

# Changing Contours of Microfinance in India

Edited by  
Jayadev M. and  
Diatha Krishna Sundar



A Routledge India Original

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This book brings together empirical evidences and theoretical perspectives to provide a comprehensive overview of the microfinance sector in India. The chapters in the volume:

- focus on the application of information and communication technology (ICT) solutions in microfinance institutions to strengthen the savings movement and widen credit access to the poor and marginalised sections of society;
- present case studies on self-help group (SHG) movements, federations and SHG–Bank Linkage programmes;
- propose measures for strengthening regulatory and governance structures of the microfinance sector; and
- identify linkages between overall financial inclusion and the contribution of microfinance institutions (MFIs).

The volume will be indispensable for scholars and researchers of microeconomics, South Asian economics and development economics as well as professionals and aspirants in the microfinance, rural banking and financial inclusion sectors.

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# Preface

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This book is an outgrowth of the seventh International Conference on E-Governance (ICEG-2010) held at the Indian Institute of Management Bangalore (IIMB), in Bangalore, India, from 22 to 24 April 2010. This conference was organised on behalf of International Congress of E-Government (ICEG), a professional society that was established in 2003 with the aim to address the growing need for furthering knowledge in e-governance. ICEG organises conferences and seminars, and plans to publish periodicals and start a research centre of excellence. The International Conference on E-Governance is a signature event that brings together thought leaders, policy makers and practitioners of e-governance. ICEG-2010, the seventh conference in this series, was organised at IIMB with three themes: public health and ICT, microfinance and ICT, and e-government and m-government. This book is primarily an outcome of selected papers on the theme of microfinance that were presented in the conference. The second half of 2010 witnessed several changes in the microfinance sector due to the crisis in Andhra Pradesh and other regulatory changes. To include contemporary issues, a few papers were invited for this volume. This book is an edited volume comprising of thirteen selected papers in the revised form, that cover four main aspects of the microfinance sector – regulation, self-help groups (SHGs), technology and other microfinance services. These selected papers highlight the emerging trends in microfinance, such as the increasing role of technological interventions using mobile and information and communications technology (ICT), societal empowerment through SHG and bank linkage policies, improvements in microfinance services provided to the poor and the role played by SHGs in post-disaster reconstruction.

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# Abbreviations

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AI	artificial insemination
ALW	A Little World
AML	anti-money laundering
AP	Andhra Pradesh
APR	annualised percentage rate
APSWAN	AP State Wide Area Network
ASS	Annapurna Sewa Sansthan
ATM	automatic teller machine
B2B	business-to-business
B2C	business-to-citizen
BPL	below poverty line
C2C	citizen-to-citizen
CAM	computer-aided manufacturing
CASA	current and savings account
CB	commercial bank
CGAP	Consultative Group to Assist the Poor
CIC	credit information company
CMIS	Chief Minister's Information System
CRI	critical rating index
CRM	customer relationship management
DA	development alternatives
DCCB	district central cooperative bank
DRDA	District Rural Development Agency
DWCRA	Development of Women and Children in Rural Areas
ERP	Enterprise Resource Planning
FICCI	Federation of Indian Chambers of Commerce and Industry
FINO	Financial Inclusion Network and Operations
FSI	financial services industry

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G2B	government-to-business
G2C	government-to-citizen
GL	general ledger
GMSS	Gramin Mahila Swayamsiddha Sangh
GoP	Government of Pondicherry
GRC	governance risk and compliance
GSM	Global System for Mobile Communications
GSMA	Global System for Mobile Communications Association
HR	human resource
HRDO	Human Resource Development Organisation
ICEG	International Conference on E-Governance
ICT	information and communication technology
ID	identification
IGA	income-generating activity
IRDA	Insurance Regulatory and Development Authority
IVR	interactive voice response
JLG	joint liability group
JMVP	Janani Mahila Vikash Parisada
KB	Khushhali Bank
Ksh	Kenyan shilling
KYC	know your customer
LPA	loan portfolio audit
MFB	microfinance bank
MFI	microfinance institution
MFIN	Microfinance Institutions Network
MFP	microfinance provider
MIS	management information system
MITRA	mobile information technology for rural advancement
MMBF	Maneswar Matrushakti Block Level Federation
MMU	Mobile Bank for the Unbanked
M-PESA	M is for mobile; 'Pesa' is Swahili for cash
MSM	Mahil Sangharsh Manch
MUDRA	Micro Units Development and Refinance Agency
MYRADA	Mysore Resettlement and Development Agency
MZMS	Mahbubnagar Zila Mahila Samakya
NABARD	National Bank for Agriculture and Rural Development
NBFC	non-banking financial corporations
NBP	National Bank of Pakistan
NER	north-eastern region
NFC	near field communication

NREGA	National Rural Employment Guarantee Act
NREP	National Rural Employment Programme
NRLM	National Rural Livelihood Mission
OBC	other backward castes
OLTP	online transaction processing
PACS	primary agricultural credit societies
PCC	per capita credit
PCI	per capita income
PKR	Pakistan rupee
POS	Point of Sales
PRADAN	Professional Assistance for Development Action
PSL	priority sector lending
RBI	Reserve Bank of India
RDO	Rural Development Organisation
RLEGP	Rural Landless Employment Guarantee Programme
RoE	return on equity
ROI	return on Investment
RRB	regional rural bank
RSP	rural support programmes
SAPO	South African Post Office
SBI	State Bank of India
SBLP	SHG–Bank Linkage Programme
SBMS	Shakti Block Mahila Sangathan
SBP	State Bank of Pakistan
SGSY	Swarnajayanti Gram Swarozgar Yojana
SHPI	self-help promoting institution
SKDRDP	Shri Kshetra Dharmasthala Rural Development Project
SMART	It is an electronic wallet that allows you to do bills payment, reload of airtime and money transfers using a SMART mobile phone (Philippines)
SME	small- and medium-scale enterprises
SMS	short message service
SNaks	Samsthan Narayanpur Kalanjia Sangamitra
SNEHA	Social Need Education and Human Awareness
SPSKK	Savitribai Phule Sawadhan Kendra Karanja
SRC	Swiss Red Cross
SS	Saheli Samiti
SSP	social security pension
ST/SC	scheduled tribe/scheduled caste

SWIFT	Society for Worldwide Interbank Financial Telecommunication
TCO	total cost of ownership
TMX	True Money Express
TRAI	Telecom Regulatory Authority of India
TRC	training resource centre
UID	unique identification number
UML	Uganda Microfinance Limited
UN	United Nations
UP	Uttar Pradesh
UPSLRP	UP Sodic Land Reclamation Project
USAID	United States Agency for International Development
USSD	unstructured supplementary service data
VCS	Village Coordination Sangam
VRC	Village Resource Centre
WU	Western Union
ZMF	Zero Mass Foundation



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## Contributors

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**Anand Sinha** served as Deputy Governor of the Reserve Bank of India (RBI). He was RBI's alternate representative in the Basel Committee on Banking Supervision (BCBS), Bank for International Settlements, Basel. He also represented RBI on the Committee on Global Financial Systems (CGFS), BIS and represented India at the G20 Working Group on 'Enhancing Sound Regulation and Strengthening Transparency' set up in the aftermath of the Global Financial Crisis.

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# Introduction

*Jayadev M. and Diatha Krishna Sundar*

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The first microcredit summit was held in Washington in 1997. Since then, the microfinance industry had grown exponentially, and the United Nations declared 2005 as the year of microcredit. The donors, academics and non-governmental organisations as well as the politicians were happy with the outcomes of this institutional access of credit to the poor and the needy. Many organisations, in whatever form, joined this movement with a social motive of credit accesses, poverty removal and women empowerment. Several new agents and investors considered this as potential opportunity to make huge profits.

To increase the outreach, sustain the microfinance movement, and to bring cost effectiveness, technology applications have become necessary. Automation helps in providing multiple products through single delivery system, and also for capturing transactions. Information and communication technology (ICT) applications build ecosystems that increase outreach of microcredit services, minimise service and delivery costs and build up effective control systems. Several experiments on ICTs have taken place in different parts of the world. In this context, the seventh International Conference on E-Government (ICEG-2010) has extensively focused on ICT applications in microfinance, public health and e-governance. The conference was held during 21–24 April 2010 at the Indian Institute of Management Bangalore. Overwhelming response was received from academics, medical doctors, microfinance institutions, National Bank for Agriculture and Rural Development (NABARD), technology companies, students and voluntary organisations. Apart from papers presented in the technical sessions, there were invited talks from the industry experts, policy makers and others.

This book is primarily an outcome of selected papers presented in the conference on microfinance theme. Chapter 1 presents the brief review of recent microfinance developments in Indian industry and analyses current issues and challenges to be addressed. Graham and others discuss how important it was for the Indian microfinance institutions (MFIs) to heed to the early signs of problems. The three cases discussed show the importance of understanding the local sensitivities, appropriate training of field officers and avoiding methods of collection that could be seen as coercive. Thus, the regulation seeks to address these specific aspects of lending when the MFIs were unable to follow the self-regulation principles. In India, the MFI sector is benefitted in view of the priority sector targets of the commercial banks.

Chapter 3 is the speech delivered by Anand Sinha, former Deputy Governor of Reserve Bank of India. This chapter emphasises need for strengthening of governance in microfinance institutions with a proper regulatory framework and also through industry level self-regulation mechanism. Improving the governance is essential to achieve the goal of inclusive finance.

Shubham Goswami's chapter examines the impact of mobile technology on microfinance with respect to poverty alleviation and socio-economic empowerment in rural areas. The chapter suggests future directions and measures to reach low-income customers in developing countries through mobile technology.

Umar Rafi provides status of microfinance banking in Pakistan and application of ICT solutions. He also presents ideas for future applications of ICT.

Another study of SHGs pertains to Etah village in Uttar Pradesh by Singh, Singh and Sharma. They show that income and employment have been generated through the SHGs, which were involved in agricultural, allied, glass beads, bulbs, carpet and tailoring activities.

The critical role of mobile enabled SHG microfinance management system and software like computer munshi by NGO PRADAN are the steps forward in role of the information and computer technology to expand the services. The key weakness of SHGs is the maintenance of book of accounts. However if external help is taken then the incentive within the group to learn the same goes down. Thus wherever literate members are available effort should be encourage the SHG members to maintain basic books which can then be transcribed by the computer munshi. The idea is to create efficacy and increase self-determination.

A study on impact of federations on the functioning of SHGs conducted by Andhra Pradesh Mahila Samatha Society (APMAS) in 2007 by Sunil Kumar, informs that there are 69,000 SHG federations in the country with 22 at the apex level, 2571 secondary federations and 66,310 primary federations. The primary reason for federation of SHGs is to harness the potential of the larger group and thus be able to advocate issues and garner more funds. Veerashekharappa studies the impact of SBLP in credit delivery in the state of Karnataka in India. Bank linkage is provided by commercial banks, regional rural banks or cooperative banks.

Theruvath and Muralidharan discuss a case study of NGO Social Need Education and Human Awareness (SNEHA) and the role of the SHGs, promoted by it and other international agencies in the reconstruction of tsunami-hit Karaikal in Pondicherry, India. With the financial help of international financing agencies, SNEHA an NGO created SHGs called Sangams. These 110 Sangams with 1,800 members in 10 villages were further organised into Village Coordination Sangams and District Fisherwomen Federation, through representative participation. At the district level, the facilitation for the fishing activity was provided through construction of dry fish platforms, purchase of auto carrier for fish vending, cooking vessels for renting. Thus a federation of sangams helps in increasing the level of the activity as well as builds the principle of democratic representation at the grass-roots level.

Melody Kshetrimayum's study aims at finding out the contribution of microfinance in poverty alleviation. It examines the changes brought about by microfinance activities from the experiences of the NGO functionaries and the women members.

Naveen K. Shetty's chapter presents empirical evidence saying that microfinance intervention has contributed in widening the access to credit, savings, micro-health insurance, self-employment and micro-enterprise development, and training and awareness in the member group as compared to the control group households. On the economic front, microfinance-plus services, in general, enabled the households to improve their income, assets, expenditure, employment and housing conditions. Further, the microfinance-plus services have also enabled the households to improve their housing conditions, which was particularly true for member group households in the study area. Furthermore, the empirical result reveals that microfinance-plus services have supported small-scale self-employment or micro-enterprise development



among the member households. It is important to note that the innovation in microfinance has played a crucial role in inculcating savings and thrift habits among their members, particularly poor women. The study finds that participation in the microfinance programme also resulted in various skill enhancement trainings and awareness programmes, networking with various institutions and empowerment of poor women. Thus, the study concludes that the microfinance-plus services not only uplifted the poor from 'income poverty' but also from 'knowledge poverty'.

The final chapter sets the road map for financial inclusion a speech delivered by Dr Raghuram Rajan, Governor of Reserve Bank of India. This chapter emphasises on role of technology in meeting the financial inclusion goal. It also underscores the importance of institutions and policy changes required in this direction. Finally, the chapter emphasises on the need for financial literacy for achieving the millennium goal of financial inclusion.

The other papers and invited presentations made in the conference are as follows:

Mr Anal Jain, advisor Sa-dhan (The Association of Community Development Finance Institutions), emphasises that the current issues of the microfinance sector are multiple lending and over-indebtedness, strengthening of internal systems and processes and minimisation of operating costs. Jain expresses that the technology solutions are needed for addressing of these issues. To address the problem of multiple lending and over-indebtedness, a credit bureau is required. Although technological solutions are currently applied in microfinance sector, the challenges for extensive usage are poor literacy rates among rural population and doubts about robustness of biometric solutions. Jain envisaged on UID and 3G connectivity as the two potential opportunities before microfinance sector for spreading the technological solutions.

Mr D. Krishnan, Principal Consultant and Advisor, National e-Governance Division, discussed in detail about mobile banking applications in India and policy initiatives taken by the government of India. He also emphasised on the role of various stakeholders in extensive usage of mobile banking. The main stakeholders are UIDIA, NPCI, TRAI and mobile service providers. Mr M. V. Patro, General Manager of NABARD, has discussed the significant contribution of NABARD for microfinance sector and reviewed the initiatives taken by the NABARD for extensive usage of ICT solutions.

Ms Totsie Mamela Khambula, Managing Director of South African Post Bank (SAPO), has reviewed various initiatives taken by South African post office to address the issue of financial inclusion. The biometric solutions and payment systems introduced by SAPO and challenges for these systems and emerging opportunities in South African market were emphasised in the presentation. Mr John Wentzel, Chief Operating Officer of South African Post Bank, has emphasised on potential opportunities for post offices in addressing the issue of financial inclusion and discussed in detail how post offices can leverage their network for providing multiple financial services and low cost banking to underprivileged.

Vijay Pratap Singh Aditya and others have documented a case study on mobile-based framework (MITRA) for provision of micro-finance services in Dungarpur District of Rajasthan. This field-based technology application is for monitoring, transacting and real-time interaction system for addressing service gap for SHGs modeled grass-roots financial institutions. This technological solution aims at strengthening the financial service delivery allowing 'financial independence' of the SHG federations would go a long way in developing self-sustaining decentralised financing institutions.

Aruna Kumari Devarakonda's paper suggested antiphishing strategy based on voice and image. This paper presented a two-factor authentication solution, which aims to protect users against e-mail phishing attacks. Main key words used are a user ID and password which is given by the user with his unique voice identity and an image sent by the bank. An e-mail that a bank sends to user contains a pre-selected image which the phisher couldn't have, that the user chose when setting up the account. This proves to the user that the e-mail came from the bank or business, not a phisher, and that it is safe to use the provided link. The user is asked to provide his or her user ID, password and unique voice ID. This voice ID is already trained to the system of the bank. This is verified with the voice ID given during the login time. When the received password along with unique voice ID is accepted, user is allowed to access the website.

Hanumanthappa and others' paper discusses applications of data mining in e-governance. This paper, a case study of agricultural bank loans, sets out to make a comparative evaluation of classifiers in the context of banking to maximise true positive rate and minimise false positive rate of defaulters. Suresh and others discuss credit risk management in private sector banks and its relevance

to microfinance sector in India.. Pavan Rama kumar and others reviews delivery model schemes pertaining to micro-insurance, and discusses issues for massification of micro-insurance industry in India. Monalisa Das's paper highlights the contribution of micro-finance organisations for social growth and bringing economically backward into the mainstream of economy. This paper makes colloquia of emphasising activities of microfinance and institutional support they are getting in the upliftment of upper poor, very poor and ultra poor. The whole write-up also tries to cover the gap in knowledge by using secondary research to critically examine how information technology is used in normal finance functions and trying to project how such uses can be applied to microfinance footprints towards establishing self-reliant poor resisting poverty. Dinuja Perera documents the evidence on women participation in microfinance and delinquency of microfinance institutions in Sri Lanka. The researcher intended to identify the women participation in microfinance in Sri Lanka and assess how far their involvement has mitigated the risk of microfinance institutions becoming delinquent. In this study, it is concluded that microfinance institutions are mitigating the risk of delinquency by maintaining their portfolio quality with women-driven microfinance. Roberto Moro Visconti says that microfinance institutions (MFIs) in developing countries are less affected by the worldwide turmoil, due to their segmentation and resilience to external shocks. If contagion is milder, the biggest risk is probably that of becoming out of scope, being unable to collect the much needed foreign capital at competitive costs. Recession has a big impact on corporate governance mechanisms, altering the equilibriums among different stakeholders and increasing the risk of investment returns. This paper highlights the importance of governance in microfinance.

Lakshman Gugulothu discussed that microfinance bill has flaws and the issues to strengthen MFI regulations. Seema Sahai's paper also discussed innovations in microfinance sector with OTF model and recommended that market forces need to be duly regulated to ensure that microfinance does not cost poor heavily.

The technical session ended with a presentation made by Atyati technologies, a software solution provider to microfinance sector.

We take this opportunity to thank all the experts and industry professionals for accepting our invitation and making presentations on innovative ideas for future. We also thank the paper/chapter-contributing authors for their timely support in making