Improving customer services in telecom, electricity and public utility services: An empirical study of low-income micro-entrepreneurs in Bangladesh, India and Sri Lanka

Methodology note

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The survey was conducted among the low-income, urban micro-entrepreneurs (MEs) in three countries, Bangladesh, India and Sri Lanka. The study defined micro-entrepreneurs as those who employed less than ten hired workers, i.e 0-9. The hired workers are paid employees or full time equivalent, excluding the owner. This is an adaptation of international definition followed by World Bank and European Commission[1]. Low-income or the poor is identified as those who occupy C, D & E levels in the socio economic category (SEC) classification in Bangladesh and Sri Lanka. It was SEC D & E levels in India. Please see Annexure 1 for the SEC classification in three countries. In all the three countries, only cities or urban localities as defined by the respective national governments were selected for the study. The owners of the microenterprise who are older than 14 were included in the study.

There were small changes made in the study during the middle of fieldwork, as we were not able to find desired number of MEs in the certain worker categories. In Bangladesh, SEC B1 and B2 were included to cover the MEs in 1-3 and 4-9 worker categories. In India, SEC B2 was added to achieve the quotas for 1-3 and 4-9 workers categories in Patna city. Whereas in New Delhi, SEC C was added to cover MEs with 4-9 employees. In Sri Lanka we were not able to find the adequate number of MEs in the 1-3 and 4-9 workers category and extended the framework to include SEC B1 and B2.

In each country, two cities were selected. The capital city and another city which is weaker in terms of governance. The governance was inferred by the proxy indicators related to the human development of the province / state the city is located. The study assumed that low-income MEs would experience differential efficiency levels in customer services in these two locations due to overall difference in governance levels. The performance of strong and weak provinces / states in which cities are located are presented in Annexure 2. In Bangladesh, Dhaka, the national capital city and Gaibandha and Kurigram cities from the Rajshahi Division were selected. In India, New Delhi, the National Capital city and Patna, capital city of Bihar State were selected on the basis of data available on cities. In Sri Lanka, Colombo, the national capital city from Western province and four urban centers from Northwestern province, Kurunegala and Kuliyapitiya from Kurunegala district and Puttalam and Chilaw from the Puttalam district were selected. More than one urban centers or cities were selected in the weaker cities in Bangladesh and Sri Lanka due to insufficient number of MEs in one location.

The respondents for the study were selected through a probability sampling method. In Sri Lanka, the A-Z map book published by The Survey Department of Sri Lanka was used. The entire province is divided into square blocks. The blocks were selected using a random number table. In each block, respondents were found first at the northwest corner and then subsequent interviews were conducted in the same block by continuous walking. In a few instances, for the 6-9 workers category, we used snowball sampling to find the respondents, but within the same block. In India, the city is divided into wards by the Election Commission of India. The list of wards was taken and sixteen wards were selected through systematic sampling process. Within each ward, all the streets were listed alphabetically. Every third street was selected and respondents were found for the study. In Bangladesh, cities were divided into wards, then mahallas and then streets. Similar method as in India was followed. As some of the wards were inaccessible due to incessant *hartals* (public protests) and governmental restrictions, additional wards were selected using the similar process.

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[1] Please see for details:
http://europa.eu/legislation_summaries/enterprise/business_environment/n26026_en.htm

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The sample size decided for each country was as follows: Sri Lanka – 900, India – 1200 and Bangladesh - 900. In each country, the respective sample was divided equally between the two locations differed by levels of governance, strong and weak. The numbers were decided after considering the required number of cases for statistical analysis and amount of funds available for the study.

As the countries did not have specific data on MEs, in other words, there was lack of data on low-income MEs, closest data extant national statistics on microenterprises was used to determine the quotas of the MEs in the sample. Also, composition of MEs on parameters like location, gender, industrial domain and number of workers were not uniformly available across the countries, in each country different parameters, determined by the availability, were used in deciding the composition of the sample. The composition of MEs in the population and the sample is presented in Annexure 3.

A single questionnaire was used across the three countries. A colloquium of fifteen experts from all the countries were assembled in Colombo city and possible items for the questionnaire were deliberated. The experts were from electricity, telecom, governance and MEs domains. The questionnaire was constructed using the items gathered in the colloquium. The draft was reviewed by the experts over email and a skype conference. After modifications, questionnaire was pilot tested in the three countries with a total of 30 respondents. On the basis of feedback, questionnaire was modified and finalized. The final questionnaire was translated in four languages, Sinhala, Tamil, Hindi and Bangla. The translation was cross checked by the native speakers who are also fluent in English.

An international market research agency was commissioned to conduct the fieldwork. It organized a three-day training program for the interviewers separately in the three countries. The training program involved discussion of the study objectives, understanding of the questionnaire and the sampling process. Few mock interviews were also conducted to enhance the familiarity with the questionnaire.

The fieldwork was conducted during March – May 2013. After identifying the valid respondents, the response rate for Bangladesh, India and Sri Lanka were 80 %, 99% and 86% respectively. The final sample size is 3180 (Bangladesh - 986, India - 1279 and Sri Lanka – 915). The final report presents the currency values in US dollars. The exchange rates used are, 78 Taka (Bangladesh), 54 Indian Rupees (India) and 124 Lankan Rupees.

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Annexure 1

1.1 Socio Economic Category Classification in Sri Lanka

Profession	Educational Qualifications				
	Uneducated	Till 5th grade	5th –9th grade	O/L and A/L	Graduate/ Professional qualification
1. Animal husbandry/cultivation	E2	E2	E1	D	-
2. Administration/ 3. management post-senior	-	B1	B1	A2	A1
4. Administration/ 5. management post-junior	-	B1	B1	A2	A1
6. Labourer/transport/mason – trained	E2	E1	D	C	-
7. Labourer/transport mason – untrained (Natami, cleaners etc)	E2	E2	E1	D	-
8. Clerk/secretary	D	D	C	B2	B1
9. Trade (Pavment traders etc)	E2	E1	D	C	B2
10. Industrial trained	E2	E1	D	C	B2
11. Industrial untrained	E2	E2	E2	D	-
12. Professional (Doctor, Lawyer)	-	-	-	-	A1
13. Service (Teacher, Army)	E2	E1	D	C	B2
14. Self-employed (zero employees) Small contract	E1	D	C	B2	B1
15. Business (1-9 employees)	C	B2	B1	A2	A1
16. Business (over 9 employees.)	B2	B1	A2	A1	A1

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1.2 Socio Economic Category Classification in India

Occupation	Educational qualification						
	Illiterate	School upto 4 years/literate but no formal schooling	School 5-9 years	SSC/HSC	Some college but not graduate	Graduate/Post Graduate general	Graduate/Post Graduate Professional
1. Unskilled workers	E2	E2	E1	D	D	D	D
2. Skilled workers	E2	E1	D	C	C	B2	B2
3. Petty traders	E2	D	D	C	C	B2	B2
4. Shop owners	D	D	C	B2	B1	A2	A2
5. Entrepreneurs – employees none (0)	D	C	B2	B1	A2	A2	A1
6. Entrepreneurs – employees <10 (1-9)	C*	B2	B2	B1	A2	A1	A1
7. Entrepreneurs – employees >10	B1	B1	A2	A2	A1	A1	A1
8. Self-employed professionals	D	D	D	B2	B1	A2	A1
9. Clerical/Salesman	D	D	D	C	B2	B1	B1
10. Supervisory level	D	D	C	C	B2	B1	A2
11. Officers/Executives: Junior	C	C	C	B2	B1	A2	A2
12. Officer/Executives: Middle/Senior	B1	B1	B1	B1	A2	A1	A1

1.3 Socio Economic Category Classification in Bangladesh

Occupation	Education							
	Illiterate	Literate with no formal education	Class 4s	Class 5 to 9	S.S.C/ H.S.C	Have some college education but not graduate	General Graduate or above	Professional Graduate or above
2. Unskilled worker	E2	E2	E2	E1	D	D	D	D
3. Skilled worker	E2	E1	E1	D	C	C	B2	B2
4. Petty trader	E2	D	D	D	C	C	B2	B2
5. Shop owner	D	D	D	C	B2	B1	A2	A2
6. Business person/Industrialist without any employee	D	C	C	B2	B1	A2	A2	A1
7. Businessperson/Industrialist with 1 to 9 employees[i]	C	B2	B2	B2	B1	A2	A1	A1
8. Businessperson/Industrialist with more than 10 employees	B1	B1	B1	A2	A2	A1	A1	A1
9. Self-employed professional (e.g. Doctor, Engineer, Lawyer etc)	-	-	-	D	B2	B1	A2	A1
10. Clerk/Salesperson	D	D	D	D	C	B2	B1	B1
11. Supervisory Level	D	D	D	C	C	B2	B1	A2
12. Officer/Executive-Junior	C	C	C	C	B2	B1	A2	A2
13. Officer/Executive-Middle/Senior	B1	B1	B1	B1	B1	A2	A1	A1

Annexure 2

2.1 Comparison of Good and Weak Governance Divisions in Bangladesh

SNO	Parameter	Good Governance		Weak Governance		
		Dhaka Division	Dhaka District	Rangpur Division	Gaibandha district	Kurigam district
1	Incidence of poverty (headcount rate) by cost of Basic needs method – using upper poverty line (%)	30.5	16.32	46.2	52.27	50.15
2	Incidence of poverty (headcount rate) by cost of Basic needs method – using lower poverty line (%)[1]	15.6	na	30.1	na	na
3	Literacy Rate for persons aged 7 years and above[2]	57.73	47.1	54.68	47.54	33.45
4	% of electrified households - National level[3]	67.34	na	30.07	na	na
5	% of electrified households - in Urban level[4]	96.15	na	68.68	na	na

Notes:

1. BBS. (2010). Report of the Household Income & Expenditure Survey 2010, Bangladesh Bureau of Statistics, Statistics Division, Ministry of Planning, p.62
2. BBS. (2010). Report of the Household Income & Expenditure Survey 2010, Bangladesh Bureau of Statistics, Statistics Division, Ministry of Planning, p.78
3. BBS. (2010). Report of the Household Income & Expenditure Survey 2010, Bangladesh Bureau of Statistics, Statistics Division, Ministry of Planning, p.25
4. BBS. (2010). Report of the Household Income & Expenditure Survey 2010, Bangladesh Bureau of Statistics, Statistics Division, Ministry of Planning, p.25

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2.2 Comparison of Good and Weak Governance Cities in India

SNO	Parameter	Good Governance		Weak Governance	
		Delhi - Union Territory	New Delhi	Bihar - State	Patna City
1	HDI Ranking 2006[1]	1	na	35	na
2	HDI Score 2006[1]	0.740	na	0.507	na
3	Competitiveness Ranking[2]	na	1	na	35
4	Factor Conditions[2]	na	1	na	37

Notes:

1. HDI Ranking and scores are average of thee dimensions: A Long and Healthy Life (Infant Mortality Rate and Life Expectancy at age), Knowledge (7 + aged Literacy Rate and Mean Years of Education for 15+ age group), and A Decent Standard of Living (Estimated Earned Income per capita per annum). Source: GoI. (2006). HDI and GDI Estimates for India and the States/UTs: Results and Analysis. Ministry of Women and Child Development. Govt. of India. Available at http://wcd.nic.in/publication/GDIGEReport/Part2.pdf, accessed 3 April 2013, p. 30-31.
2. Competitiveness is measured by a composite index of factor conditions, context for firm strategy and rivalry, related and supporting industries, and demand conditions. The factor conditions are indicated by human resources, capital availability, physical infrastructure, administrative infrastructure, information infrastructure and Scientific and technological infrastructure. Source: IFC. (2012). India City Competitiveness Report 2012. Institute for Competitiveness, Gurgaon. Available at http://www.slideshare.net/amitkapoor/india-city-competitiveness-report-2012, accessed 3 April 2013, p. 19-20.

2.3 Comparison of Good and Weak Governance Provinces in Sri Lanka

SNO	Parameter	Good Governance		Weak Governance		
		Western Province	Colombo District	North Western Province	Kurunegala District	Puttalam District
1	Province GDP Contribution to National Economy (%)[1]	48.4%	na	9.6%	na	na
2	Poor household %[2]	3.0	2.5	8.2	8.6	7.5
3	Poverty Head Count Index (%)[3]	4.2	3.6	11.3	11.7	10.5
4	Poverty Gap Index (%)[4]	0.8	0.7	2.4	2.6	2.0

Notes:

1. Central Bank of Sri Lanka, Statistics Department, Press Release, Communications Department, 2008 – 07 -10
2. Economic and Social Statistics of Sri Lanka 2012, Central Bank of Sri Lanka, Colombo.
3. Poverty Headcount Index is the percentage of population below the poverty line and is widely used to measure poverty in Sri Lanka.
   Source: Economic and Social Statistics of Sri Lanka 2012, Central Bank of Sri Lanka, Colombo.
4. Poverty gap index is measured by $\frac{1}{n}\sum_{i=1}^{n} \frac{Z-X_i}{Z}$ whereas N= Total number of persons, Z= -Poverty Line, X_i= Expenditure of the poor persons, and (Z-W_k)=0 : for non poor persons.
   Source: Economic and Social Statistics of Sri Lanka 2012, Central Bank of Sri Lanka, Colombo.

Annexure 3

3.1 Bangladesh - Composition of MEs in population and low-income MEs in the sample: Selected Indicators

		Good Governance		Weak Governance			
		In Population - Dhaka Urban (%)	In Sample (%)	In Population			In Sample
SNO	Parameter			Gaibandha	Kurigram	Gaibandha & Kurigram (%)	Gaibandha & Kurigram (%)
1	**Number of Small Establishments (less than 10 employees) [1]**						
	Manufacturer	8	7	5	6	5	6
	Trade	69	70	70	66	68	67
	Service	23	23	25	28	26	28
	Total	100 (N = 318,991)	100 (N=460)	100 (N=13,163)	100 (N=10,229)	100 (N=23392)	100 (N=455)
2	**Number of Small Establishments (less than 10 employees [2]**						
	0 Employees	33	33	45	34	40	39
	1-3 employees	58	59	49	59	53	55
	4-9 employees	9	8	6	7	7	6
	Total	100 (N=318,991)	100 (N=460)	100 (N=13,163)	100 (N=10,229)	100 (N=23392)	100 (N=455)

Notes:
1. Economic Census 2001 & 2003, National Report, Bangladesh Bureau of Statistics, pp 745-6, 749,759
2. Economic Census 2001 & 2003, National Report, Bangladesh Bureau of Statistics, pp 745-6, 749,759

3.2 India - Composition of MEs in population and low-income MEs in the sample: Selected Indicators

SNO	Parameter	In Population	In Sample
1	**Sector wise establishment distribution** [1]		
	Manufacturing	38	38
	Service	31	30
	Trade	31	32
	Total	100 (N= 19746000)	100 (N=1279)
2	**Hired workers Category** [2]		
	Without hired workers	78	77
	With hired workers	22	23
	Total	100 (N= 19746000)	100 (N=1279)
3	**Gender Category** [3]		
	Sole proprietor is male	86	88
	Sole proprietor is female	11	12
	Total	100 (N= 19746000)	100 (N=1279)

Note:
1. National Sample Survey Organisation, Non-agricultural Enterprises in the Informal Sector in India 1999 – 2000. Based on Statement 2, p.16
2. National Sample Survey Organisation, Non-agricultural Enterprises in the Informal Sector in India 1999 – 2000. Based on Statement 2, p.16
3. National Sample Survey Organisation, Non-agricultural Enterprises in the Informal Sector in India 1999 – 2000. Key Results, Page ii, Statement 10, p.24

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3.3 Sri Lanka - Composition of MEs in population and low-income MEs in the sample: Selected Indicators

SNO	Parameter	Good Governance				Weak Governance			
		In population			In Sample	In population			In Sample
		Western Province-Urban	Colombo District - Urban	Colombo city		Kurunegla Urban	Puttlam Urban	North Western Province Urban	
1	Number of Small Industrial Establishments (less than 10 employees) [1]	10	13	5	15	8	11	9	11
2	Trade and services – All business [2]	87	87	95	85	92	89	91	89
	Total	100 (71,103)	100 (52,218)	100 (27,819)	100 (501)	100 (3,528)	100 (2,708)	100 (6,236)	100 (485)

1.   Census of Industry, 2003/2004, Department of Census and Statistics, Page 90, 101, 206
2.   Census of Trade and Services, 2003/2006, Department of Census and Statistics, Page 29

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