of college campuses, think tanks, and NGO offices. Visiting people who earned less than a dollar a day made me reflect on the ways that I could accept the food and hospitality they offered without further sapping family resources. Initially I probably also worried excessively about food safety issues, but I soon learned to follow the lead of my guides who always treated their informants with respect, friendship, and warmth. I was also privileged to see them in action, problem solving and formulating new research questions as new situations emerged. So it was an exciting intellectual environment as well. The fact that the IMTFI investment continues to pay off, sometimes years down the road, was particularly striking. From my perspective, the researches that these women are contributing to the field appears to be highly original, nuanced, practically applicable, and often counter to received wisdom.

This series of stories represents the work of [Mani Nandhi](#) on rickshaw pullers in Delhi, [Deepti KC](#) and [Vanya Mehta](#) on rural women in Bihar, [Nithya Joseph](#) on silk workers in Karnataka, and [Janaki Srinivasan](#) on fishermen in Kerala, . These stories describe very specific places and people, but I have tried to do so in ways that protect the privacy, dignity, and consent of participants. By offering portraits of these five researchers and their subjects, I hope to contribute in a very small way to broaden the public policy conversation about development, money, and technology to honor the labor of these inspiring women.

The stories will be published within a 6-part blog series over the next three weeks through the IMTFI Blog starting today, stay tuned~

Blogpost 1: "[Rickshaw Pullers in Delhi with Mani Nandhi](#)"

Blogpost 2: "[Balancing Optimism and Realism: Dan Radcliffe of the Gates Foundation](#)"

Blogpost 3: "[From Eko Headquarters to Mobile Money Agents: IMTFI Opens an Account](#)"

Blogpost 4: "[Financial Literacy through Comic Books in Dharavi & Bihar with Deepti KC](#)"

Blogpost 5: "[Silk Workers and Gold in Karnataka with Nithya Joseph](#)"

Blogpost 6: "[Revisiting the Fishers of Kerala with Janaki Srinivasan](#)"



## Monday, October 5, 2015

### Revisiting IMTFI Researchers: Rickshaw Pullers in Delhi with Mani Nandhi

*In March of 2015 IMTFI arranged for a comprehensive visit to India to gather updates on four of their sponsored research projects, introduction can be found [here](#). This first of the four case studies takes a look at rickshaw pullers in Delhi with Mani Nandhi.*



For IMTFI researcher [Mani Nandhi](#), the [first research questions about the rickshaw pullers of Delhi](#) grew out of her own personal experiences with a rickshaw puller. "When I went out of my colony – to go shopping, to go to the bank – I didn't have much time, so I took the rickshaw. I came to ask him questions about his background, and why he came to this work, and I learned about the rickshaw pullers' lives, the harsh conditions, and why they migrate here. In some ways, it's the easiest occupation to take. There's no entry barrier. You just had to be taken to the contractor and pay the hiring charges for the day." Trained as an economist Nandhi also manages the administrative responsibilities as a department head at the Department of Commerce at Jesus and Mary College in New Delhi. Her commitment to studying financial inclusion has always been driven by human interests.



According to statistics there are about 8-9 million rickshaw pullers in India. Out of these, only one million hold licenses, and fewer than 10% of those in the occupation own the rickshaws that they cycle. Despite the country's rapid modernizing, human-powered transportation remains an important part of urban living, particularly to fill in the gaps in existing public transportation of bus lines and metro networks.

As I travel with Nandhi to a rickshaw pullers' camp, I notice the obvious affection they have for her. They mostly call her by the familiar but respectful "Auntie" (rather than the more usual and impersonal "ma'am" or "madam"). There is considerable laughter, joking, empathy, and personal attention in the interactions as Nandhi inquires about particular men, some of whom are back at their villages and some of whom have been in trouble with the law. The conditions in which the men live in the encampment indicated their marginal economic status, even though government-funded toilets had introduced improved hygiene conditions in the camp, and the men were diligent about sweeping garbage out of our way and shooing away feral dogs.

As Nandhi explained, "I started at Microfinance Research Alliance, and we were asked to apply for IMTFI funding . . . It suddenly struck me that I have a very important segment, which we could study – with interesting demographic profiles, ways of saving, and financial practices. I knew the group of pullers who would stay outside my colony. I was chatting with them when I was preparing my abstract, learning about their informal practices, how there was no easy option to remit."



Like other IMTFI researchers in India, Nandhi emphasized the importance of doing qualitative as well as quantitative research. "In my pilot study I had a very long questionnaire and two research surveyors. I decided on areas that I had to explore, areas that I could get pullers for my sample. In my test questionnaire – where I found problems – I got to know about remittance channels, including about the Eko channel, in which money has to be collected."

"They used the hawala channel to send money," Nandhi said, referring to a pre-digital system of money transfer popular among Muslims, "but it was impossible for them to let me explore this particular area. It was definitely an eye-opening experience, the underground channel. They said, 'yes, you come in the evening,' or 'he will come early morning at seven.' But nobody ever came. It was impossible to break through. There is some kind of fear factor, for obvious reasons. There are entire transactions to be done, and that's the best way of ensuring that money reaches their houses." (For more about IMTFI research on the hawala channel for sending money home, see the [IMTFI research of Amrit Pal.](#))

"The pullers had many different strategies. One of these pullers would stay in the open space so he could hire out a room once a year when his wife came to stay with him. 'I won't be saving money if I rent a room.' By being an open squatter, he could save on money to be used for his family. People who are illiterate -- with no means of support, no government support -- look after money very well." As a savings strategy she described how they would also bury money in polyethylene bags at uninhabited parts of their camp.



The IMTFI visiting team observed many forms of economic activity as we accompanied Nandhi making her rounds among the pullers she considered "orphans" from society. Within the seemingly chaotic environment of the camp, there were shops that sold small items and beverages, a barber shop, an eatery. There was even a stall for selling colors for the upcoming festival of Holi. As we moved around the camp, we came across surprising ways in which money circulated through a variety of payment flows.



The camp holy man showed us a selection of talismans and coins from the temple, which included a U.S. quarter among his collection of currency.



Nandhi also described arrangements that some of the men made with local shopkeepers who served as depositors for their savings. This helped them to protect it from losing them to someone who might squander away their savings in gambling or alcohol binges. "They sleep outside the shop," Nandhi explained, "the shopkeeper has a system" in which the puller provides security for the proprietor, and the money kept is recorded in a small diary. "The men say, 'I don't get the interest. But at a bank I cannot open an account. I need an ID card.'"

Nandhi described how the pullers often feel excluded from the bank and how they don't tend to see it as a public resource to which they have access. "They are not allowed into banking outlets. Lower level employees are not facilitators in that sense. Bankers at the top level, they are keen; they understand." Although executives understand the imperative for financial inclusion, "it is at the ground level where sensitivity training is needed," according to Nandhi. She described banking officers who used their own experiences in places like East Bihar to confirm their own negative stereotypes and who would even accuse the pullers of lying. "They are poor," she lamented. "It's like a bigger vehicle who hits a smaller vehicle and says they are too blame. You are small. I am big. I am powerful." Banking hours and banking holidays could also be obstacles to pullers.



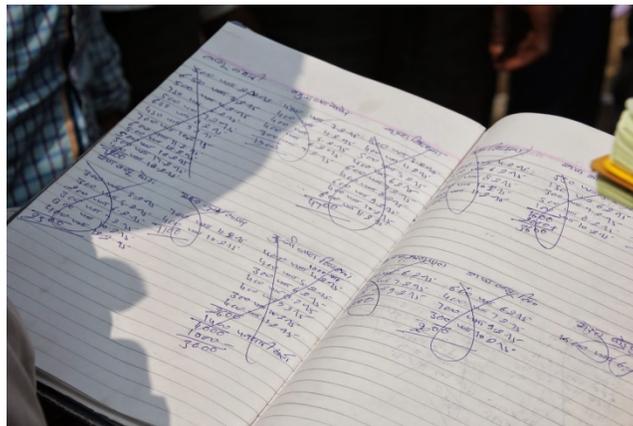
It is also worth noting that banks require proof of identification for opening accounts. Among the acceptable identification document for opening an account is the the biometric ID cards issued by the [AADHAAR](#) system which requires clear fingerprinting as a way to identify an individual. The heavy labor of maintaining these vehicles often wear the fingerprints in the hands of the rickshaw pullers and makes them illegible to the technology and debars them from acquiring their unique [AADHAAR](#) number, once again prohibiting possible access to banking facilities.



The other major factor that makes informal channels preferable is the question of access to credit. (In Africa, innovative experiments with providing credit to those in the informal sector using mobile money systems are being analyzed by IMTFI researchers studying [M-shwari and the Jua Kali in Kenya](#).) "Unless there is access to credit, access to payment alone is not enough. They can't get credit from the formal banking system."

Moreover cash may be insecure for these men, but so is maintaining control over cell phones and biometric cards. Nonetheless, she described an increase in ATM card use among the very poor despite suspicions that government involvement might lead to unwelcome forms of oversight, because if the government "started this account" tied to debit card use, it could also use electronic banking records as a means for surveilling unreported income. After all, as Nandhi observed, "90 percent of the population is migrants, and everyone is able to make money one way or the other." Financial inclusion even with intense hand-holding can be difficult to attain. In her [second study in 2012](#), she described how the initial group of 75 was soon whittled down to 50 participants, and ultimately only 13 became banked despite energetic efforts.

In our visit to the pullers' camp with Nandhi we met a contractor who manages to control much of the men's economic lives. He provides "loans, the rickshaw, gambling, entertainment, the store, the attraction of urban living, an escape from harsh reality in village, their livelihood, their opportunities." He was polite in the presence of visitors and showed us the record books in which he recorded his daily transactions with his men. She described what she called the "loan trap" in which many of the men are confined and how they are economically constrained by perpetually owing to the contractor, who might bring them from the village by the dozens, although they pay their own travel expenses.



"One of important insights, which I have stated in my study, was expressed by a puller: 'Madam, when you come, we feel motivated to think of saving, and after you leave, we go about our daily routine and the thoughts of saving is far removed.'" Nandhi argued that two things should be prioritized: "a champion like a bank motivator to keep in touch with them, as is done in the microfinance model, where a motivator goes around the group members to reinforce the benefits of the group and savings and other benefits of being in self-help groups" and "a savings collection financial product akin to a piggy bank scheme." She argued that her own experiments with having pullers deposit small sums indicated the potential for larger scale success, and she cited the [Syndicate Bank Pigmy Deposit Scheme](#) as a possible model. She wanted to see this approach combined with doorstep collection at the location of a pullers' temporary or permanent abode, because even small distances to bank services could be large obstacles. "If top policymakers could agree to introduce this kind of program compulsorily in some public sector banks in an experimental manner, it would be a test for motivating the poor to deposit."

She countered the misconception that the poor "don't like technology" by explaining how they adopt technologies selectively and according to their own personal needs. In the camp we could see that some rickshaw pullers had even acquired more expensive "smart" phones, which could be a powerful mobile communication channel with access to global networks of information, data storage, and the ability to document their financial and personal lives. Nandhi had her own smartphone with her and discussed the benefits and drawbacks of the device with one of the men.



She also explained how less formal cybercafe spaces -- which kept later hours and maintained fewer class barriers -- could be an important part of financial inclusion, particularly for completing first steps in becoming banked, such as acquiring an AADHAAR card. She noted that "RBI [[Reserve Bank of India](#)] is supposed to have digital literacy" as well as financial literacy training. (For more on financial literacy training in India, see the [research of IMTFI researcher Deepti KC and Mudita Tiwari](#).) Unfortunately agents have more incentives to promote remittances than to promote saving.

As a rhetorician, I found the end of our interview particularly moving. In her commitment to the cause of the rickshaw pullers, Nandhi still had energy despite coming to the end of a twelve-hour day. She became especially animated as she described her frustrations about reaching policymakers with her message. The changes that she is arguing for implementing involve relatively modest costs, and some initiatives should cost almost nothing other than a modest outlay for training in techniques. Nandhi insists that the sensitivity and civility that she models in simple interactions with the pullers could lower barriers to financial inclusion dramatically. She has written a book, [The Urban Poor & Their Money](#) published by Pinnacle Learning, illustrated with photographs from her first study in 2009-10 that personalizes the rickshaw pullers by presenting them as individuals to make her case to policy makers. Yet she feels that they often turn a deaf ear to her pleas for empathy for the poor.

"A little more than a year ago, I was invited to participate by someone from the UNDP ([United Nations Development Programme](#)) for a discussion on pullers. It was a small group of 6-7 men who were associated with -- the [Rickshaw Bank Project](#), a rickshaw manufacturing unit, NGOs, etc. One gentleman had got a contract from I think the World Bank to produce a status paper

with policy recommendations on pullers in a month to be presented in international fora. I participated in the discussion but the sense I got created unease in me, because the purpose of meeting was to rapidly scan data to arrive at findings. When I did venture to suggest that the time is not adequate enough, I knew my suggestion was considered unworthy to take note of. Though I was asked to be a member of a working group, I knew I would not be informed and never was called for it. It rankled me not because I was not called, but because it was not going to be fruitful for the large majority of pullers. I do intend to persist, but one needs the networks to connect with, something I do not have. I shall have to do something, just to feel that my research findings could open up possibilities for the pullers."

[Photo Credit: Carolyn Ledlie]



**Tuesday, October 13, 2015**

**Financial Literacy through Comic Books in Dharavi & Bihar with Deepti KC**

*In March of 2015 IMTFI arranged for a comprehensive visit to India to gather updates on four of their sponsored research projects, introduction can be found [here](#). Developed with [research in the Dharavi slums of Delhi](#), this second of four case studies takes a look at financial literacy and rural women in Bihar with Vanya Mehta and Deepti KC.*



(Left to Right: Vanya Mehta and Deepti KC)

Deepti KC of [IFMR](#) has had a long-standing interest in the Dharavi slum in Mumbai where she has studied both site-specific cash economies (and [the feasibility of introducing mobile or electronic payments](#)) and the [impact factor of financial knowledge](#), including knowledge derived from specially designed financial literacy comic books for [male migrant workers](#) and for [female proprietors of small businesses](#). She has now teamed up with human rights activist and journalist [Vanya Mehta](#) to continue and refine an effective approach for disseminating financial knowledge tailored to specific populations. As Deepti has argued in a [blog post](#), mobile money in India still lacks the brand recognition that it has in Kenya and there is a greater need for "knowledge platforms" in the country. Deepti has also worked with her fellow [IMTFI fellow Mudita Tiwari](#) to develop simple and engaging materials for raising awareness about digital money management and general financial literacy. According to Deepti, Mudita asked, "Shall we create a comic book and test if we can encourage women to save more?" and then "the rest is the history!"

In sitting down for an interview for this blog post, Deepti emphasized how much she had learned from her IMTFI mentoring and how the anthropological perspective in considering multiple points of engagement has been invaluable to her. "IMTFI has been very useful; it really taught us about the ethnographic approach, so before going in and just data collecting, we can find more than we might in a regular structured questionnaire." People can "communicate more about their lifestyles" when a research methodology is used for "mixing qualitative and quantitative," as she first did when working with IMTFI colleague Mani Nandhi. (See more about Mani's research on rickshaw pullers in another [blog](#) posting in this series). "I would not have scheduled five visits for these financial literacy tools with a more conventional survey."

Deepti affirms that "making multiple trips to build trust" needs to be prioritized. The kind of information you get is totally different. Yes, the same budget can collect data from thousands of women, but let's not get greedy about the numbers." She has made an effective case for getting to know subjects in deeper and more nuanced ways and has also received funding for her [projects from The Ford Foundation](#).

According to Deepti, this mixed methods approach has been particularly important for not thinking about "access" to financial literacy tools too narrowly, particularly when barriers to financial inclusion are not constituted merely by straightforward inabilities to open accounts or push buttons on a cell phone. "At first I thought the problem was access. Now I understand that access is not the issue; the problems are cultural. It's about a lack of other kinds of information, a lack of handholding support. Funding from IMTFI allowed me to work at the interhousehold level and to notice that when we are pushing these financial products to women, we may be disturbing their position in the household and causing domestic disputes."



Deepti has focused on a fundamental question: "How should we empower women?" To do so, she argues that it is important not to ignore "how their husbands behave" and acknowledge unintended consequences of development work that could even be correlated to incidents of domestic conflict. Analyzing dynamics on the intrahousehold level can also be important for customizing requirements for financial literacy products more effectively. "I would also like to understand the role of daughters in motivating mothers to save, because the more we know about what is going on inside, the more we know about what is going on outside."

Deepti also shared a more existential reason in which IMTFI support has been transformative for her. "It has made me more compassionate. Anthropology teaches you about seeing them as people, not just data. When you are giving that respect and trying to understand why that person is trusting, you are gaining trust and opening up. When you achieve that comfort level, they will tell you where they are hiding money. But you have to be very human and respectful." But building this "personal connection" isn't always easy, because "as a researcher you are not supposed to have emotions."

Vanya explained how her research interests grew out of her interest in [Dalit politics](#). In the interview she characterized herself as a relative newcomer: "I just joined in January to help run these projects on the ground. I had worked as a journalist and had conducted my own project with 216 households, in Hyderabad, working on public policies with scheduled castes. There are 37 or 38 different scheduled castes in Andhra Pradesh. By looking at four different scheduled caste neighborhoods, I could see community level differences that went beyond any questions about access to government benefits. It's about what *kinds* of jobs are they getting." (For more about scheduled castes, which are official designations given to various groups of historically disadvantaged people in India, such as the Dalit people who have been subject to discrimination as "untouchables," see [this site](#) from the Ministry of Social Justice and Empowerment).

During elections, Vanya worked for the website [TwoCircles.net](#). "It was founded by a Muslim guy for giving more space to Muslim issues. I was the first non-Muslim staff, and I chose to look at lower caste experience in India with long-form pieces."



On a bright Monday morning in a small village in Bihar Deepti K.C. and Vayna Mehta were checking in with the financial literacy team of surveyors and trainers who were organizing storytelling activities designed to cover a wide range of formal and informal money management practices. Small ruminants wandered around nearby. (See the [work of other IMTFI researchers](#) for the importance of goats for financial well-being). Unlike printed matter that is merely disseminated to provide basic information through visual communication, the special comic books in plastic sheaths that the trainers used were designed to actively engage unbanked people.



Through the comic books, Deepti hopes that women with limited literacy can still get the message that "everyone should save" and be able to prepare for unexpected events through "saving small amounts on a daily basis." Trainer Rekha was a lively interlocutor with an expressive face and voice who tried to bring the story to life. She says that she has also changed her own financial behavior as a result of being part of the team and now herself uses a financial diary to budget herself.



We began at the home of a woman in "Group E," the group of subjects who were randomly assigned to receive all the services that the field team provided to rural women: financial diaries, lock boxes, and literacy training with the comic book. She had received a machine from the government to start a tailoring business with her husband. A sign on the door warned that activities were being videorecorded, as we waited in her sitting area while she completed her [puja](#), the prayer ritual of devout Hindus. Mehta explained, because of the design of the project, the most needy people weren't necessarily the ones targeted with the most interventions. At the end of each unit, the trainer tested comprehension of major story points and encouraged conversation about applicability and recorded responses on a laptop. Later a surveyor would come and ask the same questions to ensure that the data collected was not impacted by the biases of the trainer. Deepti noted how a one-time survey would have generated much less disclosure.

During the training, other members of the family periodically listened in, and the woman explained that her five-year-old son was now saving for a bicycle based on lessons learned from the comic book. There was money in her lockbox for this purpose, and her financial diaries indicated regular updating, although she had taken a four-day hiatus from her scrupulous record-keeping during the recent festival of [Holi](#).



The training section on informal savings was clearly a message she applied to her life. She was animated in responding about the usefulness of the stories related to storing cash securely and tracking daily financial expenses. These were areas in which she could clearly express her agency, while formal banking was obviously appeared to be a domain of her husband, who was in charge of both their bank account and the mobile phone. She also shared how as a daughter-in-law of the household, she had many limitations and commitments that curtailed her movements like being able to attend the local cooperative society meetings. But she added that she did not really miss them as the issues taken up in those meetings were less interesting to her since they had begun to only focus on the financial inclusion message while leaving out other ways that women could help other women.



The next woman we visited was also in Group E. She was resistant to the educators' message and was very vocal and lamented on the futility of offering financial literacy training to people who didn't have any money.



She was a barber's wife struggling with medical expenses and her financial diary had no entries. She told us that her pen had been stolen and then laughingly added that she was illiterate. She used her lockbox for a single gold piece of jewelry. (For more about the significance of gold, see the [blog posting about IMTFI researcher Nithya Joseph](#) who has a forthcoming post in this series.)



The third woman we visited was in a group that received only the financial diary. She had five children and had opened a small shop in her home. Although she was illiterate, her diary was filled with neat entries penned by her son. This included basic provisions (potatoes, lentils, etc.) and expenditures for her children's education (school fees, exam fees, etc.).



Deepti believes that it is very important to engage with questions about the informal sector, because it is often in these spaces that the disadvantaged actually are found to act and express their financial agency more comfortably. She recalled from her last project in Dharavi, a slum in Mumbai that is the largest slum in Asia, "we were trying to understand the business transactions among small entrepreneurs: 100 business owners and 25 women entrepreneurs." (For images of Dharavi, you can see this [National Geographic coverage](#)). "They had access to finance, ATMs and bank branches close by. They were using mobile phones, and their employers opened bank accounts for them." These kinds of "direct transactions" are often privileged in financial inclusion work. However, she explained that in these areas "people relied more on informal mechanisms. They always opted for cash transactions. There were behavioral biases."

Deepti thinks that one must not stop here and blame the subjects but instead focuses on embracing the human element. She learned by watching the gaps in effectiveness that emerged when "some sort of information about banking services and financial modules easily available online" without considering why people "could not relate" to the message. These financial literacy pitches "talk about someone coming and telling you what to do, but they don't talk about lifestyle or choices. They are very preachy with one character doing exactly what they are expected to do, rather than saying there might be another option."

Deepti emphasized the importance of using rigorous experimental methods, even if randomization and the use of control groups might sometimes lead to delayed or displaced reward systems for those most in need. "We could look at only budget and actually create such financial literacy modules and test them." The stories in the comic books were "all based on our research findings about how women save." We even gave pictures from visits to field sites to the designers. "People can relate to comic books. The goal was to ensure that women understand what we are saying by using a character very similar to them."

According to an unpublished draft report, it looks like this approach is working: among those who received only financial literacy training, their savings increased by 8%, while those who received a lock box along with financial literacy training increased their savings by 42-51%, and 77% of women who received financial literacy training reported that they shared their knowledge with others (friends, and family). As Deepti shared enthusiastically, "we noticed during our field

visits too, that there was a ripple effect of the literacy program."

Link to comic book, "[Financial Literacy for Women Entrepreneurs](#)" (148,815KB)

Link to comic book, "[Financial Literacy Education of Migrant Workers](#)" (39,931KB)

*\*please allow time to download larger files, we recommend viewing in Firefox, Chrome, or Safari.*

Link to project, "[Assessing the Impact of Financial Knowledge on Adoption of Mobile Payment Systems among Enterprise Owners in Dharavi, Mumbai](#)"

[Photo credit: Elizabeth Losh]



**Monday, October 19, 2015**

**Silk Workers and Gold in Karnataka with Nithya Joseph**

*In March of 2015 IMTFI arranged for a comprehensive visit to India to gather updates on four of their sponsored research projects, introduction can be found [here](#). This third of four case studies takes a look at silk workers in Karnataka with [Nithya Joseph](#).*



Devika Raman and Nithya Joseph with silk workers (middle, left to right).

Like many of the other IMTFI researchers working in India, [Nithya Joseph](#) began with research questions around microfinance initiatives. "I was actually looking at microfinance in the Bangalore area and translating for a Dutch anthropologist. We were thinking about group solidarity in microfinance and which groups were supposed to be success stories." She was sent to study Ramnagaram as an example of a branch that had been an overwhelming success. "A year later there was a crisis in the town; all the Muslim borrowers had stopped repaying."

Joseph described how she came to understand structures of "multiple borrowing" that "were both about competitive microfinance and the about the ways in which the silk industry was itself structured and how debt relations were arranged." As Joseph explained, "it seemed like the most vulnerable women were the ones working in the silk industry, the ones not able to benefit from microfinance." She ascribed the reason for their condition in part to overlapping social roles occupied by key players in which "religious leaders could also be the silk factory owners," so that their "unhappiness and frustration" might be directed toward "competing source of credit," particularly when proprietors already "had to give more credit for loans and advances," and so "while they were supporting the revolt against microfinance as a way of protecting women from exploitation, they also stood to gain if their labor lost an alternate source of credit and continued to be dependent on them." She started out her doctoral work, in the same town, studying debt-based labor contracts in silk-reeling before extending her study to capital accumulation across

the silk industry through her IMTFI research project.

"IMTFI brought a grounded anthropology aspect to the work. Coming to the conference encouraged very particular ways in which to think. It allowed me to bring a completely different discipline to the work. One direction in which I would like to work is the materiality of capital. There are all these relationships in studies of the political economy of India," For Joseph these relationships included "how social relations organize the economy." She noted that "gold offers ways of mapping the relationship between capital and people; because any surplus income tends to be stored as gold, mandated by social pressures to own gold, and gold is often mortgaged both for reproductive needs and for investment in firms." She would like to map gold ownership, other forms of capital, and indicators of well-being together across time and space, to really look and understand what these networks mean in terms of livelihoods, health, education, gender, and violence."

As she completes her doctoral dissertation on these topics, Joseph has been working closely with research mentors [Isabelle Guérin](#) and [Lorraine Kennedy](#), who is a CNRS research director at the Centre for South Asian Studies ([CEIAS](#)) at the EHESS, Paris. Guérin had helped her revise her master's thesis, on the micro finance repayment stand off, for a book she was then editing. (You can read about Guérin's work on indebtedness, juggling, and calculation frameworks [here](#).)



With Joseph as our guide, we began by tracing different aspects of the production cycles of the silk industry, starting with the giant [Ramnagar Market](#) in which Hindu farmers come to sell their bins of cocoons to Muslim reelers. The auctioneers ticked off numbers rapidly as transactions escalate and de-escalate, and only veterans of the market attuned to the complex choreography of gestures associated with established relationships that called for interpretation had the discerning set of skills required for the purpose.

As an IMTFI researcher, Joseph brings a unique background from her affiliation with the [Srishti Institute of Art, Design and Technology](#), where she facilitated research methods and creative writing courses. She explained how "design" was construed very broadly at Srishti and how she had conceived her master's thesis on debt relations." Srishti was an open space. There was a lot of freedom with course design and there were a lot of initiatives that engaged with local and national issues. I had no background in art and design, and it was exciting to work with students who could take ideas and translate them into visual terms."

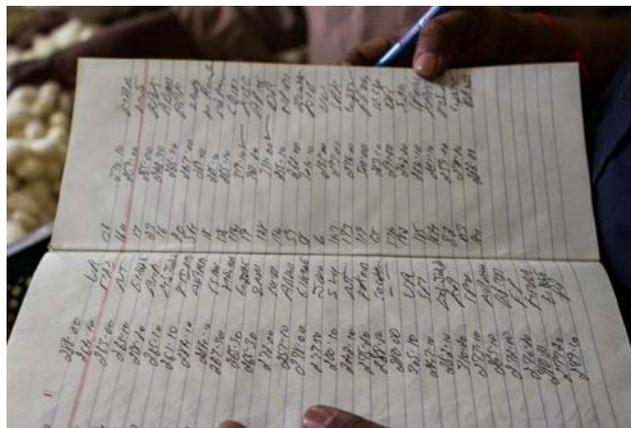


Because the cocoons represent a serious investment for many farmers, they often sleep under their lots. It is a largely male environment -- with only a few Hindu female participants and no Muslim women -- in which men socialize before the auctions begin. Muslim reelers have a designated waiting room, which was unused at the time of the visit. There were also fewer buyers on that day, according to Joseph, because of Friday prayers.

A system in which farmers receive text messages via cell phones about baseline prices apparently encourages many to travel considerable distances. As one farmer observed, "it gives us hope because we know what price we'll get when our cocoons are ready and also which town's market will give the best price." Although we saw both smart phones and feature phones in use, buyers and sellers generally focused on face-to-face interactions and attending subtleties of how a buyer examines his cocoons.



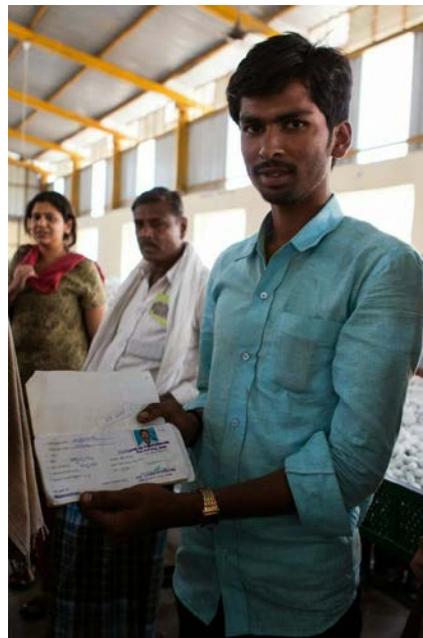
The set practices around transactions relied on paper records, which fluttered inside the large barn-like buildings as the human activity became particularly animated. Transaction slips were transcribed into ledger books. Much of the assessment seemed to be based on visual and tactile interaction with the cocoons and decades of experience. Digital scales assayed the weight of the cocoons only at the end of the process.



Far away from the action in a quiet room with a host of computers, the government managers of the silk market were busy in their digital control room. Unbeknownst to many in the market, plans were afoot for complete digitization of the transactions. Those without cell phones would be given tablets, so they could continue to participate in the system.



Digitizing the cocoon market raises a number of interesting research questions about the relationship between technological innovation and inequality, and Joseph looks forward to documenting how the "before" and "after" will play out for participants. She hypothesizes that those already comfortable with the use of smartphones might welcome these changes, while those who are less comfortable may find it difficult to shift to the e-auction.



Agents from the agricultural ministry have already done considerable outreach about technological enhancements to sericulture and deliver lectures on best practices to those interested in improving their crops. This has reduced labor requirements and significantly improved productivity in silk cocoon production.

Some families have been cultivating the crop for many decades and they are well-versed in the paper record-keeping practices that assure receiving government subsidies. They express confidence that technology allows rational decision-making, particularly about traveling to a market that may be as far as 400 kilometers away. In contrast there were other families who had been farming silkworms only for a few years. Although these families may be closer

geographically to the market than many other farmers -- only traveling about a dozen kilometers -- they may be unfamiliar with market procedures, particularly using the text message pricing system and getting registered to receive the information.



Certainly it will be interesting to see how technology changes the dynamics of the market and how it impacts financial inclusion. (For more on the theme of disintermediation, stay tuned this week when we revisit the [work of IMTFI researcher Janaki Srinivasan](#) on this blog.) When the cocoons are bought at the market, they seem to be "taken out of informal markets" in these "almost entirely open auctions in which everyone is present," but Joseph cautions that everything is "not as transparent as it appears," because there are "pre-negotiated prices, and people come to make arrangements and deals." Even if "it seems like those transactions are quite open and visible, the spaces where it is not are still interesting."



To begin to understand the importance of mechanisms for savings and credit, our next stop while revisiting Joseph's field sites was a street with thirty-five jewelers. We encountered several groups of women purchasing jewelry for weddings. As Joseph explained, "I started looking at

gold after going back and looking at inequality." She described an assignment at Srishti that asked participants to bring in different articles. Her interest in gold grew out of an assignment for her research methods class studying inequalities for which a student -- whose father is a jewelry shop owner in in Uttar Pradesh and who had watched people buying gold -- chose to study gold ownership. He was interested in questions like "Who is making decisions regarding purchases?" and "Who will own and have control over the jewelry?" What does this purchase mean for the family?" The student was a non-Kannada speaker and was also finding that "as a male, it was difficult to do interviews on gold ownership" so she met him before college every morning to translate for him. She described the interviews as "really interesting" because it became clear that "gold is tied to so many aspects of people's lives."

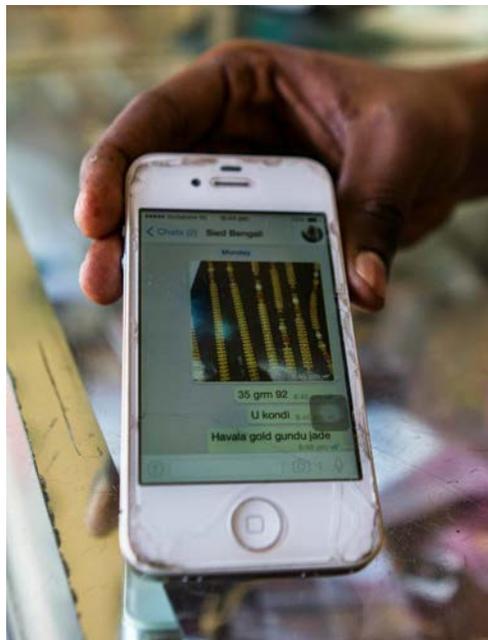
"Some of the household scenarios in the interviews were very dramatic. People were really struggling." Joseph heard stories about abuse, alcoholism, and misogyny, but in some cases gold gave these women hope by making available assets that they controlled that could be used to pay for their daughters' medical care and educations. However, Joseph notes, "it's double-edged: having gold helps in such situations, but the requirement to own gold and give dowries puts immense pressure on girls and their parents." Joseph pointed out that "objects of gold jewelry can be symbolic of the ways in which relationships are valued." She told how friends might buy earrings for each other as a way to express their close social bonds in which "I bought hers, and she bought mine."



As Joseph articulated in her [IMTFI presentation](#) in December 2013, gold serves as an important source of capital in the silk industry, one which is often more important than financial services offered by the banking sector. However, formal and informal financial mechanisms are merging as many more conventional service providers are offering "gold loans" that present an alternative to pawn brokers.



Gold jewelry is appraised on many factors, so the value of the metal as a commodity may be less important than the workmanship and appropriateness of the design. Muslim customers and Hindu customers may also favor different jewelry fashions. As more customers and craftsman are using smartphones, multiple-party consultations using platforms like [WhatsApp](#) can refine consumer selections as well.



Jewelers actually offer a number of different financial services, in addition to sales, purchases, and loans around gold. This woman pays money into a special savings account that not only gives her interest but also offers a regular draw in which participants can gain additional winnings. (See our [interview](#) with Dan Radcliffe for other ideas for incentivizing rational financial behavior with irrational expectations).



Even the poorest women were mindful of the importance of gold loans. In a sorting area for some of the lowest wage worker who clean silk waste, women described how gold loans were critical for paying home-building and other expenses, such as dowries for daughters. Even from these very poor participants we heard thanks to the government's financial literacy efforts -- some already had no-frills zero-balance bank accounts and chose to approach the banks for gold loans. Others chose to pay relatively high interest to local pawn brokers, which at a whopping 24% interest rate could contribute to spiraling debt, but they appreciated the flexibility and ease of negotiations of working with a more informal relationship.



Those who availed of gold loans from private financial institutions specializing in gold loans commented that they often offered lower interest rates but less flexibility. Gold loans could be important for building costs, medical expenses, and many kinds of liquidity requiring situations although they could make saving for serving the loan more frustrating for the borrowers. Although the fact that financial services companies may send text messages to alert borrowers in time to prevent interest accruing on compound interest, gathering money to forestall this could be stressful for the participants.



We also visited the home of a factory owner, who had been impacted by new mechanization imported from China. In Joseph's IMTFI presentation she detailed how liberalization of silk markets had largely been negative for this sector because it implied competing with cheap imports from China, although some people were better able to withstand the shock than others. Thus liberalization could lead to an erosion in traditional status for those struggling to adapt with less liquid capital resources. Many had recounted to her "with Chinese silk we lost our gold immediately." The family of reelers offered their generous hospitality to us and fondly recounted the recent marriage of a daughter who had a considerable gold trousseau as seen in her, as shown in her wedding video.



Several days earlier, before visiting the field site, Joseph had presented a paper at the 17th Workshop of the [Association Jeunes Etudes Indiennes](#), which focused on "[Gender: Politics, Labour, Law, Development](#)" at [Banaras Hindu University](#) in Varanasi, where the silk supply chain came another step closer to the consumer market in a city known for its long tradition of weaving luxury silk goods. In this way, we notice how the product moves from Hindu farmer to Muslim reeler to Hindu weaver. Joseph's paper, "[And our ears have been empty since then.](#)" showed how she is continuing to refine her work on gold ownership, gender, and work vulnerability in South Indian silk-reeling hub. While in Varanasi she had a chance to visit handloom weaving units, which earlier bought raw silk from Karnataka but were now buying Chinese silk and synthetic yarn instead.



Workers in reeling factories might receive loans conditional to perceived moral character, in addition their quality of work and years of service. As Joseph explained, "access to credit is complicated; there's a spectrum in terms of how people are able to manage this credit, and how they might not have a productive way to use it. With new forms of financial transactions that they are not familiar with, transactions can spiral out of control. In informal systems, people are

able to negotiate and discuss."

Traditionally the silk-reeling business "is seen as being unskilled and low paying work" with "very little capital investment needed for the equipment, but with high variable costs - working capital requirements - because the cocoons are very expensive." Joseph had noticed that the factory owners were expert in many tacit knowledge practices gained by "being able to gauge the quality of the cocoons, being able to do the work quickly and efficiently."

With growing competition from machine-made imports, there might be pressure on both employers and employees to consider exiting the industry. However, employers' capital is locked into advances they've given employees and employees can't payback the wages advanced as they have no alternative skills." Even if one is operating on the margins, it is very difficult to stop, especially if one is not familiar with being outside the town.

Although we weren't able to visit the factory with the new Chinese machines Joseph did show us how at the bottom end of the economic spectrum were producers of raw silk. In these establishments owners and their families worked in the factories with few, or no, employees.



Religion and culture often played a role in financial dynamics and dilemmas. Joseph characterized her field site as "a Muslim area in which women working outside the town are not encouraged; there is difficulty to access alternate employment even if it is available." Silk-reeling now attracts very few new employees; the work is physically difficult, with long hours with your hands in water, so they become puckered and blistered. Typically those who work in silk-reeling are individuals who either have high-debt to the industry or enter because they need credit from employers. The difficulty of the work and the health hazards discourage entry." Unlike other IMTFI researchers working on Muslim financial transactions, such as [Amrit Pal](#), hawala was not a major concern, because "it was all very local in terms of payment channels." Muslim research assistants and informants remained emotionally close, despite not frequenting

the town on a regular basis. (For other projects related to Muslim financial transactions see Bridget Kustin's "[Mobilizing Religion as Value Storage: Islamic Microfinance in Bangladesh for Poverty Alleviation](#)" and Rosina Nasir's study on "[The Association of Social Capital with Microfinance and Local Savings Programs among the Muslim Poor in Hyderabad](#)".)

Although Joseph is busy trying to finish her PhD and balancing the suggestions of a political economist and a social economist as supervisors, she is interested in expanding her work on mapping these financial transactions because she is interested in "listening to how people and assets have moved across space." As she visualizes this map, Joseph feels that it's important to keep in mind the whole production chain and understand how the different social groups engaged in each process relate to their ability to accumulate capital.

"I'm also interested in the materiality of silk through the various stages of production... the worms are considered sacred by their rearers, and the final silk product is considered to be pure and used for auspicious events while the process of reeling which happens between these two stages and involves the dead worm is seen as being unclean and employs marginalized groups, and the stigma associated with the work and the low value added at this stage reinforce marginalization, whereas higher caste groups are engaged in the other processes, and they are able to negotiate a higher percentage of profits."

We passed a shop displaying festive decorations that were made of cocoons, which were often worn by local Muslim politicians, celebrants, or other prosperous citizens while Hindus do not make use these garlands.



[Photo credit: Devika Raman]



## Wednesday, October 21, 2015

### Revisiting the Fishers of Kerala with Janaki Srinivasan

*In March of 2015 IMTFI arranged for a comprehensive visit to India to gather updates on four of their sponsored research projects, introduction can be found [here](#). This final of four case studies takes a look at Kerala fishers with [Janaki Srinivasan](#).*



[Janaki Srinivasan](#) of the [International Institute of Information Technology Bangalore](#) is interested in interrogating two major trends in digital culture today: "info-determinism" and "disintermediation." She had always been "interested in intermediaries, the importance of how the intermediary was introduced, and why he is always a villain. For example, why is the human auctioneer in the fish market perceived as an obstacle?" In our conversation, she also cited the work of [Elisa Oreglia](#) on the value of intermediaries and "how to re-embed them in market information systems" and grapple with "a sensible way to make them useful." She explained how just as technological determinism assumes that social development depends upon progress dictated by a history of novel inventions, informational determinism assumes that adopting new data paradigms (such as policies around transparency, open access or large-scale data mining) will necessarily transform society.

The gradual removal of intermediaries in this schema is often understood as a part of this transformation. For example, even as the Indian online mega-store [Flipkart](#) puts many neighborhood merchants out of business, it is still lauded by enthusiasts for streamlining the labyrinthine supply chains of the country. In this regard, Srinivasan draws attention to the massive international [Global Impact Study](#) which has done the important work of documenting the role of so-called "[infomediaries](#)" around the world. In this study, the researchers found that many people did not prefer direct and unmediated access to information from personal

computers. Whether it was information of interest about agriculture, health, or other topics citizens often preferred greater social transactions that involved local experts, authorities, and mediators serving as go-betweens. (The Global Impact Study was a groundbreaking and wide-reaching study funded by the sponsorship of Canada's [International Development Research Centre](#), and a grant to IDRC from the Global Libraries initiative of the [Bill & Melinda Gates Foundation](#). The Dean of IIIT [Balaji Parthasarathy](#), who is also one of Srinivasan's colleagues was a co-Principal Investigator of the study).

Srinivasan argues that technology sometimes may introduce hierarchies rather than level them and technological innovation may not necessarily deliver the promised efficiency, access, participation, and social good. Working with [Jenna Burrell](#), Professor at Berkeley and [Richa Kumar](#), Professor at the Indian Institute of Technology-Delhi, Srinivasan presented her initial findings in 2012 on "[A Work Practice Approach to Understanding Actors in Agricultural Markets: Revisiting the Fishermen of Kerala, India.](#)" (blogged [here](#), Kumar has also done research on [eChoupals](#).)

In this project, this core group of three scholars were interested in testing the hypothesis that access to price information via cell phones would simplify transactions at fish markets and make the operation of the market fairer, more transparent, and less wasteful for all participants. (Conference paper at ACM Digital library can be found [here](#)).



In the intervening years since the beginning of the project in 2012, Srinivasan and her Bangalore colleagues have been busy with launching a new [M.S. program in Digital Society](#). [This YouTube video](#) explains how this novel degree program is intended to bring social scientists, technologists, and designers together to build research and analysis that would take into account caste and gender in tackling development, health, and sustainability issues. The faculty at IIIT plan to work with an interdisciplinary cohort that is "not only corporate nor only government."

Srinivasan's initial doctoral research impetus to examine digital delivery systems came from her interest in how the "right to information" was imagined. "In my dissertation, I compared two information-focused initiatives: one a political Right to Information campaign, another an

'apolitical' village information centre project." She "was looking at this whole idea of information as a development tool" and the competing interests of "different political actors." She noted that "info-centre projects categorically state that they don't want to be involved in politics," even though case studies indicate that in reality it is difficult for ICT (information and communication technologies) initiatives to remain completely politically neutral. (To learn more about ICT efforts go to the [National Informatics Centre](#).)

Srinivasan began her analysis of ideologies about information by examining the history of right to information campaign in India. She observed that unlike lobbying for the [Freedom of Information Act](#) in the United States, which was led largely by journalists, India's 2005 [Right to Information Act](#) was the result of fifteen years of grassroots struggles spurred by the efforts of minimum wage laborers who had not received their wages for their work on public works projects.

Srinivasan recounts how prior to the legislation, citizens' access to many such public works projects were ostensibly limited by official secrets acts. There were also times when officials could use distinctions between paper and electronic records to prevent public review. The 1996 rallies in Rajasthan were critical for spurring the legislation. These demonstrations called for the [locks on government files](#) to be opened, and villagers demanded access to "entire journals" that logged data. According to Srinivasan, organizations like the [M.S. Swaminathan Research Foundation](#) (MSSRF) established in 1988, were intended to play an important role in raising consciousness by launching the [Information Villages](#) initiative. These organizations were, however more interested in the provision of information rather than conceptualizing it as a right. Although a supporter of such transparency initiatives, Srinivasan remains skeptical of the idea that digital transparency alone would be sufficient to level economic inequities.

For this project, Srinivasan, Burrell, and Kumar decided to empirically analyze Robert Jensen's "[The Digital Divide: Information \(Technology\), Market Performance, and Welfare in the South Indian Fisheries Sector](#)," a famous study on Kerala fishermen which argued that universal access to information could have transformative effects on bottom-of-the-pyramid workers. Jensen's study had focused specifically on the effects of the introduction of mobile phone service throughout Kerala from 1997-2001 on fishing communities. In the book, Jensen makes the claim that "Using microlevel survey data, we show that the adoption of mobile phones by fishermen and wholesalers was associated with a dramatic reduction in price dispersion, the complete elimination of waste, and near-perfect adherence to the Law of One Price. Both consumer and producer welfare increased."

Srinivasan appreciated the fact that Jensen had done a good job of providing detail" in a study "done over time," and the research team decided to revisit and interrogate Jensen's paper written 15 years ago. Noting that social science research wasn't necessarily reproducible in the way that other kinds of scientific research might be, she emphasized that Vizhinjam was "not a place frozen in time" and "not a controlled experiment." Srinivasan was also interested questions that Jensen brought up in terms of "wastage." The team found themselves asking somewhat different questions based on their observations: "If you do eliminate waste, who are the people who get affected? The fish are never wasted in terms of being thrown back into sea." Although they

might not circulate in formal markets, the fish have an afterlife in "home-based drying, salting, or processing."



Being interested in "the thinking behind the project," the researchers found themselves with "similar questions" about phone use in fishing communities but different questions regarding the roles played by "class, caste, and gender" in the busy markets. They were also faced with the challenge of "how to operationalize" their questions in an in-depth study. The researchers revisiting Jensen did go to one of his three sites in northern Kerala, Chaliyam, but they thought it might be valuable to acknowledge the fact that Kerala has 500 kilometers of coastline and that there were significant differences "in fish, in vessels, in credit relations, and who they sold to" across the region.



Srinivasan was also curious about why there was "no mention of gender in Jensen." The team realized that "women did not participate in the North at all; in the South there were a lot of women." The economic importance of women in other ways was evident around Vizhinjam. There were a number of establishments that offered a credit market to those able to liquidate

holdings in precious metals, especially gold accessories that were marriage gifts. (For research on gold loans and importance of wealth stored in women's jewelry see IMTFI researcher Joseph's work [here](#)).



Srinivasan's team chose Vizhinjam to the south of the state of Kerala renowned for tourist beaches as well as fishing expertise. She added further that "Kerala has centuries of history with a long relation to migration, including movement to Gulf states. You acquire connections that make you cosmopolitan. I found it interesting because the older generation in the region had in reality traveled and had ties especially in the Middle East. This gap between perception and reality I found very telling."



Srinivasan described the initial challenge of making sense of the complex scene at "an auction where everyone was bidding for piles of fish" and it was difficult to track "fishermen's movements." She chuckled about the "chaos on that first day" and at coping with the "decibel

levels." She recalls how "monitoring digital platforms, the formation of identities, and caste groups proved to be much more challenging than generating abstract and elegant 'equations' divorced from the messiness of reality. There might be fifteen auctions at the same time, with people pushing and shoving."



Srinivasan described how the Vizhinjam field site differed from where she had worked in Pondicherry where the MSSRF information centers dispensed information about government schemes through kiosks, public address systems, or websites rather than text messages on mobile phones. There she had been struck by "how categorically they wanted to divorce their activities from politics," even though "everyday politics operating in the village" made the "universal idea of information being good" was complicated by the "facts that information was A) not just one thing and B) of course it is political."



The research team also reviewed existing literature about the economic behavior of farmers around price information even though fishermen who are landless by profession, face specific difficulties different from that of farmers especially with regards to access to credit. (For more on farmers, prices, and information, see our [story](#) about IMTFI researcher Nithya Joseph and her research on silk markets).



In mapping economic relations the team also realized that when working with "the category of producer and consumer" it was often assumed that the two parties "did not actually interact," despite the apparent disintermediation of their transactions by access to cell phone data. Hybrid characters like the investor/auctioneer proved to be "critical from a design perspective" in understanding "different actors, kinds of phones, where did the auctioneer come from, and at why price information would even matter."(As a case in point IMTFI researcher Mani Nandhi's [study](#) focussed on credit relations available to rickshaw pullers in Delhi which shows that gaining access to credit could involve coercive financial relationships as well).



In understanding how fish market transactions operated in the 60s through the 80s, "it might be easy to see these earlier relations as exploitative, because it was not a freely operating market; it was one that was structured in particular ways, and social campaigns and government interventions were not equally useful." But the introduction of cell phone technology didn't necessarily make the market more democratic, Srinivasan argues, because of distinctions between "large vendors vs. small vendors." In other words, according to Srinivasan, "the bigger you were as a player, the more important price information was. Huge volume was needed, when we represent something as regulating and operating by economic laws. What about its

history allows the market to operate and mobile phones to be useful? For me it was a useful extension to my dissertation," which looked at how information worked as a development tool for a political movement and an NGO-based initiative, as a way to represent "a free market conception of development and how the world works" and apply it to a case in which "a free market conception of development used information as a development tool."



Srinivasan noted that in 2013 "the fisherman are not really literate, although the state has high literacy; many had learned to make use of the phone's calling function, or they would remember the last two digits" to pick out the right number from a contact list. Some kept notebooks, because even if they were not literate they were numerate. Cell phones weren't only used instrumentally for economic purposes but "they used mobile phones for music out on the sea." Their social connections between the fishers were also much more than merely transactional. Srinivasan pointed out that even the youngest fisherman or auctioneers maintained traditional ties with the church tax collector, which were often enhanced by new technologies rather than weakened by them. A younger fisherman and the young church tax collector from a fisher family said that "Facebook was important as a way to connect with the world; it was different from their parents' generation, who were from a close set of people with no ties outside of village.



In their research the researchers have worked with local informants and translators in the field site to map a dense multiplicity of economic relations in which there were many types of producer, many types of consumer, many uses for cell phones, many different types of equipment for fishing. Among the many actors in the scene one would find auctioner/investor figures and export agents, wholesale agents, fish vendors, waste procurers, and even local religious leaders.



For my visit, the researchers had provided me with images that were intended to map the dense network of participants in the harbor who were engaged in the buying and selling of fish as well as many other kinds of transactions. From the research team's photographs I recognized the mosque and church that shared the Vizhinjam skyline with tall palm trees. Vizhinjam is not very far from the regional capital of Thiruvananthapuram, which has a busy international airport and a vibrant political culture that had shut down the streets during my visit. Anticipating political disturbance on the street I waited to visit the docks until Sunday, a day when most of the activity focused on the maintenance of boats. On the quiet Sunday when I visited Vizhinjam, the main auction was closed and churches were holding services, there was plenty of activity around the marine food supply that ranged from managing family economics to the transactions of small

roadside vendors selling meat who were doing brisk business. (Find IMTFI funded work on how small ruminants like goats function as a form of capital among those who live on less than a dollar a day [here](#)).



Srinivasan also pointed out that "whole idea of collaborating closely on ethnographic research" involved a lot of coordination among the three researchers who were in different work environments. For instance Burrell was yet to visit the field site at the time of the interview. Nonetheless the group was able to have what Srinivasan described as a deep and lasting conversation about methodology as they stayed in touch through frequent Skype calls. "There were things we wanted to discuss throughout the process and recent things that emerged from the nature of the collaboration." Each saw the field site from her side through "disparate pictures and field notes" but also supplemented the research with new expertise. "Richa had worked with farmers in India and had seen how information circulates in that context, which was tremendously useful." Of course, she admitted that there was sometimes "ethnographic confusion" and many challenges in trying to get "a complete picture in three months" even as each of them would "jump in with questions." Srinivasan said "as a methodological path, it very useful, even if the connectivity was not always ideal. We started with plan of Skyping two times a week, and Jenna would read our notes and come up with set of questions. Jenna did a fantastic job on figuring out the political economy of the region."



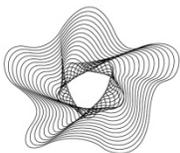
In conclusion, Srinivasan shared her interest to work on mobile payments and exploring questions regarding gender, particularly as she has personally encountered stories of women and the work of [Lilly Irani](#) about what counts as computing. As the MSc Digital Society program gets underway, she continues to pursue multiple collaborations, including "putting our students in touch with [CIS](#)," the Bangalore-based Centre for Internet and Society. Srinivasan has also begun thinking about the possible repercussions of the [AADHAAR](#) biometric identity card as another case study for exploring info-determinism, "it's interesting to think about biometrics as an ideology, about agents and enrollments, about the nationwide rollout of standardized numbers, who will come up to enroll, what documents of identity will be accepted, and how intermediaries will function." AADHAAR promotes what she calls "the idea of a stable identity" while overlooking "people's desire to negotiate their visibility to the state." She is also enthusiastic about working with other collaborators, as she develops her ideas about info-determinism, which might be "even bigger than technological determinism as a bias, because it ignores social structures, ignores the agencies of people who do something with the information."

Srinivasan, along with Elisa Oreglia, will be joining the next cohort at IMTFI Fellows to develop new research in, "[Intermediaries, Cash Economies, and Technological Change in Myanmar and India](#)." Initial findings will be presented at the IMTFI Annual Conference, coming to UC Irvine in April 2016~stay tuned!

[Photo Credits: Janaki Srinivasan and Elizabeth Losh]

*“IMTFI’s network is heterogeneous, flexible, and innovative. Ethnography, though grounded rigorously in a rich research tradition, is practiced in at least as many ways as there are ethnographers.”*

Established in 2008 with a grant from the Bill & Melinda Gates Foundation, the Institute for Money, Technology & Financial Inclusion (IMTFI) is housed in the School of Social Sciences at the University of California, Irvine. Its mission is to support research on money and technology among the world’s poorest people. We seek to create a community of practice and inquiry into the everyday uses and meanings of money, as well as the technological infrastructures being developed as carriers of mainstream and alternative currencies worldwide.



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