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IMPACT SOURCING IN INDIA: TRENDS AND IMPLICATIONS

ABSTRACT

This paper focuses on impact sourcing¹ which refers to a type of business process outsourcing activity whereby service providers elect to provide high quality, information-based services to clients by purposefully employing youth from low-income communities to carry out simple data handling tasks. Whilst this activity proliferated across countries in Africa, Asia and Latin America from 2010 providing jobs and skills to many individuals, its growth seems to have been constrained in recent years. In order to explain this phenomenon, we undertake a longitudinal study of impact sourcing based on the case of Karnataka which has been a prominent player in this sector since 2008. We commence by describing the operations of three impact sourcing enterprises in the state and locate this activity within the broader scope of state government policy focusing on two key aspects. First, we assess the adequacy of state support for rural entrepreneurs to sustain their operations for client companies, and second whether there has been sufficient policy focus on ameliorating the socio-economic context within which impact sourcing activity takes place. Finally, we reflect on important implications of our findings for further research on impact sourcing in the field of information systems and for policy prescriptions in order to create a conducive environment within which this socially-focused business activity can thrive.

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¹ Also sometimes known as 'socially-responsible outsourcing'

INTRODUCTION

Impact sourcing emerged around a decade ago as a new innovation in the ITES-BPO sector with service providers taking part in global supply chains hiring and providing employment plus career development opportunities to rural marginalised youth who would otherwise have limited prospects for formal employment (Lacity et al., 2011; The Everest Group, 2014). As a response to the BPO industry's need to shift to a more effective delivery model for low skilled work, impact sourcing service providers have been able to recruit an engaged and committed workforce at low cost (Kennedy et al., 2013; Sharma et al., 2013). A key proponent of this activity, the Rockefeller Foundation, has established a Global Impact Sourcing Coalition² enabling service providers to communicate their capabilities to client organisations and to scale up their commitment across markets.

Over the years, impact sourcing has proliferated across many developing regions employing more than 561,000 people and generating approximately \$20 billion worldwide (Everest Group, 2014; Carmel et al., 2014). Samasource³ is one of the first organisations to engage in impact sourcing operating delivery centres in Kenya, Uganda and India currently employing more than 600 workers. Among other leading impact sourcing service providers is Digital Divide Data founded in 2001 as a social enterprise with a mission to create better futures for youth from disadvantaged communities through employment and education. With its headquarters in New York, Digital Divide Data has established centres in Cambodia, Laos and Kenya employing over 1200 people to produce a range of low complexity business services for corporate clients including content conversion, data entry and research services⁴.

The few existing studies on impact sourcing by information systems researchers have focused on identifying the benefits derived by individual employees within marginalised communities in terms of income and skill generation, lifestyle, personal development and community relations (Heeks & Arun, 2010; Madon & Sharanappa, 2013; Malik et al., 2015). Of interest has also been to investigate how the framing of impact sourcing by service providers aligns or misaligns with competing framing of this activity by the local community (Sandeep & Ravishankar, 2015). A recent study focused on the cognitive and psychological adjustments made by impact sourcing employees in order to transition from their traditional lifestyle to an IT-oriented workplace and how this adjustment impacted these individuals and the local community (Sandeep & Ravishankar,

 $^{^{2}}$ https://www.bsr.org/en/collaboration/groups/global-impact-sourcing-coalition 3 Now called Sama Group

⁴ http://www.digitaldividedata.com/

2018). Missing so far from the information systems literature is an understanding of impact sourcing in context, namely how operational level issues related to this activity emerge over time and how they are influenced by the wider policy and institutional environment. As a contribution to bridging this gap, this paper draws on the experience of India, a leading player in the impact sourcing sector compared to other major participants such as the Philippines and countries in Africa⁵. India placed emphasis in its 12th Five Year Plan (2012-2017) on accelerating growth of the IT-ITES sector in order to generate rural employment (GOI, 2013). To promote impact sourcing among disadvantaged rural communities, the NASSCOM Foundation⁶ has frequently used the mantra 'technology for good' and 'changing India bit by bit'⁷. Impact sourcing grew rapidly in India from 2008 onwards with first movers such as Rural Shores and held great promise of limiting the rapid migration to urban centres for BPO work. However, more recently this rapid growth has been constrained as a result of inadequacies in the policy and institutional environment.

We have been studying impact sourcing in Karnataka which is a front-runner in the IT-ITES sector and the only state in India to have launched an explicit rural BPO⁸ policy in 2009. In the next section, we briefly describe our research methods after which we document the implementation of impact sourcing activity in three rural BPOs in Karnataka over several years. The following section identifies two major policy-related and institutional challenges which have affected impact sourcing activity from thriving within the state. Finally, in the discussion section, we draw on our analysis to suggest future research directions and policy prescriptions for the furtherance of impact sourcing.

⁵ Everest analysis – see http://www.everestgrp.com/2014-10-the-impact-sourcing-market-market-insights-15571.html/

⁶ NASSCOM Foundation is the social arm of NASSCOM, the trade association of the India's IT-BPM industry, and is dedicated to leveraging the untapped potential of the industry for underserved communities across the country

⁷ See NASSCOM Foundation website - http://www.nasscomfoundation.org/who-we-are/vision.html

⁸ Impact sourcing is referred to as rural BPO in Karnataka

METHODS

We adopt an embedded case study methodology as we are interested in understanding the implementation aspects of impact sourcing in Karnataka within its broader policy and institutional context.

a) Implementation aspects of impact sourcing in Karnataka

We studied three rural BPOs in Karnataka between May 2014 and February 2016 interviewing staff at each centre to understand the client base of each organisation, its recruitment strategy, training, operations and outreach within the local community where it is based. The three rural BPOs were selected as they are representative of different scales of operation related to impact sourcing activity in Karnataka. RuralShores operates 17 centres across 10 states of India of which three centres are located in Karnataka. In contrast, Simply Grameen is a smaller social enterprise which focuses more within-state with operations in three centres across Karnataka and one recently-opened centre in Tamil Nadu. Our third rural BPO is Samarthanam Kirana, an NGO with a specialised focus on recruiting youth who are disadvantaged both in terms of income and disability currently operating one rural BPO centre within Karnataka with a recently opened 25-seater centre in Delhi.

Interviews with senior management within the rural BPOs were conducted in English while individual and group discussions with employees were held in Kannada and then translated into English by one of the authors. As secondary data, we gained access to two employee surveys undertaken by RuralShores which provided an insight into the many ways impact sourcing has affected the lives of rural poor communities in the catchment area.

b) Policy aspects of impact sourcing in Karnataka:

We traced Karnataka's rural BPO policy from May 2014 through a variety of sources. Initially, we visited Government of Karnataka's Department of Information Technology, Biotechnology and Science & Technology and held semi-structured interviews with senior policy makers to gain an understanding of the basic tenets of the state's rural BPO policy. We subsequently studied various documents including the original 2008 rural BPO policy, an independent evaluation carried out by the Indian Institute of Management, Bangalore in 2011, a document drafted by the state government in 2014 which amended its original rural BPO policy and a 2015 NASSCOM report which made recommendations for sustaining rural BPO activity within the state. Over the duration of the research, we discussed the details of these reports with various state government personnel as detailed in Table 1.

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⁹ This means that the rural BPO unit has capacity to employ 25 employees

In terms of policy, we were also interested in identifying government investment over the years in the broader institutional environment within which impact sourcing has taken place. Towards this end, we collected disaggregated government expenditure data on key dimensions of rural development, namely agriculture, rural roads, health and education in the localities where our three rural BPOs were located. These dimensions have an important influence on the quality of life of rural BPO employees, their families and the wider community within which they are located. Karnataka is predominantly an agricultural state. 24% of the total GDP comes from agriculture and 65% of the workforce is dependent on agriculture. In the rural parts of the state, 70% of the population depend on agriculture for the livelihood (GOK, 2016). Expenditure data was collated over a six-year period to coincide approximately with the start of rural BPO operations in Karnataka. Obtaining this data involved a lengthy process of RTI¹⁰ applications and appeals which eventually enabled us to obtain public expenditure data from Chikkaballapura and Maddur taluks 11 where two of the rural BPOs we studied were located. As a supplementary source of data on the challenges faced within the agricultural sector we interviewed three local farming organisations selected randomly within the localities of our three rural BPOs. Finally, we used recent Government of Karnataka Human Development Indices (HDI) as a proxy to assess the current status of human development in Chikkaballapur and Maddur.

Table 1 – Data Collection Timeline and Details

RuralSho	RuralShores			
25/7/14	Interview with Co-Founder and Director of RuralShores			
31/7/14	Visit to RuralShores Muddenahalli Centre, interviews with Centre Manager & employees			
19/9/14	Telephone interview with RuralShores Marketing Manager			
3/2/16	Telephone interview with RuralShores Marketing Manager			
Simply G	rameen			
29/7/14	Visit to Simply Grameen Maddur Centre, interviews with Centre Manager & employees			
29/9/14	Telephone interview with Simply Grameen CEO			
28/11/14	Telephone interview with Simply Grameen CEO			
19/8/15	Telephone interview with Simply Grameen CEO			
25/12/15	Telephone interview with Simply Grameen CEO			
Samartha	Samarthanam Kirana			

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¹⁰ RTI stands for Right to Information and refers to legislation that enables government data to be in the public domain

¹ A taluk is a sub-district administrative unit

31/5/14	Visit to Samarthanam Kirana Bangalore headquarters, interviews with Senior Manager		
5/6/14	Visit to Samarthanam Kirana Bidadi Centre, interview with Senior Manager & employees		
12/2/16	Telephone interview with two former Samarthanam employees		
Data on K	arnataka's rural BPO Policy		
13/5/14	Meeting with Secretary at KBITS in charge of Rural BPO Cell		
28/7/14	Interviews with Secretary, IT & BT, Govt. of Karnataka and Director of KBITS		
15/10/14	Follow-up interview with KBITS Secretary		
15/6/17	Meeting with Senior Programmer and Nodal Officer, RBPO		
7/9/17	Interview with Advisor, Department of IT & BT, Govt. of Karnataka		
11/9/17	Interviews with Additional Director, Software Technology Parks of India (Bangalore), Ministry of Electronics and Information Technology, Govt of India.		
Data on I	nvestments in broader institutional environment		
25/2/16	Telephone call to Public Information Officer, Chikkaballapura		
24/3/16	Telephone follow-up with Public Information Officer, Chikkaballapura		
30/3/16	Data received from Muddenahalli Primary Health Centre, Chikkaballapura taluk		
3/6/16	Data received from Deputy Director, Dept. of Education, Chikkaballapura		
4/8/16	Data received from Public Information Officer on agriculture, rural roads expenditure		
10/11/16	Telephone interview with Head of Vyahini Development Society, Chikkaballapura		
15/11/16	Telephone interview with founding member of EEJ Training Institute, Maddur		
02/09/17	Collection of Human Development Indices for Chikkaballapura and Maddur taluks		

IMPACT SOURCING IN KARNATAKA

While India is a leading player in the impact sourcing market, there has been no national level government policy to guide the sector's trajectory. Out of twenty-nine states in the country, only Karnataka has formulated a state level policy to support this activity prompting us to focus our study in this state. In 2000, the state government established Karnataka Biotechnology & Information Technology Services (KBITS)¹² with the mandate of facilitating and promoting the information technology and biotechnology sectors in the state. One of its functions was to serve as the main implementing agency for Karnataka's rural BPO policy which was launched in 2008. This policy was inspired by the objective of redressing regional imbalances within the state as identified

¹² KBITS website with information on the state's rural BPO policy - www.bangaloreitbt.in/rural-bpo.html

in the Nanjundappa Report¹³ which was the output of a high-powered committee established under the chairmanship of Dr. Nanjundappa, a leading economist from Karnataka. The Report which was published in 2002 identified significant disparities in the level of development across Karnataka and recommended policies to redress these imbalances in different rural sectors including agriculture, industry and infrastructure (HPC FRRI, 2002). Following publication of the report, impact sourcing in Karnataka became identified as one strategy that could contribute towards reducing regional inequalities in the state by providing employment to school-educated rural youth in their local environment and by supporting rural entrepreneurship through incentives and subsidy to carry out impact sourcing service activity. Since 2008 Karnataka has seen the emergence of rural BPOs dedicated to employing disadvantaged youth for their operations many of whom are below the poverty line with minimal school leaving standard education. In this section we describe the operations of three enterprises: the first is a large enterprise with a global reach, the second a medium-sized enterprise with a domestic reach, the third a small NGO that focuses on employing economically and physically disadvantaged youth.

RuralShores

RuralShores commenced operations as a for-profit social enterprise in 2008 and currently operates 18 delivery centres in 8 states of India of which two centres are in Karnataka. Over the years, RuralShores has maintained high quality standards in terms of data-handling, security, confidentiality and responsiveness increasing client confidence, promoting greater transaction volumes and hence growth. Centers have been established in small towns or large villages with employees recruited from the locality within a radius of approximately 10 km. The work carried out at these centers is of low to medium complexity involving rule-based transaction processing, local language or dialect voice support (Mukherji & Pinto, 2012). At the time of our study RuralShores operated a centre in Muddenahalli located approximately 35 km. from Bangalore which began operations in 2011. Business at this centre derived from two main verticals - telecoms and industry, the latter arising from consultancy firms, manufacturing and e-commerce with the tenure of contracts ranging from 12-60 months. For the duration of our research, the Muddenahalli centre had been contracted to provide transaction processing support to US Mortgages and we were informed by staff that the rural BPO had invested in a dedicated line for power with UPS backup and reliable internet connectivity according to industry certification standards for outsourcing. A single shift operated at the centre from 8.30am to 5.30pm employing 63 youth (mainly female) with

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¹³ Dr. Nanjundappa was a renowned economist from Karnataka who was Deputy Chair of the Karnataka State Planning Board

basic school education. The Centre Manager informed us that at the time of initial recruitment there had been a steady stream of prospective employees applying for jobs as word soon spread by advertising in local schools and colleges. The Centre staff held meetings with village elders and parents of potential employees to dispel any apprehensions they had about safety in the workplace, particularly for women. The length and content of training for employees at the Muddenahalli centre was extensive compared to urban centres. In the words of the Centre Manager,

'Training at RuralShores lasts about four months as a longer period of hand-holding is necessarily to prepare rural employees for their duties'.

The training modules included a one-month basic introduction to IT followed by training on mortgage terminology, specific transaction processes and English language skills. It was emphasized to us that of equal importance were training modules on soft skills such as personal grooming, behaviour at work and punctuality to inculcate professional standards amongst employees. After successful completion of training, we were told that most new recruits were employed straight away at the centre as associates, many of whom would subsequently graduate to 'process champions' and eventually 'team leaders'. Salaries were described as incremental based on experience and performance while all employees were provided with medical insurance. Despite the close proximity of the centre to Bangalore, attrition rates at the rural BPO had been held constant at 8% per annum. When probing the Centre Manager as to why this was so, he observed that employees at RuralShores were increasingly aware of the benefits they could derive from local income generation and of being able to access formal banking services rather than going to money lenders at very high rates of interest,

'Employees valued the prospect of combining the opportunities they were obtaining from RuralShores with pre-existing household income sources from agriculture. In particular, employees found that they were less reliant on local money lenders as it became easier to obtain personal loans from banks as a result of their formal employment with RuralShores'.

Employees also engaged in outreach activities within Muddenahalli, for example in the running of health camps for villagers, planting trees, harvesting rainwater, managing waste and teaching school children. In 2016, the RuralShores Marketing Manager informed us of a 100% employee-funded community connect program called UTSAH¹⁴ which undertakes social initiatives such as

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¹⁴ www.ruralmarketing.in/industry/sopcial/ruralshores-launches-utsah-csr-initiative

afforestation drives in villages. Since the time of our research, RuralShores has relocated its operations from Muddenahalli village to a location closer to Chikkaballapur district headquarters.

Simply Grameen

Operational since 2011, Simply Grameen is a medium-sized enterprise which currently runs two centres in rural Karnataka employing a total of 250 people mainly for domestic clients with a third centre planned for international processes. We visited the Maddur centre located approximately 85 km. from Bangalore which employed around 160 agents offering a dedicated specialised team to perform non-voice processing for the Indian National Stock Exchange on behalf of mutual fund houses such as ICICI bank. The centre is responsible for verifying around 4000-6000 applications per day which involves ensuring all information and supporting documentation is in order and that different levels of quality checks have been carried out. To avoid costs of applying for certification from industry, the Centre Manager adhered to security and confidentiality protocols as guided by the client.

Approximately 26% of the new recruits were below the poverty line 15 with minimum 50% employment of females educated up to school leaving standard. They received one month's training which included theory and practical classes that explained specific concepts such as mutual fund and how to process applications as well as life skills on how to type, read English, groom for work and interact with the client. Most of the employees came from disadvantaged backgrounds and needed on-the-job training to build their confidence not only to handle transactions but also to work within an office environment. Despite the fact that many local employees have poor communication skills, consistent effort was being made to meet the quality standards prescribed by their client organisations. The team was divided into five groups each having a leader who was proficient in English and responsible for regular monitoring of quality and productivity. The CEO of Simply Grameen told us that he was able to provide high quality and reliable staff for its operations,

'It took approximately only one and half years from inception to bring the error rate down from 20% to a rate of 0.3% level'. People are good at what they do, rather than communication'.

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¹⁵ The global poverty line is the ability to live on \$1.90 per day

While internet connectivity was generally reliable, the centre had invested in a large generator in order to mitigate against the problem of power cuts which were reported to last up to seven hours and had called on government to provide subsidies to help with these recurrent costs. As the cofounder of Simply Grameen commented:

'We need active government support. We need better data and voice network connectivity in smaller towns ... and reliable power supply. We cannot run our centers on generators which pushes up our cost and is bad for the environment. Also, public transport capability needs to be enhanced so that the companies do not have to bear transportation cost and the banking system needs to support entrepreneurs with overdraft facilities without collateral. The government should offer concessions on interest rates" 16

Employees travelled to work from a radius of 20 km. and transportation was identified by a team leader employee as a major problem, particularly when faced with rapid output demands from the client,

'People want to work but there is no transportation after 7pm – no bus and no lights'.

Salaries ranged from Rs. 8000-10,000 (US\$ 120-150) per month. In addition to statutory compliance benefits, Simply Grameen provided Group Personal Accident Insurance coverage of Rs. 100,000 (approx. US\$ 1498) for all staff to support their family in case of unforeseen events. Approximately 15-20 of the employees worked part-time and there was also a split shift option to support female employees who wished to work in the morning, go home to cook and come back to work later in the day. All of the employees we spoke to were natives of Maddur or from surrounding villages from families in which the main occupation was farming or informal sector trading and had taken a conscious decision to remain in their home town as narrated to us by one agent,

'I was born in Maddur and spent 6 years in marketing in Bangalore. I moved to Maddur because of my family's health problems. I could work in Bangalore but the cost of living is very high, while in Maddur even a salary of Rs. 10,000 [US\$ 150] is more than enough'.

From a female perspective, the following comment was provided by a team leader who had previous experience of working in Bangalore,

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¹⁶ http://sustainabilitynext.in/entrepreneur-talk/rural-bpos-growth-slows-down-due-to-apathy/

'Since Simply Grameen had established its centre in Maddur, for the first time young women have the opportunity of local employment which is culturally acceptable by the household. I worked in Bangalore before joining Simply Grameen and it was a harsh existence working for an urban BPO both in terms of the high cost of living and because of the lack of a social support network for women'.

The rural BPO had a policy to support employees for any educational event such as preparing for an exam or for non-educational events such as marriage or for looking after ailing dependents rather than forcing staff to quit as would typically be the case in an urban BPO.

Samarthanam Kirana

Samarthanam Trust for the Disabled is an NGO that has been working since 1997 to provide education, vocational training and placement-based rehabilitation to visually impaired, disabled and economically underprivileged youth in India. More recently, the Trust has established BPO training centres across Karnataka to impart computer and soft skills training enabling this category of the population to be included in the mainstream IT job market. As indicated on the Trust's website¹⁷, BPO jobs are seen as ideal for disabled people since they do not involve much physical movement. Hence, so long as those recruited have an eye for detail or can speak well, particularly vernacular and multi-lingual, they would be supported by dedicated disabled-friendly work stations. We visited the 100-seat centre located in Bidadi, 35 km. from Bangalore which began operations in 2011 offering a variety of services such as customer support, technical support, telemarketing, IT helpdesk, insurance processing, data entry/data processing and data conversion for clients including banks and mobile phone companies.

The infrastructure at the Centre included a reliable power back-up facility, high-level data security and compliance systems and a purpose-built training unit. Samarthanam Kirana had a special cell dedicated for placements and a team that coordinated with schools to identify new recruits for its centres. On-the-job training took place at this rural BPO during induction and there were programmes designed to provide refresher training and to upgrade skills, particularly in niche areas such as financial services. A trainer told us that employees at Samarthanam Kirana often persist so

¹⁷ http://samarthanam.org/node/86

hard in trying to overcome their disability and perform well that the quality of some of the calls was sometimes far superior than in urban BPOs.

Employees at Samarthanam Kirana comprised a mix of local people and those who have migrated from other parts of the state. Most are provided with lodging either within the centre complex or a few kilometres away. These employees felt that the most important aspect of working at the rural BPO was the fact that they could live a life away from home because of the support systems that have been put in place by the NGO. In the words of a visually-impaired employee who joined Samarthanam Kirana in 2011 and is currently working in a government bank,

'I am very happy to say that it was because of the training at Samarthanam Kirana that I realised that I will be able to work and stand on my own. Samarthanam Kirana not just gave me job training and taught me how to handle customers, but it gave me the confidence that I can do anything and achieve anything'.

With a mission dedicated to providing youth who are both economically and physically disadvantaged with rural BPO opportunities, a Senior Manager at Kirana believed that it should be receiving extra support from the government,

'We want work-related support from government in order to ensure our operations are sustainable. Government should at least outsource some of its business needs to rural BPOs working for disadvantaged communities. Governments should also explore supporting expenses through subsidies for the centre such as power, telephone, internet'.

The three rural enterprises described above share certain common features in terms of their operations. Each of them (i) provides training to compensate for the low levels of education amongst low income rural youth, (ii) complies with insurance and pension contributions for employees, and (iii) strives towards integrating their business operation within local culture and norms, for example in terms of women's employment options. In this way, impact sourcing activity on the ground can be seen not only as a business activity but also as one that helps improve the lives of low-income communities in rural Karnataka. However, over the years, rural BPOs in Karnataka have been finding it increasingly difficult to sustain their operations as a result of the policy and broader institutional environment within which the sector operates to which we now turn.

POLICY AND INSTITUTIONAL SUPPORT FOR IMPACT SOURCING IN KARNATAKA

While Karnataka should be praised for having established a rural BPO policy as part of its broader mandate of promoting regional equality, our research shows that the potential for impact sourcing to thrive as a key activity in the ITES-BPO sector has been compromised due to inadequate policy and institutional support.

a) State policy support for impact sourcing in Karnataka

In the first phase of Karnataka's rural BPO policy launched in 2008, only those units that were able to provide employment for three years to a minimum of 100 persons from the locality of a small town or village in Karnataka were eligible to apply for financial support. A capital investment subsidy of up to Rs. 4,000,000 (approx. US\$ 60,000) per 100-seater BPO unit was made available by the state government to support entrepreneurs for renting of building, training of staff, computers and internet connectivity. While this initial policy received good response from companies and about 38 rural BPO units were sanctioned by KBITS, by 2014 only five were found to have sustained their operations. Smaller start-up rural BPOs experienced many challenges during this initial period but interactions between these enterprises and KBITS were irregular and seldom resulted in action on the part of the state government. For example, as referred to in the previous section, an issue raised by smaller players such as Simply Grameen and Samarthanam Kirana related to the poor state of infrastructure such as power, telephone and internet which resulted in these enterprises having to incur the cost of leasing dedicated services. A second challenge facing rural BPOs concerned the uncertainty they faced in securing a regular stream of business as identified in an evaluation study of rural BPOs in Karnataka commissioned by the state government and undertaken by the Indian Institute of Management, Bangalore (Tara, 2011). The study found that smaller rural entrepreneurs faced the practical difficulty of recruiting 100 employees of suitable calibre for BPO work given the general status of poverty and illiteracy in the catchment area. The evaluation study also found that smaller rural BPOs faced difficulties in obtaining contracts from client companies as they had to compete with larger enterprises. Subsequently, a NASSCOM Foundation report (2014) confirmed that there was huge potential for state and district-level government agencies to outsource data processing tasks to rural BPOs and also made recommendations for establishing skills and training workshops to improve the quantity and quality of rural BPO output. These observations resulted in the Government of Karnataka reducing the minimum number of employees that a rural BPO needed to commence operations from 100 to 30. However, other recommendations for government outsourcing of data processing to rural BPOs,

increasing rural skills and training, and providing subsidy for basic infrastructure such as power, electricity and internet although incorporated into a draft amendment document were never enacted.

By 2014, it was clear that the Government of Karnataka was at a crossroad with respect to its rural BPO scheme with the original mandate of targeting regional inequalities through local entrepreneurship becoming increasingly overshadowed by a central government narrative about stepping-up BPO activity within the country. By now, many of the smaller rural entrepreneurs were unable to survive without government support and policy focus shifted towards targeting larger and more established entrepreneurs who had a track record of turnover but were not necessarily from the locality. From 2014 KBITS actively encouraged larger and more established entrepreneurs to bid for setting up rural BPO units but many of these players were reluctant to establish centres in rural areas as a result of the lack of skilled human capital, poor infrastructure such as roads and transport facilities, and poor quality of basic services such as health and education. In 2017, the India BPO Promotion Scheme (IBPS) ¹⁸ was launched by the Central Government to accelerate BPO activity in tier 2 and tier 3 locations throughout the country. This central government scheme has a target allocation of 2300 seats for Karnataka with encouragement to set up large units which cater for up to 5000 seats.

b) State support for economic and social infrastructure in rural Karnataka

While Karnataka has benefitted from growth in the ITES/BPO sector, this growth has been far from inclusive with 25% of the state's population living below the poverty line, particularly those in rural areas who are involved in small-scale agriculture and informal sector work (GOK, 2015). It was envisaged that this section of the population could be targeted through Karnataka's rural BPO policy thereby contributing towards redressing the regional inequalities in the state as identified in the Nanjundappa Report. Of the 175 taluks in the state, the report had classified 35 as backward, 40 as more backward and 39 as most backward and suggested an 8-year timeframe to ensure these imbalances were rectified. In 2007-8 a budgetary allocation of Rs. 1,571 crore (US\$ 238,949,100) was made by the state government for key rural sectors. Yet in Karnataka there has been declining investment in agriculture and an under-supply of public goods such as rural roads, education and healthcare in rural areas (Mamanshetty, 2012). For example, large tracks of roads in the state (around 75,866 km.) are still mud tracks compromising on the ability of impact sourcing employees to travel to and from their local centre, particularly after dark (The Hindu, 2015). While Karnataka has made significant progress in the overall growth of literacy, disparities remain with urban male literacy crossing 90% while rural female literacy yet to cross 60% (Times of India, 2015). In terms

¹⁸ https://ibps.stpi.in/

of healthcare, despite the establishment of super speciality hospitals in Bangalore and other towns, in rural areas the infant mortality rate (IMR) of ~31 in 2013 is far higher than the target of 24 set for 2012 in the state's 11th Five Year plan (GOK, 2017).

We obtained disaggregated time-series data of government expenditure in the two taluks where RuralShores and Simply Grameen are located, namely Maddur and Chikkaballapur respectively. Appendix A shows that while expenditure has increased over the six-year period in both taluks, the more backward Chikkaballapura has seen only a very modest increase of approximately Rs. 5000 (US\$ 74) over the six-year period. There has been an overall increase in government spending in agriculture over the six-year period but expenditure has fluctuated in Chikkaballapura where a large section of the population are small and marginal farmers who struggle to maintain their livelihoods due to the shortage of rainfall and frequent encroachment of natural resources. The spike in agricultural expenditure in Chikkaballapura may be due to the promise made by Modi in the aftermath of the 2014 elections which was enacted by several state governments including Karnataka to waive farm loans for poor farmers. We obtained supplementary evidence regarding smallholder farming activity in rural Karnataka through interviews with three local farming organisations - two cooperatives and one NGO working in Chikkaballapura and Maddur. While all the three farming organisations agreed that over the last 5 to 10 years, the agriculture department has introduced numerous projects and programmes, a generic issue facing small and marginal farmers relates to the lack of local agricultural extension officers available to train small and marginal farmers, inform them about government schemes and address issues they may be facing as remarked during our interview with Head of Vyahini Development Society,

'The problem is a staff crunch in the government agricultural department due to an increase in table work of agricultural staff. This has resulted in less field work by agricultural extension officers [approximately] 40% of farmers don't even know about government schemes'

Appendix B shows that expenditure in education for Chikkaballapura taluk at senior, higher primary and lower primary schools over the six-year period has been declining and Appendix C shows a declining or stagnant health expenditure trend in Muddenahalli village primary health centre where Rural Shores was based.

The lack of policy focus on ameliorating the economic and social infrastructure of rural areas in Karnataka finds expression in the low levels of human development in our two study taluks compared to the India average.

Table 2 presents the recent HDI index of Chikkaballapura and Maddur taluks where impact sourcing activity is occurring.

Taluk	HDI
Chikkaballapura	0.4
Maddur	0.4
India	0.6

Source: GOK. (2015) Human Development: Performance of Grama Panchayaths in Karnataka, State Institute of Rural Development and Panchayathi Raj, Government of Karnataka, Mysuru.

DISCUSSION AND CONCLUSION

Impact sourcing is acknowledged as a topic of broad significance in the information systems discipline as an innovation in the ITES-BPO sector of developing countries. For the most part, these operations do not form part of a concerted policy with an exception being Karnataka in South India. Our purpose in this paper has been to critically evaluate the long-term survival of impact sourcing activity in this state drawing on several years of study. Karnataka's rural BPO policy was a home-grown solution towards redressing regional inequalities in the state through localised entrepreneurship. Although well-conceived, the policy has collapsed due to three main reasons. First, the majority of small-scale rural entrepreneurs who embarked on impact sourcing in Karnataka have been struggling to survive and many have ceased operations. One of the reasons for this has been the high costs they have incurred to ensure reliable internet connectivity and power so that services can be provided to clients in a timely and uninterrupted manner. It has equally been a challenge for smaller players to secure long-term contracts with clients in order to guarantee financial sustainability of operations. Rural entrepreneurs have also had to cope with poor infrastructure in the vicinity where they operate. As our findings reveal, the quality of rural roads, street lighting and transportation has affected the ability of employees to travel to and from their place of work which has ultimately affected service delivery. Finally, rural BPOs have had difficulty recruiting staff who have a sufficient level of education and potential for engaging in rural BPO work.

Second, impact sourcing policy in Karnataka has been riddled with confusion due to a series of twists and turns over the years. Despite the Karnataka government's initial support for small

entrepreneurs, the subsequent stalling of amendments to its rural BPO policy has resulted in a decline in government-supported impact sourcing activity in the state. In particular, there has been indecision on the part of the government with respect to three key demands made by rural BPOs. First, in terms of granting rural BPOs subsidized access to internet, electricity and power. Second, despite recommendations made by independent evaluation bodies demands made by rural BPOs for government agencies to outsource work to them and for increasing skills and training for BPO work in rural areas have not been met. Third, established impact sourcing service providers are also reluctant to set up or start operations in rural areas due to infrastructural issues such as access to good education, healthcare and transportation since a team of experienced staff need to be deployed in these rural centres who can lead the operations and train staff to a level commensurate with client requirements. Without such arrangements, it remains uncertain as to how long a particular rural community will have the security of employment from a rural BPO. For example, since the time of our fieldwork, RuralShores has already shifted its operation from Muddenahalli to a less rural location in Chikkaballapura taluk adversely affecting those who were employed by the rural BPO, their families and the wider local community.

Important policy implications follow from our analysis of the experience of impact sourcing in Karnataka over the past few years. Despite the benefits that have accrued to employees and social enterprises from impact sourcing, the reach of this activity remains minuscule. Of the total workforce of 27,872,597 recorded in Karnataka in 2014-15 (GOK, 2015), only approximately 4,000 are employed in impact sourcing activity. In our study sites, a mere 0.1% of the total workforce has obtained employment in the three rural BPOs. This state of affairs threatens to result in furthering inequalities within peripheral locations, a finding that concurs with previous research on impact sourcing in India conducted by Sandeep & Ravishankar (2015). One key policy implication that follows from our study is that impact sourcing activity can only thrive if there is long-term support given to local enterprises for scaling-up operations in rural areas. This involves earmarking funds for investment of skills and training in rural BPO work and ensuring that these fledgling sociallycommitted organisations can rely on a regular stream of data processing work from local government agencies. Moreover, impact sourcing goes beyond supporting entrepreneurial activity and involves ameliorating the rural context where this activity takes place. This involves policies to strengthen the institutions that deliver economic and social infrastructure in rural areas, for example increasing the capacity of cooperative societies to support smallholder farmers, authorities and local agencies that are responsible for constructing and maintaining rural roads, schools and health facilities (The Hindu, 2015).

The disintegration of Karnataka's rural BPO policy is symptomatic of a greater overall trend towards greater centralised government control. In 2017, a centrally-sponsored IBPS scheme was launched to establish BPOs throughout the country over which individual state governments have little direct control. The nodal agency assigned for implementing the scheme is Software Technology Parks of India (STPI), an organisation with an overall mission of boosting the export of software from India rather than addressing regional inequalities. One of the objectives of IBPS is to incentivize enterprises to increase seat capacity to 5000 making it unlikely that smaller players will become service providers. Moreover, enterprises bidding to establish centres need to demonstrate minimum average annual turnover of the last three financial years of Rs. 2 crores (US\$ 20m.). While Karnataka's rural BPO policy had attempted reverse migration of BPO work from urban to rural areas, the locations in Karnataka where enterprises have made bids to establish centres under the IBPS are mainly in cities and district headquarters rather than in small towns and villages¹⁹. Implementation of IBPS in Karnataka is occurring in parallel with the Government of India's current Pradhan Mantri Gramin Digital Sakshar Abhiyan drive, a central aim of which is to transform the country into a cashless economy by improving digital literacy amongst rural households (NASSCOM, 2018). This mandate has shifted attention away from priorities that have been identified within Karnataka that include training and employing rural youth from very poor socio-economic backgrounds and for investing in economic and social infrastructure such as transport, telecommunications, schools and health facilities (GOK, 2013).

In terms of research implications, while the role of context has long been acknowledged in the information systems field of study, the juxtaposing of implementation and policy over a period of time is rarely undertaken. Most impact sourcing studies have focused on showcasing the opportunities that this activity provides to individual employees and service providers rather than assessing long-term impact. Our contribution in this paper has been to improve understanding of outcome by tracing the lived experience of impact sourcing from the perspective of entrepreneurs and policy-makers in Karnataka over a period of years. The approach we have adopted can be useful not only for furthering our understanding of impact sourcing but also for the growing forms of online outsourcing such as microwork increasingly prevalent in many developing countries. This type of activity enables clients to use technology-mediated platforms to outsource their work remotely to a large, distributed global pool of labour with the platform performing tasks such as quality control, performance, coordination, delivery automatically through algorithms rather than an outsourcing service provider (Heeks, 2017). Impact sourcing service providers such as Samasource

¹⁹ https://ibps.stpi.in/unitlists

are using digital platforms to specifically target disadvantaged youth. However, as microwork has no fixed location, it is even easier to forget about context and place than with impact sourcing and to neglect the critical role of government in balancing the quest for growth with social development goals.

To conclude, over the years India has been regarded an exemplar for BPO and impact sourcing although it is important to remember that these two activities are driven by different rationales. The former has a macro objective of increasing software exports throughout the country to boost aggregate revenue and finds expression most recently in the centrally-sponsored IBPS. The latter has a more localised objective of improving the lives of marginalised communities and addressing regional imbalances through impact sourcing. We believe that important lessons can be learnt through the experience of Karnataka which can help in the future formulation of state-level policies in India that are designed to integrate impact sourcing activity with local developmental priorities.

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APPENDICES

A. Expenditure for rural roads and agriculture from Chikkaballapura and Maddur taluks over 6 years

Chikkaballapura

	AGRICULTURE	RURAL ROADS
	GOVERNMENT (in Rs.)	TALUK PANCHAYAT (in Rs.)
2010-11	119,393,177	112,745
2011-12	174,645,273	112,555
2012-13	146,868,506	115,644
2013-14	173,337,072	116,756
2014-15	550,844,653	116,887
2015-16	199,538,620	117,000

Maddur

	AGRICULTURE	RURAL ROADS
	GOVERNMENT	TALUK
	(in Rs.)	PANCHAYAT
		(in Rs.)
2010-11	20,641,678	109,829
2011-12	29,886,454	371,362
2012-13	43,169,686	368,648
2013-14	44,199,762	368,742
2014-15	66,079,324	368,000
2015-16	104,877,646	369,000

GOVERNMENT - expenditure at central and state government level for sponsored programmes. TALUK PANCHAYAT – spending at block/mandal level for government sponsored programmes, and for local infrastructure, water & electricity, rural roads, community development

B. Education Expenditure over 6 years (all figures are in Indian Rupees)

Grant Allocation to Government Higher Primary School, Muddenahalli, Chikkaballapura

Grant Allocation to Government Middle School, Muddenahalli, Chikkaballapura

Year	School Grant	Teachers' Grant	Drinking Water and	ACR	Kitchen Room	Grand Total
			Hitech Toilet			
2010-2011	50,000	1,000	2,23,000	36,00,000	0	38,74,000
2011-2012	50,000	1,000	0	0	0	51,000
2012-2013	50,000	1,000	0	0	0	51,000
2013-2014	50,000	0	0	0	0	50,000
2014-2015	50,000	0	0	0	2,21,200	2,71,200

Grant Allocation to Government Nursery School, Muddenahalli, Chikkaballapura

Year	Grant
2010-2011	12,000
2011-2012	12,000
2012-2013	12,000
2013-2014	12,000
2014-2015	12,000

Information on all the tables obtained through RTI from Department of Public Instruction, Government of Karnataka dated 3.5.2016.

C. Muddenahalli Primary Health Centre expenditure over 6 years

· v	Financial R	eport of Mudenahalli PHO				
	NHM Budget Expenditure up to end of 2011-2012					
		Mig to one of go one	Amount in Rupees			
SI no	Programmes	Total Fund Releases	Total Expenditure			
1	RCH	213,925	174,180			
2	NRHM	1,385,314	266,465			
3	an RI	23,085	21,385			
4	NVBDCP	1,500	- Line			
	State Budget					
5	Prasoothi Arike	475,000	389,300			
6	Thayi Bhagya	4,000	-			
	Grand Total	2,102,824	851,330			

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				್ರಾಫಮಿಕ ಆರೋಗ್ಯ	20° 00
	Financial R	Report of Mudenahalli PHO	C du	ದ್ದೇನಹ ್ಳ , ಚಿಕ್ಕಬಳಾ	50
	NHM Budget Expe	enditure up to end of 2	2012-2013		N -400
15.00 F			Amount in Rupees		
SI no	Programmes	Total Fund Releases	Total Expenditure		
	5011				

93,245 68,800 RCH 903,230 546,422 NRHM 3 RI 51,990 43,190 **NVBDCP** 1,500 4 State Budget
Prasoothi Arike
Thayi Bhagya 5 85,700 7,000 6 2,000 **Grand Total** 1,142,665 660,412

	Financial R	Report of Mudenahalli PHO)
	NHM Budget Expe	enditure up to end of 2	2013-2014 ಮುಬ್ಲೆ
			Amount in Rupees
SI no	Programmes	Total Fund Releases	Total Expenditure
1	RCH	202,885	103,450
2	NRHM	641,719	450,975
3	RI	87,590	58,690
4	NVBDCP	1,500	-
5	RNTCP	250	250
S	State Budget		
6	Prasoothi Arike	268,500	233,000
7	Thayi Bhagya	5,000	-
	Grand Total	1,207,444	846,365

ವೈದಾಧಿಕಾರಿಗಳು ಪ್ರಾಹೃತಿಬಳ ಆರೋಗ್ಯ ಕೇಂಜ್ರ ಯುಕ್ಷ ಕನಹತ್ತಿ, ಚಕ್ಕಬಳಿಕೆ ಯುಕ್ಷ ಕನಹತ್ತಿ, ಚಕ್ಕಬಳಿಕೆ

	Financial Report of Mudenahalli PHC NHM Budget Expenditure up to end of 2014-2015					
	Tim Daaget Expe	Traitare up to ena or z	Amount in Rupees			
SI no	Programmes	Total Fund Releases	Total Expenditure			
1	RCH	538,433	152,075			
2	NRHM	601,374	477,300			
3	RI	73,376	51,126			
4	NVBDCP	10,900	8,665			
5	RNTCP	1 000 834	I a sanA stroop			
	State Budget					
6	Prasoothi Arike	35,500	35,500			
7	Thayi Bhagya	5,000	-			
	Grand Total	1,264,583	724,666			

ವೈದಾಧಿಕಾರಗಳು ಪ್ರಾಥಮಿಕ ಆರೋಗ್ಯ ಕೇಂಡ್ರ ಯುವೈನಹಳ್ಳಿ. ಚಕ್ಕಬಳ್ಳಾ ಪುರ ತಾತಿ

	Financial R	eport of Mudenahalli PHO	
		enditure up to end of 2	
			Amount in Rupees
SI no	Programmes	Total Fund Releases	Total Expenditure
1	RCH	273,300	35,300
2	NRHM	247,254	139,714
3	RI	74,290	74,290
4	NVBDCP	10,235	-
5	RNTCP		
S	State Budget		
	Prasoothi Arike		
	Thayi Bhagya	5,000	1,000
	Grand Total	610,079	250.304

304 ವೈದಾಧಿಕಾರಿಗಳು ಪ್ರಾಥಮಿಕ ಆರೋಗ್ಯ ಕೇಂಡ್ರ ಮುದ್ದೇನಹಳ್ಳಿ, ಚಿಕ್ಕಬಳ್ಳಾವುರ ತಾತಿ