- D. Rajasekhar
- R. Manjula
- T. Paranjothi *Editors*

Cooperatives and Social Innovation

Experiences from the Asia Pacific Region



Cooperatives and Social Innovation

"Social innovation has been of late widely discussed by scholars; but most of the literature has addressed the nonprofits or the third sector at large. This book is a unique collection of theoretical papers written specifically for this purpose as well as cases of social innovations by cooperatives to solve problems at the local and higher levels from the region presented in the ICA-Asia Pacific research conference on 'Cooperatives: The key solution for social innovation'. A wide range of social innovations in the areas of finance, health, agriculture, climate change, consumer, marketing and worker welfare, empowerment of women and youth are covered. I believe this volume will be an important addition to the literature on cooperatives in the Asia Pacific region."

—Prof. Akira Kurimoto, Chairperson of the ICA Asia Pacific Research Committee and Hosei University, Tokyo, Japan

"This book on 'Cooperatives and Social Innovation' is the first of its kind. The book discusses the new concept of social innovation and brings out the social innovation practices in cooperatives. The volume consists of papers that have undertaken an in-depth analysis of cooperatives particularly in the area of social innovation. The book covers interesting areas on social innovations in cooperatives relating to finance, grading of cooperatives, social media to promote cooperative movement, tourism, producer, consumer, climate smart agriculture, health insurance and women leadership. The book will be of great value at the global as well as national level cooperatives. NCUI recognizes and appreciates the efforts put in by the editors Professors Rajasekhar, Manjula and ParanJothi."

—Dr. Chandra Pal Singh Yadav, President, National Cooperative Union of India (NCUI); Member of Parliament (Rajya Sabha), Government of India

"Scholarly studies on the subject of Cooperatives are a few as compared to those on Economics, Commerce and Management. I am extremely happy to note that Institute for Social and Economic Change (ISEC), Bengaluru, and Agricultural Cooperative Staff Training Institute (ACSTI), Thiruvananthapuram, have jointly worked to bring out the book "Cooperatives and Social Innovation" through a Springer publication. I am confident that this book will contribute to more innovations by Cooperatives in the field and will help the members of Cooperatives functioning in different sectors of the economy. It is hoped that both the Institutes will continue to work together for enriching the literature on Cooperatives and thereby guide policy formulators in making cooperatives as member-centric institutions."

—Kadakampally Surendran, Minister for Co-operation Tourism & Devaswoms, Government of Kerala, Thiruvananthapuram, India D. Rajasekhar \cdot R. Manjula \cdot T. Paranjothi Editors

Cooperatives and Social Innovation

Experiences from the Asia Pacific Region



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This volume is dedicated to Late Prof. T. Paranjothi who passed away after this volume went to the press



Foreword

The COVID-19 pandemic has exposed the fragility of our current systems. The economic system which depends on the market was found wanting; the public health system left gasping; and the political system floundering in its response. The need of the hour is innovation in the social space and in the way we organise to address issues of common concern. I am delighted at this timely endeavour by Dr. D. Rajasekhar, Dr. R. Manjula and Dr. T. Paranjothi to revise, update and compile papers from the International Cooperative Alliance Asia Pacific Research conference on Social Innovation and Cooperatives in the Asia Pacific region held in Seoul and relate it to the current situation.

A decade or so earlier, the global financial crisis brought with it painful consequences in relation to financial and economic losses, unemployment and increases in poverty and social exclusion. The financial crisis showed the perils of valuing short-term gain over longer term viability and the dominant model of capitalism increasing levels of inequality and lowering "social capital" and wellbeing. Be it health, economic or any type of shock, the people most affected are the poorest and the most vulnerable. In the decade between the financial crisis and the global pandemic, governments have been moving away from the welfare state, pulling out of the social space, reducing public expenditure and shifting social provisions to social enterprises, either private or through civil society.

Social enterprises achieve social objectives as they focus on the individual users, people at the margins, deal with workers in the real economy and get into activities which main street businesses are unlikely to focus. The volume points out that social innovation emerges when the state and market find it difficult to solve problems such as poverty, hunger, ill health, poor education and sanitation. These get accentuated due to poor governance, unequal opportunities, social exclusion and discrimination. The financial crisis and the pandemic have accelerated the need to innovate as the need is acute, resources limited and trust in institutions at a nadir.

The ICA Blueprint for a Cooperative Decade makes the case for cooperatives as builders of economic, social and environmental sustainability. As member-owned economic enterprises, cooperatives are less likely to compromise on quality in pursuit of short-term profit, focusing more on longevity. As social actors, they are

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inclusive and build the stock of social capital on which successful societies and economies thrive. As participatory organisations, concerns about future environmental outcomes are voiced democratically by members, without needing to be calculated in terms of return on investment. The volume touches upon the distinctive features of social innovations by cooperatives and how these change the process and outcome of development. It builds on social innovation by cooperatives by presenting cases across social inclusion, income security, sustainable practices, health insurance, accessible education, youth engagement, gender balance and governance.

The volume on Cooperatives and Social Innovation is a valuable resource as it offers new literature on Cooperatives in the Asia Pacific Region, provides pioneering work on Cooperatives and social innovations, and examines social innovation to address global challenges of rising inequality, sustainable development and climate change through cooperatives. I appreciate the rigorous process adopted by the editors to update the papers presented in Korea, by making relevant corrections and providing valuable comments to authors and also adding four new papers in the Volume.

I would like to congratulate the editors for editing the volume on Cooperatives and Social Innovations in the Asia Pacific region and working with the prestigious publication house Springer to have this volume published.

Balasubramanian Iyer Regional Director International Cooperative Alliance Asia Pacific Administrator ICA Domus Trust, New Delhi

Preface

Social innovations include new activities, services and processes initiated by organisations and institutions for the benefit of people. Social innovations typically emerge when the society is facing problems such as poverty, unemployment, ill health, poor educational outcomes and so on, and these problems are not getting resolved either by the market or the state. Social economy consisting of cooperatives, mutual societies, voluntary organisations and foundations is in the forefront when it comes to conceiving, creating, implementing and evaluating social innovations. Yet, the literature on social innovations by cooperatives is scanty. This volume aims to fill in this gap in the existing literature on cooperatives.

Realising the importance of social innovations in cooperatives, the International Cooperative Alliance—Asia Pacific (ICA-AP) organised a research conference on *Cooperatives: The key solution for social innovation*, at Sungkonghoe University, Seoul, South Korea, during November 10–12, 2017. The ICA-AP has requested us to bring out a volume with papers presented in the conference for wider dissemination of findings relating to social innovations through cooperatives. This volume consists of 14 out of 27 papers presented in the conference. These papers are substantially revised based on comments from editors, reviewers of Springer and participants in the conference. In addition, three chapters are written exclusively for the volume in order to make the volume more comprehensive and up to date. We would like to thank all the paper writers for their patience and cooperation in addressing our comments and suggestions from time to time.

Our grateful thanks to Mr. Balasubramanian Iyer, Regional Director, International Cooperative Alliance, Asia Pacific, Prof. Akira Kurimoto, Chairperson of ICA-AP Research Committee, and other members of the ICA-AP Research Committee, for reposing their faith on us to bring out the volume. We also thank Mr. Iyer for contributing a foreword to the volume.

We thank Mr. Mohit Dave and Mr. Ashok Taneja from ICA-AP, New Delhi, for sharing soft copies of the papers presented in the Seoul conference and providing us with the contact details of the authors.

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We are thankful to Mr. Murali J, Research Assistant, Centre for Decentralisation and Development, Institute for Social and Economic Change, Bengaluru, and Mr. Aneesh A K, formerly Research Associate, Agricultural Cooperative Staff Training Institute, Thiruvananthapuram for providing support whenever required without any hesitation.

We express our heartfelt gratitude to Ms. Nupoor Singh, Editor, Springer, for her constant encouragement and support. We also express our thanks to two anonymous peer reviewers of Springer for their comments and suggestions.

Bengaluru, India Bengaluru, India Thiruvananthapuram, India D. Rajasekhar R. Manjula T. Paranjothi

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About the Editors

Dr. D. Rajasekhar is HAG Professor in Economics at the Centre for Decentralisation and Development (CDD), Institute for Social and Economic Change (ISEC), Bengaluru. He obtained Ph.D. and M.Phil from the Jawaharlal Nehru University, New Delhi (through Centre for Development Studies, Trivandrum). He was Visiting Scholar at the Universities of Oxford, Melbourne, Hitotsubashi, Sussex and at the Centre for Development Research, Copenhagen. He worked extensively on decentralisation, social protection and microfinance, and served in policy bodies constituted by the government. He has published 26 books/ monographs and 86 articles in national and international journals and as chapters. His recent paper (co-authored) on 'Motivating Knowledge Agents: Can Incentive Pay Overcome Social Distance?' is published in *The Economic Journal*. His paper on 'Collusion, Co-option and Capture: Social Accountability and Social Audits in Karnataka, India' published in Oxford Development Studies was awarded the Sanjaya Lall Prize for its contribution to the development studies. He is currently collaborating with researchers from the London School of Economics, and the universities of Bristol, Melbourne, Tsuda and Hitotsubashi in research relating to decentralisation and poverty reduction, delivery of public services and social protection. His recent books are "Decentralised Governance, Development Programmes and Elite Capture" (Springer: 2018) and "Decentralization, Cooperatives and Rural Development".

Dr. R. Manjula holds a PhD in economics and is working as Assistant Professor at CDD, ISEC, Bengaluru. She was an Academic Visitor at the Department of Economics, University of Oxford, UK. She has co-authored books and research papers (in national and international journals and as chapters). 'Motivating Knowledge Agents: Can Incentive Pay Overcome Social Distance?' is the recent co-authored paper published in *The Economic Journal*. Her other co-authored paper on 'Collusion, Co-option and Capture: Social Accountability and Social Audits in Karnataka, India' published in *Oxford Development Studies* was awarded the Sanjaya Lall Prize for its contribution to the development studies. She has worked on several of the centre's research projects, covering themes of

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decentralisation, child labour, social security, health insurance, public works programme and public service delivery, and collaborating with researchers from UK (London School of Economics, the Universities of Bristol, King's college) and scholars from various universities at Japan (Hiroshima, Tsuda, Hitotsubashi and Kobe University).

The late Dr. T. Paranjothi was the Director, the Agricultural Cooperative Staff Training Institute in Kerala (India), Trivandrum, and Vice Chairman of International Cooperative Alliance, Research Committee, Asia Pacific Region. He obtained his Post Graduate degree in Cooperation, M.Phil in Applied Economics from JNU, New Delhi (Centre for Development Studies, Trivandrum) and obtained his Ph.D. from the University of Calicut. He has had 38 years of experience in Teaching and Research in Cooperation. He taught and held important positions in a number of Universities and institutes such as Kerala Agricultural University, Thrissur, National Council for Cooperative Training, New Delhi and Vaikunth Mehta National Institute of Cooperative Management, Pune.

Chapter 1 Cooperatives and Social Innovation: Experiences from the Asia Pacific Region



1

D. Rajasekhar, R. Manjula, and T. Paranjothi

1.1 Introduction

One in every six persons in the world has membership in (or a client of) a cooperative. Such is the presence of cooperatives in the world. Cooperatives strive to bring in social innovations (new and innovative products, services and processes) for the benefit of their members. This volume discusses social innovations initiated by cooperatives in the Asia Pacific region. Readers of this volume will find answers to the following questions. What social innovations are started by cooperatives? What motivated them to come up with social innovations? What benefits did cooperatives and their members get from social innovations?

The concept of social innovation was first used by sociologists in the nineteenth century academic literature. Following the seminal work on innovations by Joseph Schumpeter, the research studies focused mainly on innovations in economic enterprises. As a result, the studies on social innovations became few and far between. The number of research papers on social innovations, however, witnessed a rapid increase after the turn of the present century, and especially after the financial crisis of 2008. Many scholars attribute the resurgent interest in social innovation to 'austerity agenda' of European countries and budget cuts by these countries on the provision of social security and other benefits. These countries explored ways of passing the

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responsibility to non-profit sector to meet the wide gap in the delivery of key services by advocating the philosophy of 'do more with less' (see the chapter on theories and concept of social innovation in this volume).

The purpose of this volume is not to support 'austerity agenda'. There are three reasons why we think this volume is important. First, neo-liberal idea of technoeconomic innovation for wealth creation will only work in the free market. In underdeveloped countries, there is no free market. Markets typically fail when confronted with problems of uneven economic development, environmental degradation and so on. On the other hand, "social innovation, based on solidarity and reciprocity, is an alternative to the logic of the market ideology and suggests a different theoretical departure" (Grimm et al. 2013: 448).

Second, although the number of studies on social innovation witnessed a rapid increase from the turn of the present century, what is striking is that most of this research was carried out by researchers from the developed west (notably England, USA and Canada) and there are hardly any studies undertaken with data collected from the developing or underdeveloped countries from Asia, Africa and Latin America. The studies on social innovations through cooperatives are conspicuous by their absence although social innovators in cooperatives such as Friedrich Wilhelm Raiffeisen and Franz Hermann Schulze-Delitzsch from Germany and Verghese Kurien from India made a considerable contribution to social innovation through cooperatives. Our main aim is to fill in this gap in the existing literature through this volume (see the chapter on theories and concept of social innovation in this volume).

Third, Asia Pacific region is set to witness a rapid growth and transformation by 2050. Asian Development Bank (ADB 2011) stated in its report on *Asia 2050: Realizing the Asian Century* that the contribution of Asia to global gross domestic product (GDP) will be 52% by 2050. ADB report, however, states that Asia's growth is by no means preordained, and is fraught with the following challenges; (i) increasing inequality within countries that could undermine social cohesion and stability; (ii) overexploitation of limited natural resources as neo-rich Asians aspire for higher standards of living; (iii) climate change threatening agricultural production and undermining food security; and (iv) poor governance and weak institutional capacity. Cooperatives which are widely present in the Asia Pacific region and strong in their outreach can make a difference in this regard by initiating new and innovative products and services that would be efficient, sustainable and socially just. But, we know very little about cooperatives as social innovators. This volume is, therefore, brought out with case studies on social innovations through cooperatives from the countries in the Asia Pacific region to fill in this gap in our understanding.

An innovation is needed in a society that faces problem of instability. Social innovations emerge when there are vexed environmental, political and social problems in developing countries that cannot be solved by the market or the state. Poverty is one such problem. The other important problems are hunger, high mortality rates, unsafe drinking water supply, poor education systems and poor sanitation. There are also barriers to economic growth such as climate change, poor governance, unequal

¹In 2019, about 600 million people in the world were living below the poverty line.

opportunities and social exclusion. These problems, in combination, create traps from which developing countries are unable to come out.

According to the Asian Development Bank, Asian countries face the danger of falling into the middle-income trap unless they achieve success in the following; (i) growth and inclusion; (ii) entrepreneurship, innovation and technological development; (iii) improving quality and efficiency of urban areas; (iv) financial transformation; (v) reduction in the use of finite energy and natural resources; (vi) climate change; (vii) climate smart agriculture; and (viii) improving governance and institutional performance (ADB 2011). Countries in the Asia Pacific will do well by addressing these issues although the priority to be given to each one of the above varies across these countries depending on their level of development.

The international agencies have been responding to solve these problems from time to time by formulating policies and programmes.² These policies did not bring the desired results because markets or conventional forms of entrepreneurship fail. It is here that social economy,³ in particular, cooperatives, is expected to play a considerable role in the area of social innovation. This book, presenting cases of social innovations by cooperatives to solve problems at the local and higher levels from the Asia Pacific region, is pioneering as there is no other publication, to the best of our knowledge, which deals with cooperatives and social innovation in this region.

1.2 What is Social Innovation?

It is concluded (in Chap. 2 of this volume) that social innovations constitute the following elements. First, social innovations are launched by institutions or organizations whose primary goal is social. Second, innovative activities and services aim to meet the unmet needs of people. Third, social innovations emerge because of the failure of the market. Fourth, a place and role to people is provided in innovative activities and services—in the conception, development and implementation of these activities. Fifth, social innovations tend to be disruptive as they seek to implement new activities and services by replacing the existing activities and services. Sixth, social innovations are expected to be efficient, sustainable and socially inclusive.

²First response was to formulate development goals to address problems faced by the developing countries. Millennium development goals on poverty reduction, hunger-free society, education and health to all, clean drinking water and so on were formulated at the turn of new Millennium and these goals to be achieved by 2015. An assessment of progress in MDGs revealed that while there was some progress in the achievement of these goals, the sustainability potential was found to be low. Hence, 17 sustainable development goals on the above were formulated in 2015 and these are expected to be achieved by the governments in developing countries by 2030.

³The social economy is defined by the collection of different social objectives of the various organizations that make it up, and a third sector of mixed capitalist economies distinct from the private and public sectors. The social economy consists of cooperatives, mutual societies, voluntary organizations and foundations.

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Seventh, outcomes of social innovation are uncertain; it can be either both further empowerment and further impetus for change or loss of motivation and faith among people in the social innovation itself. Hence, social innovations are to be studied indepth to ascertain their effect on people. Eighth, benefits of social innovation should go to the entire society, not for a few individuals, and that social innovation should not lead to elite capture.

The term social innovation describes wide-ranging activities undertaken by organizations to address the deep-rooted problems faced by the society. Broadly speaking, social innovation refers to the formulation and implementation of new ideas by organizations to meet social goals. In a narrow perspective, it refers to 'innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly developed and diffused through organizations whose primary purposes are social' (Mulgan et al. 2007). Thus, unlike business innovations that are led by the profit motive of an organisation, the principal motivating factor for social innovation is the social need.

There are four stages in the social innovation (Neumeier 2017): The first stage is to *generate an idea* after the needs in the society are identified and potential solutions are arrived at. Most often, the needs identified are those that are not effectively dealt by the market and the government. The needs have to be tied to new possibilities in terms of innovations such as new organizational forms, use of mobile and artificial intelligence. Ideas need not necessarily be new all the time; they can combine two or three old ideas. All the new ideas need not reach the second stage; some are thrown away, while others reach the next stage. The second stage of social innovation is to *test an idea* in the field. Testing the idea as a pilot is helpful to generate interest and enthusiasm on the new idea. The third stage of social innovation is *proving an idea in practice* and scaling up of the successful one. The fourth stage consists of *learning and evolving*.

According to Neumeier (2017), there are two dimensions to social innovation; a process dimension (for instance organisation and mobilization of actors, initiation of processes that facilitate the participation of members/people and so on) and outcome dimension (for example, new and improved means of collaborative action, new governance structures). It should, however, be noted that these two are linked; process dimension is critical to the success of social innovation as the outcome. This implies that participation and empowerment of people, and learning from the process stage will lead to and result in people's wellbeing from social innovation.

Not every process of learning, participation and collaboration will result in social innovation. To be able to become a successful social innovation, such a process must meet the following criteria; (a) it is innovative with regard to the user, context or application; (b) it meets peoples' needs more effectively than pre-existing alternatives; (c) it provides long-term solutions; and (d) it is adopted beyond the initial group/network hat developed it.

There are barriers to the development and growth of social innovation. According to TEPSIE (2014: 4), these barriers include inadequate access to finance, lack of alliances and interface among social economy organizations, low level of skills in these organizations and inadequate support structure.

1.3 Cooperatives and Social Innovation

According to International Co-operative Alliance (ICA), "cooperative is an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically-controlled enterprise.⁴" Fairbairn et al. (1995: 21) define it as an "associations of people who have combined their resources of capital and labour to capture greater or different benefits from an enterprise than if the business were undertaken individually" (cited in Majee and Hoyt 2011).

Cooperatives are membership-based organizations, and are owned, managed and controlled by members. The collective thinking and democratic decision-making process in cooperatives enable members to participate voluntarily in the problem identification, generation of idea, piloting the idea and eventual problem-solving. Through collective engagement, cooperatives will be in a position to meet social needs that are not met by the market. The governance, principles and social effect of cooperatives are ideal for social innovations. Cooperatives, therefore, have the potential to be social innovators to resolve vexed problems faced in the society. However, there is no literature on social innovations by cooperatives. What social innovations are initiated by cooperatives? In which fields are they implemented? What outcomes were achieved by social innovations?

1.4 Social Innovations in Cooperatives in the Asia Pacific Region

The chapters in this volume discuss these questions with case studies of cooperatives from the Asia Pacific region. Some of these chapters were presented in the 12th ICA-AP research conference on *Cooperatives: The key solution for social innovation*, at Sungkonghoe University, Seoul, South Korea during November 10–12, 2017. Of 27 papers presented in the conference, this volume consists of 14 papers which were revised four times for the volume; the first revision was on the basis of comments provided by the participants in the research conference; the second was on the basis of initial comments and suggestions provided by editors; the third was in response to comments provided by peer reviewers identified by the publisher; and the final revision was in response to comments by editors. In addition, three chapters (on the 'concept and theories of social innovation', 'cooperatives and social innovation' and 'role of cooperatives during the Covid19 pandemic') are written exclusively for the volume as it was felt by one of the reviewers that these chapters would make the volume more complete. A summary of 19 chapters, including those on introduction and conclusion, is provided below.

⁴For more details, https://www.ica.coop/en/cooperatives/cooperative-identity. Accessed 20 July 2020.

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In the second chapter on theories and concept of social innovation, D. Rajasekhar shows that the concept of social innovation, which was in use since nineteenth century, was widely applied to the academic literature and policymaking from the turn of twenty-first century. The research on social innovation was mostly carried out in universities in England, USA and Canada. But, not many studies were undertaken with primary data from underdeveloped countries and on cooperatives. The theories of Max Weber, Emile Durkheim and Joseph Schumpeter in the late nineteenth century and early twentieth century influenced the concept of social innovation, so also are the theories relating to social entrepreneurship, social investment and social capital and new public management in the second half of twentieth century. The chapter shows that the meaning and concept of social innovation constantly expanded over a period of time in response to changing social needs and relations. It is, therefore, unsurprising that definitions adopted by chapter contributors in this book are different as they are analyzing social innovations that emerged at different points in time in their case studies on cooperatives.

The next chapter on "Cooperatives and Social Innovation: A Critical Review" by Yashavantha Dongre and T. Paranjothi reviews the literature on social innovations in cooperatives. For them, social innovations are innovative activities and services provided by cooperatives to meet social needs. The studies reviewed in this chapter are from the Asia Pacific region, as well as outside. Their review of studies on social innovations in cooperatives outside the regions of the Asia Pacific region cover tourism cooperatives in Brazil, women housing cooperatives in Canada, platform cooperatives, online market place cooperatives in Germany, energy cooperatives in Denmark and so on. The prominent social innovations in the Asia Pacific region covered in the chapter are web-based and open sourced worker cooperative in New Zealand, Alpha Cooperative in the Philippines, workers and Transport Cooperative Societies in India, Industries Cooperative in Australia, medical cooperatives from Japan and India, solid waste management cooperative from India and so on. They also discuss the factors that drive cooperatives to come up with social innovations, and barriers that they face in this regard.

D. Rajasekhar discusses the health insurance programme of Yeshasvini, which aimed to promote health protection among cooperative members in the Indian state of Karnataka. He defines social innovation as new idea implemented by cooperatives to meet unmet needs for reaching social goals and improving people's welfare. In the absence of adequate access to quality healthcare, the poor in India, use expensive private healthcare providers and spend a considerable proportion of their meagre incomes on healthcare leading to deepening of poverty and perpetuation of vulnerability. Yeshasvini was introduced through rural and urban co-operative societies to meet the unmet need of access to healthcare. Yeshasvini provided healthcare to members to some extent. However, the positive impact of Yeshasvini was hampered by the inability to provide awareness and knowledge among members on health insurance. Households stated that they could not use Yeshasvini as they did not have illnesses qualifying treatment under the scheme, although several of them faced health problems necessitating hospital visits and considerable expenditure on treatment. The limited awareness on and less use of Yeshasvini was due to lack

of alliances between cooperatives and other local organizations (local government, community-based organizations and other government departments).

In view of the vast potential of the tourism industry, **Najmah binti Nawawi, Shamsiah binti Syamsudin and Christina Andin** in their chapter on "Community-based Tourism through Cooperatives in Sabah, Malaysia" discuss community-based tourism (CBT) as social innovation to improve the status of rural community through cooperative principles. With the help of three case studies of cooperatives in Sabah—popularly known as the "Land below the wind" having beautiful beaches and islands, wildlife reserves, Mount Kinabalu and unique culture. Beginning one community-based tourist activity, cooperatives rapidly expanded to include many tourism downstream activities and, in the process, contributing to an increased income to cooperatives. The success of tourism activities by cooperatives is attributed to a variety of factors such as the commitment of the cooperative management and support of the local community. Community-based tourism thus provides opportunities to cooperatives to be involved in community activities, especially in rural areas, and enable rural dwellers to generate income through various downstream tourism activities such as accommodation, food and beverages, transportation, souvenir shop and so on.

In the next chapter on "Failed Market-Oriented Society and Working Co-ops' Biodiesel-Based Food Systems after the Great East Japan Earthquake", Akihisa Nonaka shows that social innovation of biodiesel production by cooperatives addresses peoples' needs in times of crises. In Japan, biodiesel is usually produced from cooking vegetable oil, collected from local food businesses and households as a part of recycling and subsequently refined by small processors. Biodiesel, with strong links with the local food system and sustainable society, addressed the problem of disrupted transport system on account of the failure of the state and market soon after the 2011, Great East Japan Earthquake in the Tohoku region. The earthquake disturbed all commodity markets for a month and the affected people faced an acute shortage of food and other essentials (bottled water, blankets, tarpaulins, generators and portable toilets). By providing minute evidence, Nonaka contends that social innovations of cooperatives work better as they support the local food production and prepare biodiesel. Such social innovations intended to build a sustainable society which will work in the crises when the market fails. In her opinion, the strength of small food businesses indicates that a market-oriented economy is not enough and that social innovations of cooperatives should be related to such small and local activities.

The chapter by **R. Manjula** examines the role of cooperatives in the climate smart agriculture. Realizing that the climate change is an important challenge to food security to the growing world population, climate action is formulated as a Sustainable Development Goal to combat climate change and reduce its adverse impact on agriculture. With the help of primary data, she shows that farmers experienced climate change and adopted strategies to pursue climate smart agriculture without full knowledge. Primary Agricultural Credit Societies, which work at the grassroots level to improve crop productivity by providing access to short-term credit, have a potential to address the mitigation strategies such as the promotion of drought resistant seeds, reducing greenhouse gas effects with the help of good agricultural practices.

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However, cooperatives do not have the mandate to directly participate in the adaptation activity of development and management of natural resources in rural areas. In order to meet this unmet need of farmers, she suggests that cooperatives need to move from their traditional role of credit disbursement to coming up with social innovation of developing an interface with different departments and collaborate with local organizations in transferring the new information to farmers, and bring economic and social transformation.

For **Sanjay K Verma**, social innovation is a new idea or innovation on interlinkages between the work of cooperatives and the use of the same in social media. He begins with the premise that the social media platform can be used to advocate the work of cooperatives. Cooperatives, as member-based organizations, have been coming up with several innovations to address the social problems. However, the cooperatives have not used the platform of social media to highlight their achievements. Deploying a case study approach, the chapter describes the experiences of various cooperatives on the usage of social media such as twitter, facebook, instagram, etc. It also explains how cooperatives can play an active role in not only getting connected with their members through social media but also to build wide-ranging collaborations with the government, civil society, private sector and so on. With the power of social media, cooperatives will not only showcase their work but also contribute to further social innovations. The chapter discusses an important barrier to social innovation namely lack of expertise within cooperatives in the use of social media.

An important requirement in the cooperative movement is to ensure that secondliners and successors are available on a continuous basis to continue the work of the movement in a genuinely cooperative manner. Social innovation of providing longterm leadership training in cooperatives for 13 years was undertaken by PHCCI-MPC in Tacloban in Philippines, to develop cooperative leadership. Ma. Jenny C. Advincula provides the context of the leadership training programme, components and outcomes in her chapter on "A Phenomenological Study of the Lived Experiences of PHCCI Summer Youth Program Tutees Turned LabCoop Officers" with the help of in-depth interviews with tutees and provides lessons that can be learnt from this innovation. This chapter, based on phenomenological methodology, shows that children from the age of six were admitted into the summer programme. This education and arts development programme for thirteen years produced a few tutees as incumbent officers of Laboratory Cooperative and potential cooperative leaders. The chapter argues that the youth's involvement in the Tutee Program and their exposure developed their leadership skills, helped to serve as officers in the Laboratory Cooperative and perceive themselves as potential second-line leaders of the organisation.

For **Ajit Kumar**, social innovation is a novel solution to a social problem that is cost-effective, efficient and sustainable. In the chapter on "Cooperative and Social Innovation in Finance—A Case Study of Mann Deshi Mahila Sahkari Bank", he examines social innovations by cooperative bank for women informal workers in the Indian state of Maharashtra in the context of inability of formal banks to provide timely and adequate credit to the poor on the grounds that they are unbankable. Innovations of women cooperative bank such as new project design, loan products,

delivery models and product cost structure contributed to: (i) easy reach of credit to the poor and unorganized worker households; (ii) breaking of social barriers by introducing and expanding artificial insemination of goats among women entrepreneurs; (iii) business of poor customers during the period of demonetization; and (iv) social inclusion. In view of difficulties faced by large-sized banks to reach the poorest, the social innovations by the cooperative bank are worth emulating.

Arunima Guha in her chapter on "Co-operative sector grading—a social innovation in finance" discusses grading of cooperatives, especially those dealing with finance, as social innovation. This chapter becomes important in the context of scams (real or alleged) on cooperatives that frequently appear in the print and electronic media causing loss of trust on cooperative institutions in general among the public. As member-based organizations, the trust of members builds up the image of the cooperative, and thereby their loyalty. Against this background, the author discusses the relevance of grading of cooperatives and the need for the development of rating methodology. After reviewing studies on the existing rating methods, she suggests a rating methodology which includes four factors such as scale and diversification, franchise strength, growth potential, financial flexibility and financial policy and ratios. The rating factors on broad parameters are assigned weights and based on that rating category is arrived by giving scores. The author argues that cooperatives need to go in for grading so that parity can be brought with profit-seeking enterprises, also to improve accountability to the public and develop clean public image on cooperatives.

For C A V Sathish Kumar and C Shambu Prasad social innovation is social learning and collective experimentation. In their chapter on "Social Innovations in Organic Foods in Rainfed India: The case of Dharani FaM Coop Ltd.", the authors discuss the innovation that Dharani Farming and Marketing Cooperative (Dharani) initiated to address problems that small and marginal farmers in a drought-prone area in the Indian state of Andhra Pradesh, which faces persistent droughts, increasing input costs, declining soil fertility and non-existent or very poor market linkages. While organic crops are an option to farmers, the absence of agricultural extension system was a hindrance. Dharani, therefore, worked not only on changing production systems towards sustainability but also to procure, processes and sell the organic produce of its members sustainably under the brand name *Timbaktu Organic*. Dharani's product line includes millets (flour, rice and semolina), groundnuts (whole, roasted, cold-pressed oil), pulses, wild honey, and several ready-to-eat and ready-to-cook items. These contributed to the spread and growth of the business and enabled farmers to adhere to principles of sustainable agriculture.

Pitchai C., and S. V. Akilandeeswari, in their chapter on "Social Innovative Enterprises: Ubiquitous Cooperatives in the State of Tamil Nadu", discuss social innovative practices adopted by industrial (tea processing) and agricultural marketing (turmeric) cooperatives in the Indian state of Tamil Nadu. The two cooperatives focused on improved methods of cultivation of tea and turmeric crops, producing qualitative and higher yield crops and imparting skills on processing for value addition. Social innovations of value addition, and digital auction and tender system for transparent marketing of agricultural produce helped farmers in obtaining a good

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price for their produce by breaking the hold of exploitative traders and middlemen on the supply chain. They explain how these new practices reduced cost and brought transparency. The innovative efforts by both the cooperatives resulted in the establishment of branded products, namely, "Mangalam" turmeric and "Ooty Tea", and contributed to the displacement of the conglomeration of the middlemen. The innovative practices not only infused the entrepreneurial skills but also resulted in higher and regular income to member farmers, improved social status, social inclusion and strength to cooperative enterprises to survive in the competitive environment.

Japanese consumers' co-operative movement is known for "Han" system, which promotes collaboration between members and workers of cooperatives. Products and processes developed through such collaboration promote the interests of the consumer cooperative, and in the process members' interest, are termed as social innovations by Misa Aoki, Taiki Kagami and Takashi Sugimoto in their chapter on "Commitment of Co-operative Workers to the Movement: The Case of Japanese Consumers Co-op". They describe two cases of such products and processes that advanced the co-operative business and movement. The first case is "CO-OP mix carrot", a pioneer healthy vegetable drink in the Japanese market is a prominent example of the joint product of cooperative members' aspiration and workers' professionalism. The second case is the chatting parties of members that contribute to the two-way communication between members and workers that improve the quality of consumer products. From these two cases, the lesson is that worker motivation is enhanced by members, while workers increase the commitment of members to the member-owned co-operative business. This will, in turn, strengthen cooperatives and members' participatory democracy.

The chapter on "Worker Cooperatives: A Social Innovation to the Issue of Contractualization in the Philippines" by Leo G. Parma, Maria Antonette D. Pasquin and **Bienvenido P. Nito** analyzes the functioning of worker cooperatives. The policy of contractualization in Philippines resulted in a type of non-permanent employment arrangement between employer and employee either directly or through a third party. While capitalist and socialist perspectives on this policy represented two extremes, this chapter suggests worker cooperative as an alternative to address the concerns of workers in a contractual employment arrangement. With the help of primary data, the chapter examines how worker cooperatives as a social innovation addressed the concerns of workers faced with the problems of contractualization, namely sustainable livelihood, productivity, income equity, participation, identity and inclusiveness, things that could not be achieved by either the state or the market. Despite internal and external challenges, worker cooperatives could address the problem of precarious work that accompanies contractual employment and make a difference in the areas of human and economic security, social capital and empowerment through cooperative participation, in the process enabling Filipino informal workers to overcome the problems of unemployment and poverty.

Women have been the backbone of dairy cooperatives in India; yet, women do not occupy leadership positions within cooperatives. The chapter by **Neha Christie** and **C. Shambu Prasad** raises a question of how to promote women leadership in dairy cooperatives. They address this question with the help of a case study of

Vasudhara dairy cooperative, which is operating in the tribal region of Gujarat and consists of the highest number of women milk cooperatives, as well as women board of directors, in Gujarat state. The chapter notes that in order to foster the women's leadership, the Vasudhara milk cooperative formulated several new and innovative policies that enabled greater participation of women in cooperatives. The chapter concludes that gender mainstreaming, being the main agenda of this cooperative, has achieved sustainable development of the region. They look at social innovation as an act by the Vasudhara dairy cooperative bringing in changes in the policies or formulating new policies for the economic empowerment of women and also building leadership qualities of the women in the cooperatives.

The relationship between social investment and social innovation is under researched area (TEPSIE 2014). The chapter by Minsun Ji and Tony Robinson on "Democratizing Capital: Building Union-Coop Partnerships through Economically Targeted Investing and Crowdfunding Innovations" addresses this neglected area. In many countries, workers possess capital pooled in massive pension funds, deployed in targeted private equity funds, and distributed in the pocketbooks and individual investments of workers themselves. The challenge is how to coordinate and deploy the potential power of this "workers' capital" in a way that can humanize the broader economic system. This chapter explores how equity crowdfunding laws across the world, together with technological innovations (e.g., the expansion of social media and the rise of internet investment portals), opened new paths for social innovation through a democratized deployment of investment capital by worker cooperatives. The authors argue that crowdfunding, if strategically pursued, offers a pragmatic tool to democratize capital in labour-friendly ways. Through equity crowdfunding, large numbers of small investors can pursue socially conscious goals by coming together to support cooperative enterprises, built around socially innovative goals of democratic worker control, concern for the community, mutualism and equity among members. Labour unions can play an important role in strategically pursuing these socially innovative possibilities by promoting crowdfunding opportunities to their members.

The chapter titled as "Asia Pacific Cooperatives Responding to Covid19 Crisis" Yashavantha Dongre and T. Paranjothi provides an overview of how cooperatives across the world, in general, and in the Asia Pacific region, in particular, are responding to the unprecedented crisis caused by the pandemic. While illustrating the ways in which cooperatives in their long history, have responded during different crises such as war and natural calamities, the chapter provides details of specific relief and remedial measures initiated by cooperatives to protect the interest of members and local community hit by the pandemic. Two case studies from India, are discussed by giving the details of various short- and long-term measures initiated by them.

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1.5 Towards a Conclusion

Overall conclusions of the volume are provided in the last chapter by **R. Manjula** and D. Rajasekhar. Key conclusions are summarised below. First, social innovations in the form of new products and services alone will not bring a lasting solution to members. They will be more successful in meeting the unmet needs of people if organizations have alliances and interface with local organizations (such as local government and community-based organizations). Second, non-institutional training on leadership development provided by cooperatives resulted in the identification of second line leaders in the cooperative movement. This validates Heckman's (1999) theory, which argues that social investment on informal and non-institutional learning will build social capital and lead to social innovation, resulting in benefits to the community in the short, as well as long-run. Third, cooperatives can foster and support social innovations through social media. This is in line with the argument of Charalabidis et al. (2014). Fourth, unlike other social innovations in the community-based tourism (Malek and Costa 2014), cooperative tourism initiatives are more likely to be successful in eliciting community participation in tourism development because as member-based organizations they are less likely to face constraints in enabling the community to participate. Fifth, so long as social innovations contribute to sustainability and social justice, the community does not assign much importance to the efficiency of social innovation (Phills et al. 2008). Sixth, barriers to social innovations such as obstructive legal environment, lack of mandate and knowledge among cooperatives to implement climate-sensitive measures, insufficient social capital in the community, limited capacity to develop business models and so on are important. Seventh, active collaboration between cooperative members and workers is beneficial in bringing out products and services that are needed most by the community. Eighth, worker co-operative model is a better arrangement for workers having contractual arrangement. Ninth, producer and marketing cooperatives need to come with an appropriate model which can be beneficial to enhance the collective capacity of the producers.

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Chapter 2 Concept and Theories of Social Innovation



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Abstract Theories and concepts of social innovation are discussed in this chapter. After briefly discussing the evolution of the concept of social innovation, it is shown in the chapter that the concept, although in use since the eighteenth century, gained considerable importance in the academic literature and policymaking from the turn of the twenty-first century largely because of the financial crisis of 2008, and austerity agenda of countries in Europe. This is further corroborated by the review of research studies on social innovation. Important theories influencing social innovation are social action, social and solidarity economy, innovations, social entrepreneurship, social investment and social capital and new public management. An evolutionary perspective to the concept of social innovation is provided to show that the meaning of social innovation constantly expanded over a period of time in response to changing social needs and social relations.

Keywords Social innovation \cdot Social entrepreneurship \cdot Social investment \cdot Social capital \cdot New public management

2.1 Introduction

The humankind witnessed several social innovators and social innovations in the past. In the Asia Pacific region, social innovators brought lasting solutions to people's problems. Verghese Kurien, a social innovator par excellence, made efforts to form dairy cooperatives in India and contributed to dairy farming to become the largest self-sustaining industry. His 'billion-litre' idea resulted in what is now widely referred to as the white revolution in India, as dairy farming provides employment to rural dwellers and contributes to one-third of all rural income. In Bangladesh, Mohammed Yunus pioneered microcredit and this innovation spread to several countries. In the region outside of Asia Pacific, social innovators such as Friedrich Wilhelm Raiffeisen

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and Franz Hermann Schulze-Delitzsch (who pioneered cooperatives) from Germany and Robert Owen, Michael Young and Octavia Hill from the UK, are well known for their development work (Mulgan et al. 2007).

An important social innovation that emerged in the Asia Pacific region, was microfinance. The idea of forming a small group of the poor, mostly women, for undertaking the functions of small savings contribution and borrowing from out of their revolving credit fund changed the way banks perceived the poor and their bankability. Called as Self-Help Groups, these have become prominent in several parts of the world including the Asia Pacific. The whole world is now aware and adopts microfinance as it has succeeded in making the poor bankable, leading to poverty alleviation and empowerment of the poor.

The term social innovation was used since the mediaeval times, and this was first mentioned in research studies in the late nineteenth century. Ever since the publication of the seminal work by Joseph Schumpeter, the term innovation has received considerable attention. The literature following Schumpeterian tradition, however, focused on innovations related mainly to economic enterprises. The number of studies using the concept of social innovation in their research work and the number of times that the governments adopted social innovation as a policy option to tackle social problems has picked up in the last three decades. In particular, the studies surged after 2009. Although these studies have brought out a number of dimensions of social innovation, ¹ the focus in this chapter is on the concept and theories of social innovation.

This chapter is presented in six sections. After briefly discussing the evolution of the concept of social innovation in the second section, it is concluded that the concept, although in use since the nineteenth century, gained considerable importance in the literature and policymaking from the turn of the twenty-first century. The reasons why the concept gained importance in the last decade are also provided in this section. A review of the research studies on social innovation is undertaken in the third section to highlight a few dimensions of the research on the subject in the last three decades. In the fourth section, theories of social innovation are reviewed. In the fifth section, an evolutionary perspective to the concept of social innovation is provided to show that the meaning of social innovation constantly expanded over a period of time in response to changing social needs and social relations. The final section concludes the chapter.

¹Research on social innovations covered diverse areas such as urbanisation (Gros-Balthazard and Talandier 2020), corporate sector (Herrera 2015; Mirvis et al. 2016), information infrastructure (Charalabidis et al. 2014; Klievink and Janssen 2014), tourism (Malek and Costa 2014), care services (Casanova et al. 2020), and greater resilience to globalisation from within (Hopeton 2020). There have also been studies analysing the impact of social innovations such as (Courtney and Powell 2020).

2.2 Social Innovation: Tracing the Evolution of the Concept

The term 'innovation' was used in the religious texts as far back as the fifteenth century. This was, however, contested because the term implied 'change' and 'revolution', and often came in conflict with conservatives who did not want any change for the fear of losing control (Moulaert et al. 2017).

The concept of social innovation was used in the academic literature in the nine-teenth century. Ayob et al. (2016) observed that the origin of social innovation concept was sociological. The term innovation was mentioned in the work of Gabriel Tarde, which was published in 1899. Subsequent use of the term was in an academic paper on the American Negro and race blending published in 1909 (Ayob et al. 2016).

Thus, the concept of social innovation was used in the academic literature more than 100 years ago. However, what is surprising is that until about the 1990s, the term social innovation was not widely used in the academic discourse, as well as in policy debates. Ayob et al. (2016) searched Google Scholar in 2013, for papers published on social innovation, and found that there were 44,100 papers related to social innovation; of them, only less than 10% were published before 1989. This clearly shows that the literature on social innovation proliferated in the last three decades.

Another paper similar to the one by Ayob et al. (2016), was published by Păunescu (2014). This paper looked at the research articles that mentioned or included social innovation in their titles. Covering the period of 1966 to 2014, he found that social innovation was used in the titles of 824 research papers. Nearly 81% of these papers appeared during the ten-year period 2004–2014 and about 55% of them appeared in the five-year period 2009–2014 (Păunescu 2014). This paper thus shows that the term social innovation attracted wide attention from researchers in the last decade or so, especially after 2008.

The question that comes to one's mind is that why a concept that appeared in the late nineteenth century was not widely used until about the turn of the twenty-first century? At least three reasons can be offered.

The first reason is related to the ambiguity in the concept itself. There was a disagreement on what constitutes an innovation. The adjective 'social' in the concept of social innovation has different meanings. For Henderson (1993), social means social movements that result in social innovation. He argues that social movements normally begin as informal, unpredictable and often unnoticed. According to him, social movements, emerging on account of dysfunctional social relations between different social groups, lead to social innovation by putting pressure on the elite to bring in new ideas, products/services, structures. For some, social consists of new forms of social collaboration, while it is a collective action for the delivery of innovations to others. Some authors viewed social as non-state actors including

²For this paper, the database of Thomson Reuters ISI Web of Knowledge was used as this is considered reliable scientific database. The paper examined research papers published during the period 1966 to 2014 to identify key topics and debates relating to social innovation (For details see Păunescu 2014).

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the civil society spearheading innovations at various stages. Social is construed as the societal impact in some of the papers. Such a lack of precision in the concept kept researchers away from using this concept in their research work in the early stage. Only after substantial improvement in the understanding of the concept, did the researchers and policymakers begin to use the concept.

Second, with existing policies not fully resolving people's problems, policymakers began to look for new ways of resolving the problems. After the second world war, theories and policies of modernisation, dependency and neo-liberalism were suggested for the development of war-torn nations, as well as for newly independent countries in Asia, Africa and Latin America. Several approaches, cross-cutting these three streams of development, such as basic needs, natural resource management, gender approach, sustainable livelihood, participation and empowerment, microfinance, pro-poor growth and poverty reduction were also advanced. All these development theories and approaches did not work, and the problems of poverty, unemployment and growing inequalities continued in the society, and new problems such as climate change, ageing and elderly care began to appear. It is, therefore, felt that social innovations by organisations such as cooperatives may be more effective to address the problems.

The third factor relates to the 'austerity agenda'. After the economic and financial crisis of 2007–2008, many countries in Europe and North America adopted 'austerity measures' and resorted to reduced spending on public services. Consequently, there was a considerable gap between the services that were needed and the services that were provided. This has resulted in an interest in and deployment of social innovation approaches to meet the gap (TEPSIE 2014). As a result, the number of studies on social innovation has witnessed considerable surge after 2009 (Păunescu 2014; Ayob et al. 2016: 639).

2.3 Research on Social Innovation

In the previous section, it was observed that most of the research studies on social innovation were undertaken after the turn of the century, and that much of the research was recent. Who undertook this research? In which university was this research undertaken? What were the main areas covered? What type of research—conceptual, theoretical or empirical—was carried out?

These questions will be examined in this section with the help of existing studies (Rana et al. 2014; Păunescu 2014; Ayob et al. 2016: 639). Rana et al. (2014) adopted a search process to collect and analyse relevant articles on social innovation undertaken up to 2013 and found 210 articles that were having keywords of social innovation published during 1990 to 2013. Further scrutiny reduced the number of relevant

papers to 185 and usable papers to 105; while 185 articles were used to show demographic characteristics³ of social innovation research, 105 articles were used to make substantive points relating to academic aspects⁴ of the research (Rana et al. 2014).

Who undertook the research on social innovation?

As on December 2013, 341 authors contributed 185 research papers on social innovation. Most of them contributed one article each, while only 21 contributed two or three articles, thus indicating that the research on social innovation was not dominated by a few productive scholars or their research groups.

Which universities produced most of the research on social innovation?

Interestingly, authors from the universities in Europe (England, Germany, Italy, Spain, Netherlands, France, Sweden, Russia, Lithuania, Scotland, Belgium and Denmark) accounted for as many as 55% publications, while North America (the USA and Canada) accounted for 33% of the publications. Even from among these two continents, researchers from universities in USA (21%) and England (15%) dominated the research on social innovation. As far as Asian countries are concerned, researchers from only two countries (Japan and China) figured in the research on social innovation. Another interesting aspect is that four universities (University of Quebec, Canada, University of Oxford, UK, University of Waterloo, Canada and University of California, USA) accounted for large number of publications (Rana et al. 2014). The analysis of country and university origin of researchers on social innovation shows that the research was mostly carried out in the developed west, and that the number of studies from the developing countries is less especially those from the Asia Pacific.

When was the research on social innovation undertaken?

In the second section, we have observed that the research on social innovation was influenced by 'austerity agenda'. In order to empirically validate this observation, there is a need to look at the year-wise number of publications. Most of the publications on social innovation were published in the years from 2010 to 2012 (Rana et al. 2014). In fact, 88 out of 215 papers appeared after the financial crisis of 2008, thus lending the credence that the research on social innovation was guided by the austerity agenda. The two findings, namely, years of publications and universities that carried out the research are located in the developed west, lend further support to the earlier observation that social innovation research was motivated by the 'austerity agenda' as it is the west which was the most affected by the 2008 financial crisis looking for agencies that will meet the gap felt by citizens in the provision of services (TEPSIE 2014).

³These included profile of authors, contributing universities/institutions, university affiliation according to country, frequency of publication, publication outlets and categories of articles.

⁴These include theories and models used, methods employed and topic analysis.

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Thematic areas of research on social innovation

The major thematic areas of social innovation research include business economics, environment and ecology, psychology, public administration, sociology, engineering, urban studies and occupational health. These thematic areas accounted for nearly 71% of the studies on social innovation. Interestingly, the thematic area of social work figured just in 10 studies. What is interesting is that there were no studies on cooperation.

From which countries primary data were collected for research on social innovation?

The venue for most of the studies on social innovation was USA, Canada and countries in Europe. From Asia, only China and Japan figured in three studies, each. From Africa, only South Africa figured in two studies. This clearly shows that the research on social innovation is mostly carried out in relation to issues from the developed countries, and that this research has not touched the issues relating developing or underdeveloped countries in Asia, Africa and Latin America.

What research methodology was used in social innovation research?

Rana et al. (2014) show that a large proportion of social innovation research is conceptual (46%), followed by case study (20%), interview (10%), survey (9%) and secondary data analysis (8%). This suggests that most of the literature on social innovation is conceptual and literature oriented. Only a few studies are based on primary data. Interestingly, the studies on social innovation published until 2013, were not based on primary data collected from the developing or underdeveloped countries. This is a major lacuna in the literature on social innovation.

2.4 Theories of Social Innovation

There was proliferation of literature on social innovation after the crisis of 2008, and the research undertaken by the researchers hailing from universities in the developed West at the behest of international agencies such as European Union and European Commission (see Sect. 2.5). Subsequently, there was an apprehension that the research on social innovation as well as suggestions that this has to be incorporated into policies of the country was motivated. It was also criticised that rising importance to social innovation is nothing but an endorsement to neoliberal policies which typically call for fiscal austerity, deregulation, free trade, privatisation and a reduction in government spending. In other words, the call for greater importance to social innovations, it was criticised that, amounts to rollback of the state from its responsibility of meeting the social needs and addressing the development.

The new proponents of social innovation, however, did not agree with the above, and called those suggesting that social innovation seeks to promote neoliberal policies as biased, economistic and reductivist account of social economy and it has the following three weaknesses (Jessop et al. 2013). First, this approach tends to

ignore the distinctive macro-economic aspects of social innovation as an interactive ensemble of practices. Second, it neglects those aspects of social innovation that are not immediately economic in their objectives such as democratisation, gender equality and so on. Third, it puts so much of emphasis on the economic agency that it pushes the other types of socially innovative agency to the background (Jessop et al. 2013: 111).

The first theories to influence social innovation were related to sociology. In the nineteenth century, there was a duality in the interpretation of social innovation. The writings of Karl Marx and Engels on socialism were becoming important in the Europe around this time. Because the term social innovation was associated with social reform and socialism, this term was pejorative to conservative forces. At the same time, the social problems in the Western Europe were severe on account of industrial revolution, movement of people from rural to urban areas, increasing urbanisation rates and social problems faced by urban dwellers. In order to resolve these problems, social innovation was considered to be the solution in the academic and policy circles.

Under these circumstances, the theories of Max Weber, Emile Durkheim and others laid the foundation to the concept of social innovation. As a founding father of Sociology, Weber (1968), argued that structural, as well as action approaches, were necessary to understand society and social change. Living in Germany, at a time when there was a rapid transformation in the society on account of revolutionary changes in the economy, he wrote the book on *Economy and Society* in which he noted that sociology is concerned with an interpretive understanding of social action and a causal explanation of its course and consequences. According to him, instrumental-rational social action is carried out by actors in the society because it leads to a result that is social innovation. For him, the significance of technical change hinges upon innovation in the social order and how society perceives the technical change. Social innovations (new forms of practice, organisation or social product) will have influence if widely used in the society.

Émile Durkheim witnessed a rapid transformation of France, from a predominantly agrarian society to a modern and industrialised country with the spread of industrial revolution. The division of labour associated with industrial and capitalistic society brought alienation of workers from one another, something quite different from what they experienced when they were living in an agrarian society. According to him, societies with a high division of labour or increased specialisation rendered workers more alien to one another and yet more dependent on each other; specialisation meant that no individual labourer would build a product on his or her own. He propagated that institutions need to socially innovate to promote cooperation among members in the industrial society, where one is for everyone and all for one, and to provide social security to members in the society.

Joseph Schumpeter, an Austrian economist, influenced the literature on social innovation through his famous book on *Capitalism, Socialism, Democracy* (1942). He noted that there is a constant process in which product and process innovation takes place leading to new production units replacing outdated ones. He called this as 'creative destruction' as the new innovation destroys the old units of production by

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replacing them. According to him, innovations influence long-term economic growth by having an impact on business cycles, structural adjustment and functioning of factor markets. It is often viewed that ideas of Schumpeter on innovations mainly influenced economic enterprises, but not social innovation. But, this is not true. He viewed that social innovation is important as this surmounts the resistance against it in the society. He, therefore, argued for integration of comprehensive social theory that allowed multi-dimensional analysis of development and innovation (Jessop et al. 2013).

Schumpeter has had a great influence on innovations; in five decades or more after the publication of his book, the scholarly work focused mostly on innovations in economic enterprises. The theoretical works on social innovation were becoming a few and far in between. Jessop et al. (2013), however, notes that the French intellectual movement acted as a connecting point between the eighteenth century theories on social innovation and the new approaches to social innovation in the second half of the twentieth century. They explained how social innovations emerged due to collective initiative (and not due to state action) and addressed citizen needs. They also brought out the duality in the role of the state—on the one hand, the state acts as a barrier to social innovation, and on the other, as an arena of social interaction that can stimulate social innovations originated by the state or the market.

Social entrepreneurship influenced the concept of social innovation (Defourny and Nyssens 2013). Normally, social entrepreneurship is defined as doing business for a social cause by putting the general interest of the society on top of economic performance. Santos (2012) argues that social entrepreneurship definition should go beyond social cause or comparison of social value with economic value. By making a distinction between value creation (i.e. creating a strong and important impact for the society as a whole) and value capture (i.e. appropriating a substantial portion of the value created with the aim of making a profit), Santos (2012), argues that neither private companies nor the government will engage in areas or activities that have substantial value creation. The failure of the market, as well as the state to engage in areas that can provide substantial value creation, provide a scope for the involvement of social entrepreneurs and social innovation. It is to be noted that social innovations by social entrepreneurs will provide solutions to problems having positive externalities. The central aim of social innovations by social entrepreneurs is to seek sustainable solutions and develop solutions that are built on the logic of empowerment.

Heckman's (1999) theory of social investment and social capital also influenced social innovation. Heckman's theory says that the investment on both cognitive (imparting general, technical and vocational education) and non-cognitive (informal and non-institutional learning) education will lead to a dynamic process with strong synergistic components. The latter will lead to socially and economically valuable non-cognitive skills and motivation produced by schools, families and other institutions. This causes further skill formation in the society leading to social capital, social innovation and economic growth. The theoretical contribution of Heckman is that returns to investment on human capital will be more when invested on the young as compared to the old (Heckman 1999: 6), as the old will have a shorter time to

recoup the investment as compared to the young. Human capital thus has features which are dynamic and complementary.

Public administration has also influenced social innovations providing solutions to the problems relating to hierarchical and bureaucratic decision-making (Jessop et al. 2013). The link between the public administration, especially New Public Management (NPM), and social innovation is brought out by Levesque (2012). Drawing a distinction between organisational innovations (management and coordination relationships) and institutional innovations (power and regulatory relationships), Levesque notes that social innovations in the public service delivery are recognised and supported by public authorities. This is in contrast to the position taken by Santos (2012), who notes that the government will not be in a position to undertake social innovation that creates value.

The point of departure in this approach is the serious efforts (such as greater autonomy and leeway) made to inject the culture of innovation into the government's bureaucracies from the turn of the twenty-first century. NPM is characterised as an ideal type for social innovation as it includes the following elements: (i) Hands-on professional management in the public sector with more autonomy given to organisational heads by way of responsibility sharing and accountability; (ii) Explicit standards and measures of performance by fixing targets, objectives and indicators to enable quantitative evaluations of the performance and accountability; (iii) Greater emphasis on output controls; (iv) Decentralisation of administrations and management with financial autonomy to managers for achieving effectiveness; (v) Shift to a greater competition in the public sector for achieving cost reduction and effectiveness; (vi) Stress on private-sector styles of management practice; and vii) Stress on greater discipline and parsimony in resource use especially human resources. These features enabled the public sector to initiate social innovations such as administrative reforms and modernisation of the state with ultimate objectives of efficient service delivery and responsibility to users.

Levesque (2012) argues that the public sector, by separating the functions of 'steering' and 'rowing', introduced *organisational innovations* in the management, recruitment and promotion, accountability, new performance management tools, choices to users, e-governance and so on. Institutional innovations of the public sector include decentralised public service delivery, delegation, public—private partnerships, reciprocal role of elected leaders and bureaucrats.

2.5 Concept of Social innovation—An Evolutionary Perspective

One of the first definitions of social innovation was by Mulgan et al. (2007), who provided broad, as well as narrow definitions. Their broad definition was that "social innovation refers to new ideas that work in meeting social goals" (Ibid.: 9). Since this definition includes every organisation, every idea and so on, their narrow definition

of social innovation refers to "innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly developed and diffused through organisations whose primary purposes are social" (Ibid.: 9). Three elements in this definition are to be noted. First, social innovations are carried out by organisations that have social goals. Second, organisations not only develop social innovations but also diffuse them. Third, social innovations, which are innovative activities and services, must be in a position to meet social need.

The economic crisis of 2008, and the consequent global challenges of unemployment, poverty and climate change prompted the member countries of Organisation for Economic Cooperation and Development (OECD) to discuss the need to take innovations beyond economic objectives and cover social goals as well in a workshop organised for this purpose. The proceedings of this workshop note that social innovations seek new answers to social problems by identifying and delivering new services and products (labour market integration processes, new competencies, new jobs, and new forms of participation) that lead to an improvement in the quality of individuals and communities. It defined social innovations that deal "with the welfare of individuals and communities, both as consumers and producers. The elements of this welfare are linked with their quality of life and activity. Wherever social innovations appear, they always bring about new references or processes. Social innovation is distinct from economic innovation because it is not about introducing new types of production or exploiting new markets in themselves but is about satisfying new needs not provided by the market (even if markets intervene later) or creating new, more satisfactory ways of insertion in terms of giving people a place and a role in production" (OECD 2011: 24). OECD's definition clarifies that social innovations emerge when the market fails, and secondly, it hints about empowerment when it is mentioned that social innovation gives people a place and role in the production.

European Commission wanted to find out whether European countries could 'do more with less' in the wake of 2008 crisis and austerity agenda, and reduced funds leading to slimming down of welfare benefits and services, social protection, elderly care. It, therefore, funded a four-year project in 2010, entitled "Welfare Innovation at the Local level in favour of Cohesion", the short title of which was WILCO. The main objective was to "describe instruments and approaches that are used by innovative social projects and networks to fight social inequality and stimulate social cohesion". As a part of the project, studies were carried out on innovations (at least six in each city) in 20 cities in 10 European countries. Based on these studies, WILCO defined social innovations as "new and disruptive towards the routines and structures prevailing in a given (welfare) system or local setting. Whether or not they can be seen as "better" (more effective/social / democratic) is a question of its own that can only be answered in the retrospective" (WILCO 2014: 11). WILCO added the following two new features to the definition of social innovation. First, social innovations disrupt the prevailing social welfare structures in a locality. This is more close to Schumpeter's viewpoint that innovations are creative destructions. Second, it is not certain that social innovation will always result in a better outcome such as improved effectiveness, democratisation and so on, and that this can only be found out in retrospective. However, it is also observed that social innovations are

not disruptive, and they should be called as 'catalytic' where social change is the primary objective (BEPA 2011).

In 2013, European Union invited the scientific community to study how social innovations could address societal challenges that emerged in several European countries in the wake of government budget cuts, stagnating economies and high unemployment in the wake of 2008 crisis. A group of researchers joined in TRANSIT (Transformative Social Innovation Theory) project to develop transformative social innovation theory. For this, TRANSIT studied 20 social innovation networks and over 110 local initiatives in Europe and Latin America, and analysed over 450 turning points in the development of social innovation initiatives. TRANSIT defines social innovation as "a process of introducing new social relations, involving the spread of new knowledge and new practices (where the newness is a matter of degree and perspective)... Social innovation can also be understood as a qualitative property of ideas, objects, activities and different groupings of people. A social innovation initiative is a collective of people working on ideas, objects or activities that are socially innovative, and a social innovation network is a network of such initiatives" (TRANSIT 2017: 12). As in the case of WILCO, TRANSIT also notes that the outcome of social innovation cannot be predicted at the beginning—the outcome may be further empowerment and further impetus for change, or loss of motivation and loss of faith in the social innovation itself.

European Union also initiated a global research project on social innovation (called as SI-DRIVE) in 2014, to "describe social innovation in all its diversity, to develop robust models for the creation, roll out and diffusion of social innovations and to better understand the relation between social innovation and social change" (Howaldt et al. 2016: 30). In four-year period, SI-DRIVE covered 25 countries in the world, analysed 1005 social innovation initiatives in these countries and prepared 82 case studies to provide the evidence-based review on policy areas such as education, employment, environment and climate change, energy supply, transport and mobility, health and social care and poverty reduction and sustainable development. According to this research group, "Social Innovation is seen as new (combination of) social practices in certain areas of action or social contexts. What distinguishes social innovations from other manifestations of social change is that they are driven by certain actors in an intentionally targeted manner with the goal of better satisfying or answering needs and problems than is possible on the basis of established practices. An innovation is, therefore, social to the extent that it is socially accepted and diffused in society or certain societal sub-areas and ultimately becomes institutionalised as a new social practice. Just like any innovation, Social Innovation does not necessarily provide an impact that is 'good' for all or 'socially desirable' in an extensive and normative sense" (SI-DRIVE 2018: 11). As in the case of earlier definition, social acceptance and diffusion potential are essential features of social innovation, the outcome of which cannot be predicted at the beginning.

In the inaugural issue of the Stanford Social Innovation Review journal in 2003, the social innovation was defined by the journal as "the process of inventing, securing support for, and implementing novel solutions to social needs and problems" (Phills et al. 2008). After publishing several research papers on social innovation, the journal

reached a conclusion that social innovation is the best concept to understand lasting social change, and that there is need to gain more precision and insight into the concept than what was defined in 2003. Hence, the journal redefined social innovation as "a novel solution to a social problem that is more effective, efficient, sustainable, or just than existing solutions and for which the value created accrues primarily to society as a whole rather than private individuals" (Phills Jr et al. 2008: 36). It is interesting to note that while the solution to meet social needs remained the same in the original, as well as the revised definition, certain attributes to the solution such as effectiveness, efficiency, sustainability and social justice are added. Secondly, the social justice dimension is given considerable focus in the revised definition. Coming from a journal which published research papers on social innovation, these two additions to the original definition implies that researchers found that not all the social innovations are effective, efficient and sustainable, and equitable. Third, by mentioning that benefits of social innovation should go to the entire society this definition implies that social innovation should not lead to elite capture. Similar definitions began to appear later on indicating that researchers began to provide certain attributes to social innovation. For instance, one definition of social innovation is "an 'innovative' program or service [which] is a new or different way to address a societal problem or pursue a charitable mission that is more effective, efficient, sustainable, or just than prevailing approaches" (Salamon et al. 2010: 2).

Moulaert et al. (2017) provided three meanings to social innovation. The first meaning is that social innovation is a response to the unmet needs or needs that are not identified or fulfilled by the State, as well as the market. The second meaning is that social innovation is a process that introduces changes in social relations in such a way that the process results in equal opportunities, social justice and autonomy to the people. This will, in turn, result in social inclusion and cohesion. The third meaning is related to the empowerment. Social innovation results in an increased social and political capacity among people to access resources that are needed to strengthen rights to meet needs and engage in collective action. Rodima-Taylor (2011: 1) defined social innovations as "human adaptations to changing needs and socioeconomic conditions, and are, therefore, embedded in social processes. The concept of social innovation draws attention to the broader, collective dimensions of these adaptive practices".

A comprehensive definition of Social Innovation was provided by TEPSIE (The Theoretical, Empirical and Policy Foundations for Building Social Innovation in Europe), a research project funded by the European Union and collaboration between six European institutions.⁵ After three years of research, discussion and debate, TEPSIE (2014: 4) defined social innovations as "new approaches to addressing social needs. They are social in their means and in their ends. They engage and mobilise the beneficiaries and help to transform social relations by improving beneficiaries' access to power and resources". Although the purpose of formation of TEPSIE was

⁵These institutions are the Danish Technological Institute, The Young Foundation, The Centre for Social Investment at Heidelberg University, Atlantis Consulting, the Catholic University of Portugal, and Wroclaw Research Centre EIT+.

to explore the barriers to innovation, as well as the structures and resources that are required to support social innovation at the European level, and therefore, Europe specific, this definition includes mobilisation of people, transformation of social relations, improved access to resources and empowerment. The inclusion of these elements makes the definition as the most complete.

2.6 Conclusions

The theories and concept of social innovation are discussed in this chapter. The discussion on the evolution of social innovation concept shows that the concept was used since the nineteenth century, and sociologists were the first to use the concept. The number of academic papers on social innovation and the use of the concept in policymaking witnessed a phenomenal increase from the turn of the twenty-first century. It is argued in this chapter that three reasons contributed to such a growth in the use of the concept. First, the concept of social innovation was imprecise; this deterred the wider use of the term by academicians. Second, the policies formulated by the countries did not achieve the desired success in resolving problems such as unemployment. Added to that, new problems such as climate change and ageing began to appear. So, social innovation was thought to be a solution to both old and the emerging problems. Third, the financial crisis of 2008 has resulted in austerity measures, leading to reduced expenditure on the provision of services by the government. This, in turn, resulted in a gap between services provided by the government and what people wanted. Social innovations by the non-profit sector were thought to be a solution to bridge the gap.

In this chapter, a review of the research studies on social innovation in the last three decades was undertaken to highlight the following. First, the academic research was not dominated by a few productive scholars or their research groups. Second, the research on social innovation was mostly carried out in North America and Europe (especially the USA and Europe), and that the number of studies from the developing countries is less, especially those from the Asia Pacific. Third, a significant proportion of the studies with social innovation as the main theme appeared after 2009, thus suggesting that the financial crisis of 2008, and the consequent austerity agenda by countries in Europe, the USA and Canada contributed to the surge in research on social innovation. Fourth, the thematic focus of the studies was business, economics, environment and public administration. There is hardly any literature on cooperatives. Fifth, the data for these studies were mainly collected from the developed west. The data were collected only from three countries in Asia and Africa—Japan and China in Asia, and South Africa from the African continent. This shows that the research output on social innovation was not based on wider understanding and that there is a need to undertake research on social innovation in the developing and underdeveloped countries. Sixth, most of the research was conceptual and literature

oriented, and only a few studies were based on primary data collected from developing or underdeveloped countries. This is a major lacuna in the literature on social innovation.

In this chapter, the theories of social innovation starting from those propounded by sociologists such as Max Weber and Emile Durkheim and economists like to Schumpeter are reviewed. In the nineteenth century, social innovation was associated with social action, solidarity and social reform, and this was considered to be essential for resolving social and economic problems faced by the poor, especially in urban areas, on account of unemployment, urbanisation, lack of access to social security, poor quality of civic services and so on. On the other hand, the term was pejorative to conservatives who resisted social reforms. Schumpeter's work on innovations as 'creative destructions' resulted in considerable interest among academicians and policymakers; but, the literature on innovations was mostly related to economic enterprises although Schumpeter held a view that innovations in economic enterprises have to be socially relevant for wider acceptance. The subsequent theories that influenced social innovation were social entrepreneurship, social investment and social capital and new public management.

The meaning of social innovation constantly expanded over a period of time in response to changing social needs and relations. From the review of concepts in this chapter, it is concluded that the following are elements in the concept of social innovation. First element is that innovations are initiated by institutions or organisations whose primary goal is social. Second, innovative activities and services aim to meet the unmet needs of people. Third, social innovations emerge because of the failure of the market. Fourth, a place and role to people is provided in innovative activities and services. Fifth, social innovations tend to be disruptive as they replace existing activities and services. Sixth, social innovations are expected to be efficient, sustainable and socially just. Seventh, the nature of outcomes of social innovation cannot be predicted at the beginning. The outcome can be good such as empowerment or desire for more changes. It can also be negative such as loss of motivation and faith among people in the very social innovation itself. Hence, monitoring and evaluation assumes importance to ascertain the effect of social innovation on people. Eighth, benefits of social innovation should go to the entire society, not for a few individuals, and that social innovation should not lead to elite capture.

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Chapter 3 Cooperatives and Social Innovation



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Abstract Social Innovation, the innovative activities/services that are aimed at meeting social goals, has been at the forefront of both academic and policy discussions. Among the institutions that engage in social innovation as a strategy to serve the community, cooperatives and social solidarity organizations are at the forefront. Cooperatives, themselves hailed as a great social institutional innovation of the nineteenth century, facilitate social innovation and deliver social good. Healthcare, alternative energy and environment are the key areas of social innovation by cooperatives in Asia and Pacific region, similar to their counterparts in Europe. The empirical evidences point to the presence of social innovation, as well as continued emphasis on increased social innovation on the part of cooperatives in the Asia Pacific region, both for serving the social purpose and for survival in the competitive setting.

Keywords Social innovation \cdot Social enterprise \cdot Social orientation \cdot Enterprise orientation \cdot Cooperative principles and values

3.1 Introduction

As per a widely used definition, "social innovation refers to innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly diffused through organizations whose primary purposes are social" (Mulgan 2006). While business innovations are driven by the desire for increased profits, social innovations are driven by the needs of the people. Cooperatives, organizational innovations themselves, are driven by community needs and in this sense part of the social innovation. Cooperatives were a micro level social innovation of the 19th century, when collective action was needed to respond to the challenges posed by industrial

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revolution (Esim 2018). Even though cooperatives are business organizations, they are established also to realize social purposes such as self-help, mutuality and equal participative opportunities. However, since cooperatives are business organizations and operate in a competitive market environment, they should attain operational efficiency like any other private for-profit enterprise. At the same time, they have to continuously and consistently strive to realize the economic and social emancipation of their members.

The management of a cooperative enterprise has to blend business skills with social orientation and work towards the objective of member development. The managing committee needs to have the competence to run the organization as an economically viable business unit and should understand the economies of scale in its operation so that the opportunities in the environment could be exploited for the development of the members. At the same time, the committee has to keep a constant interface between the members and the organization. They should have closer interaction and greater awareness of organizational goals and individual goals which are mutually complementary.

It is said that "there is often a hiatus between Cooperation as an ideology and Cooperation as a business. Actually, cooperation as an ideology cannot spread unless Cooperation as a business is successful. Conversely, the business of Cooperative Institutions will not serve its purpose if it forsakes cooperative ideology. These two have to be combined. There is nothing in Cooperation ideology which goes against sound management of Cooperative business and at the same time, there is nothing in scientific management principles which should circumscribe their application to Cooperative enterprise" (Dubashi 1994). Therefore, cooperatives need to be perpetually innovative. The innovations are needed to address the various economic and social needs of the member community. It is in this backdrop that this paper explores the issues related to social innovation vis-à-vis cooperatives. This paper is primarily focused on examining the social innovation efforts by cooperatives in Asia Pacific region. It attempts to examine the distinct features of cooperatives from across the region.

3.2 Cooperative as a Social Enterprise

A cooperative is an association of members, formed by members and for members, following the principles and values of Cooperation as advocated by the International Cooperative Alliance. Voluntary and Open Membership, Democratic member control, Member economic participation, Autonomy and independence, Education training and information, Cooperation among cooperatives and concern for community are the core cooperative principles, while **self-help**, **self-responsibility**, **democracy**, **equality**, **equity** and **solidarity are considered core cooperative values**. "Members' transaction costs decrease as a consequence of cooperative principles and cooperative values. The members' cooperative values reduce their uncertainty

in relation to each other and in their relationship to the business environment. Thus, there are two categories of values: social values and sovereignty values. The cooperative principles are characteristics of the cooperative organization that aim to reduce transaction costs in the members' relationships with the cooperative. Thus, we find two types of principles: business principles and society principles. Business principles state how relationships between the cooperative enterprise and the members should be designed. Society principles reduce transaction costs for members in their interactions" (Nilsson 2007). A member of a cooperative is a member of an enterprise in the sense that the cooperative, like any other form of business organization, is engaged either in providing services or a product or products. All enterprise values like profitability, expansion, diversification, organizational development and human resource development that are applicable to other forms of business organizations are equally relevant to cooperatives. A member of a cooperative is also a member of a social institution, and hence the social values like mutuality, trust, equity and sharing become highly relevant.

A cooperative pursuing institutional (social) value as an end in itself, unmindful enterprise realities such as viability and profitability, remains a cooperative only on paper. Alternatively, following enterprise values without taking the member's interest into account degenerate the cooperative into an investor owned concern. Only when both goals are attained together does the uniqueness of a cooperative organization emerge (Seetharaman and Mohanan 1986).

Given the above features, cooperatives very much qualify to be called as social enterprises. Cooperatives may be representatives of a very old movement, but they imbibe the features of and remain relevant like any modern enterprise. While both the for-profit and the non-profit institutions are undergoing a transformation to become social enterprises, in cooperatives we have a time-tested business model with social orientation.

3.3 Cooperatives and Social Innovation

Cooperatives meet social needs that are not fulfilled by the markets, through collective engagement. The collective thinking and democratic decision-making process let members participate voluntarily in problem-solving. This brings both the internal and external innovation, which facilitates social change and progress. In fact, by their very purpose and structure, cooperatives facilitate social innovations as per the needs of time. Cooperatives, as part of the third sector, are social economy actors with multi-stakeholder features. Supported by bonding social capital in the internal structures and bridging social capital in the external structures, cooperatives facilitate co-production. With these characteristic features, cooperatives facilitate developing and diffusing innovative activities/services in the production (delivery) process in a more sustainable manner (Matsuyo 2015).

Cooperatives can play the role of social entrepreneurs and innovators, generating positive impacts on local and regional development and adding value to the territories in which they operate. It is illustrated in a study on tourism cooperatives in Brazil, that the farming community who were suffering from inadequate income from agriculture, and hence were facing both social and economic insecurity were greatly benefitted through the formation of tourism cooperative. Through cooperatives "they created a new model of collective work, developed new alternatives to generate income through new tourism-related activities and products and organized themselves through new institutional arrangements that required learning and cooperation with different actors (Quandt et al. 2017). Well, over half a century ago, a study on Canadian Women Housing Cooperatives had demonstrated that cooperatives have responded to distinct social issues of women. Their contribution included creating a new model of housing facilities but also went into the new realm of social innovation. The feminist approach made these cooperatives go well beyond creating housing as shelter, using it for the delivery of essential services, the creation of community and a development of an economic base for the women members (Wekerle 1988). Such innovative initiatives made scholars argue that cooperatives are the driver of social innovation in a region by introducing principles such as mutual aid and solidarity, supporting the development of social actions through collective participation in its ventures. It also promotes social inclusion and introduces alternative solutions for socio-economic problems (Oliveira and Silva 2012). Innovative activities of cooperatives create new opportunities, a more balanced income distribution, better social and organizational practices (Rollin and Vincent 2007), the mitigation of social exclusion and improvements in quality of life (Pol and Ville 2009).

Cooperatives and social enterprises want to generate social innovation "because social innovation arises out of society and aims to find solutions for social/ecological/economic problems with clever entrepreneurial models" (Pfister 2018). Empirical studies on cooperative clusters like Mondragon and Anne coop have demonstrated that cooperative clusters have facilitated social innovations such as community participation in business development and single-window for all member requirements (Juan and Rafael 2019). Examples of social innovation by cooperatives are found in different parts of the world. In most of such cases, we can find that the cooperatives were responding to the changing social situation and consequent changes in social needs of the community, as may be seen through the examples discussed in the next section.

Most cooperatives often address the needs of vulnerable communities. Be it agricultural cooperatives, artisan cooperatives, women cooperatives and/or consumer cooperatives, they constantly address the issues of the socially disadvantaged groups. From finding new ways of understanding their needs to ensuring their participation in organizational matters to offering goods and services at an affordable price, these cooperatives constantly innovate. Social goods, such as health, education, sanitation, for example, are the most important needs of the large groups of members, and hence cooperatives often find new ways of producing and delivering them to the community. While for-profit business organizations innovate to address the changing nature

of demand, cooperatives innovate based on the changing and unmet needs of the members.

Cooperatives facilitate social innovation even in the most modern, technology-driven, urban environment. For instance, Platform cooperatives, the most recent cooperative model, build social innovation with technology, bringing gig economy workers together in worker cooperatives to provide services or sell products in consumer cooperatives, with collective ownership and governance by the people who depend on and participate in by using digital platforms, websites or mobile applications (Esim and Katajamaki 2016).

Germany based Fairmondo, is a cooperative online marketplace that is owned and run by its buyers, sellers, workers and investors. It sells ethically sourced products from producers and small fair-trade companies including cooperatives (thus also providing an example of cooperative to cooperative trade). It is an online fair-trade alternative, with transparent and fair terms, enabling users of its services to know where the products are coming from, and how they have been produced (Esim and Katajamaki 2016).

The Coopératived' Activitéet Emploie (CAE) or, in English, Cooperative of Activity and Employment is a business cooperative of entrepreneurs who have the status of salaried employees. This is a new organizational form and a social innovation that overcomes the structural and individual barriers to people starting businesses in developed mixed economies. Further, this new organizational and business form represents an important extension of democratic and cooperative organizing into domains of explicit entrepreneurship and innovation. This extension has important practical advantages, including the leverage for the spread of cooperative and the capacity of cooperatives to move further into the mainstream of community and state-level economic development (Ashta and Cheney 2017).

However, in the CAE, each entrepreneur brings one's own equity and assets specific to the business but also shares common resources in return for a fee. The CAE is a new organization of economic relations and is, therefore, a social innovation in that sense, called co-entrepreneurship by their members (Les CAEs 2014).

A variety of such innovations are found throughout Europe especially in the area of alternative energy. Cooperatively operated wind turbines in Denmark (Olesen et al. 2004) and Germany (Toke et al. 2008), and cooperatively owned biomass heating networks in Austria (Madlener 2007), are just a couple of examples. "Apart from constituting social innovations in themselves, energy cooperatives and similar initiatives have also been important sites of technological innovation activities, as in the cases of self-build groups around renewable energy technologies referred to above" (Schreur 2010).

What is socially innovative in the above examples is that the cooperative is evolved through members of a collective rather than individuals per se and an important social issue, global warming, is addressed through the cooperative endeavour. Further, they innovated and ventured into activities that have both economic and social dimensions. So, the social innovations are not only in the objectives and outcomes of social benefits but also in their nature of diffusion and mutualistic nature and processes. Cooperatives often combine these two basic features of social innovation in practice.

Therefore, social innovation by cooperatives may be said to include new arrangements in a society which help to meet unmet social needs; these actions can take place on local, regional, national or even global levels. For example, group lending in microfinance represented a new arrangement at a local level forty years ago (Yunus and Weber 2011). At the macro level, the formation of international bodies like the International Cooperative Alliance and the UN initiatives on cooperatives too are innovations driven by the cooperatives.

3.4 The Asia Pacific Scenario

Cooperatives in the Asia Pacific, like their counterparts in other parts of the world, have facilitated social innovation across varied time and space domains. Even though cooperatives in most part of this region function in a "not so supportive" legal environment and often the state patronage turns into actually state intervention, cooperatives still have ventured in to new and socially much needed areas. We illustrate some examples here.

To begin with the most recent form of cooperatives, the platform cooperatives would be the right starting point. A case in point is Loomio, a web-based, open-source worker cooperative from New Zealand, providing communication and decision-making infrastructure for individuals and organization. Its innovativeness lies in enabling collaborative decision-making and offering a space for people to interact and collaborate regardless of their geographical location.

Loomio began in 2011, when activists and social entrepreneurs from the Enspiral Network realized they needed to solve the issues: fast, inclusive, effective decision-making without meetings. In 2012, a cooperative was formed and it released a prototype (Loomio Beta). They found that many others around the world needed the same solution. In 2014, Loomio ran a successful international crowdfunding campaign, enabling them to work on a new version of the software, Loomio 1.0, which was released the following year. In 2015, Loomio raised a round of ethical capital and is working to bring collaborative decision-making to millions of more people around the world. With the right collaborative purpose, groups generate better ideas, decisions and actions than any individual would by themselves. The Loomio Cooperative aims to break down the barriers to participation in decision-making at every level: in neighbourhoods, community organizations, businesses, social movements and local and national governance.

It is a social enterprise collectively owned by the people building it. Unlike a traditional profit-maximizing company, revenue is not an end in itself, but a means towards achieving a core social purpose. A worker-owned cooperative structure is a powerful way to live our values of collaboration and collectivism, which are essentially social in nature. Loomio is committed to remaining independent so it can provide a neutral place for any group to come together and aims to develop tools which are iterative, self-reflexive and adaptive, driven by the collective wisdom of the user community (Loomio 2020).

Innovations by cooperatives in the Asia Pacific region happened within the framework of conventional cooperative structures as well. Detailed case studies on worker cooperatives for instance, such as the Alpha Cooperative in the Philippines, ULCCS and Transport Cooperative Society in India, and the C-Mac Industries Cooperative in Australia, demonstrate the social innovation and social protection provided to the worker members (Altman et al. 2020). The worker cooperatives are found fulfilling a social purpose by preserving jobs in the face of bankruptcies and retrenchments, facilitating the solidarity building elements with the workers coming together to take ownership of a given business often with support from co-workers and cooperative movements and paving the way for a sociopolitical empowerment and giving voice to workers in deciding their future through these enterprises.

Cooperatives in the Asia Pacific region have also started making their mark in addressing a very important social need, through cooperative provision of care services such as childcare, elderly care, mental health care, etc. (Leviten-Reid 2009). Medical cooperatives in countries like Japan and India have come out with innovative ways of providing social safety nets to vulnerable groups of the society. This is a social innovation because it addresses growing unmet needs for care in the face of demographic changes in a collective manner. It is opined that cooperatives providing care services encourage beneficiaries to actively participate in care plans in a holistic manner. They also provide better and fairer wages and benefits to workers, especially their members. In many of these cooperatives, women are often the majority of workers and members (ILO 2020).

Another significant social innovation found in the region is the emergence of cooperatives dedicated to the collection and recycling of waste. The SWaCH waste pickers cooperative in Pune, India is a celebrated example in this field (ILO 2019). Apart from providing effective waste management systems in urban areas, such cooperatives "integrate members into waste management systems, and improve their access to occupational safety and health, training, and financial services. This is a social innovation because it moves toward addressing decent work deficits faced by informal workers" (Esim 2018).

3.5 Conclusion

Social innovation is the driving force today and cooperatives are one of the major institutions facilitating such innovation. Of course, cooperatives in Europe have been the front runners in social innovations. However, the new generation cooperatives in the Asia Pacific have been close on heals with their European counterparts, in innovating and pursuing the social agenda. In as much as innovations signify the level of organizational performance, they are also necessary for the survival of the organizations. For cooperatives, perpetual innovation is integral to the very purpose for which they are established. No doubt cooperatives need to pursue a lot of business innovation (enterprise orientation), but the core of their identity will be social innovation (societal orientation). It is time to use social innovation as a parameter

to assess the principle-based organizations like cooperatives and solidarity-based organizations. In the Asia Pacific context, a conducive policy together with a legal environment for the cooperatives, in general, and social cooperatives, in particular, is the need of the hour. This would be possible with greater academic scrutiny and research output that provides the tools for policymakers.

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Chapter 4 Health Insurance as Social Innovation for Farmers in Cooperatives: Lessons from Yeshasvini in Karnataka, India



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Abstract Health insurance (called as Yeshasvini) was introduced for members of cooperative societies in Karnataka, India, to address the problem of high and mounting healthcare expenditure incurred by the poor, leading to poverty and vulnerability among them. Yeshasvini was a new idea introduced to meet unmet needs to reach social goals and promote members' welfare. This chapter examines whether Yeshasvini was implemented as social innovation by addressing the following questions. What has been the process adopted in providing awareness on Yeshasvini? What is the level of awareness among farmer beneficiaries? What are the levels of enrolment across the socio-economic groups? What is the extent to which the health insurance benefits are utilised by farmers from cooperatives? How did the utilisation pattern influence the welfare of farmers? What lessons can be learnt from this social innovation by cooperatives? These questions are answered in this chapter with the help of primary data collected from 552 sample households from 60 villages in three Karnataka districts. It is argued that Yeshasvini as a social innovation met the member needs to some extent; but, its success would have been more if there are effective alliances with the other local institutions such as community-based organisations and local government in the implementation.

Keywords Health insurance · Social innovation · Welfare loss · Yeshasvini · Karnataka

4.1 Introduction

Social innovation is defined as new ideas implemented by individuals and institutions that meet unmet needs in order to reach social goals for the welfare of the people (Mulgan et al. 2007). An important unmet need was inadequate access to quality healthcare. As a result, the poor, as well as the rich in India, tend to use expensive

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private healthcare providers in India. Consequently, the poor spend a considerable proportion of their meagre incomes on healthcare leading to deepening of poverty and perpetuation of vulnerability. Studies show that health shocks are a major cause of entry into poverty in India (Peters et al. 2002) and other developing countries (Gertler and Gruber 2002; Xu et al. 2003; Krishna 2004). The poor peasants and workers in Karnataka show a high incidence of health-related risk factors (Rajasekhar et al. 2007; Rajasekhar 2012), and they depend on exploitative moneylenders to tide over the crises on account of ill health. Considering the above, the Central government, as well as state governments, introduced health insurance schemes to: (a) reduce the use of expensive private health care; (b) reduce the dependence on exorbitant informal borrowing for meeting health expenditure; and (c) mitigate the adverse effects of ill health among the poor (Rajasekhar et al. 2011).

In order to provide healthcare to members, the Yeshasvini Cooperative Farmers Health Care Scheme² (hereafter Yeshasvini) was introduced by the Government of Karnataka in 2003. Members of all rural and urban cooperative societies are eligible to enrol themselves in the scheme and the scheme has been extended throughout the state. In 2017, 4.15 million³ farmers were enrolled in Yeshasvini. Enrolment in the scheme is voluntary. Farmers can avail cashless treatment in 725 network hospitals with the help of enrolment card provided by their cooperatives (Rajasekhar and Manjula 2012). The Department of Cooperation is implementing the scheme in all districts of Karnataka.

Yeshasvini is thus a social innovation that has been providing social protection to cooperative farmers in Karnataka, for the last one-and-half decades. Social innovation thrives best when effective alliances between small and big organisations are established for the tiny, but novel idea to grow and scale up. Viewed from this angle, we argue that, Yeshasvini as a social innovation adopted by cooperatives would have become successful if there are effective alliances with the other local institutions such as community-based organisations, local government and so on.

There are some scholarly studies on the performance of Yeshasvini (Aggarwal 2010; NABARD 2007; ILO 2008; Ito and Hono 2010; Kuruvilla et al. 2005). However, these studies did not look at the potential of health insurance as social innovation for farmers' cooperatives. Against this background, this chapter looks at the experience of Yeshasvini as social innovation for cooperatives as this may provide valuable lessons. The chapter addresses the following questions. What has been the process adopted in providing awareness on Yeshasvini? What is the level of awareness among farmer beneficiaries? What are the levels of enrolment across the socio-economic groups? What is the extent to which the health insurance benefits

¹Studies conducted by Anirudh Krishna found that, in parts of India (Rajasthan, Gujarat, and Andhra Pradesh) and Africa (Ghana, Uganda, and Kenya), between 59 and 88% of a large sample of households attributed their descent into poverty, and their inability to escape from it, primarily to ill health and health-related expenses (Krishna 2003, 2004; Krishna et al. 2004, 2005).

²Some of the scholarly articles on Yeshasvini schemes are Aggarwal (2010) and Kuruvilla et al (2005).

³ Accessed from the official website (https://yeshasvini.kar.nic.in/achieve.htm) on July 25, 2017.

are utilised by farmers from cooperatives? How did the utilisation pattern influence the welfare of farmers?

In this chapter,⁴ we discuss the implementation of Yeshasvini in Karnataka with the help of primary data collected from three agro-climatically different types of districts (see Chart 4.1); Urban (close to Bangalore city) (Bangalore Rural), agriculturally prosperous (Shimoga) and backward (Gulbarga). We randomly selected 60 villages representing all the taluks from three districts (18 from Bangalore Rural, 20 from Gulbarga district and 22 from Shimoga district) to analyze the study questions. A semi-structured questionnaire was used to have a discussion on the implementation process (awareness campaigns in the village, enrolment process and utilisation status) of the scheme with key informants⁵ from each of 60 sample villages.

The methodology⁶ to select sample households was the following. First, a list of households having membership in Yeshasvini scheme or those which have had membership in three years prior to the survey was collected for all the sample villages. If the number of member households was equal to or less than 15 in a village, all

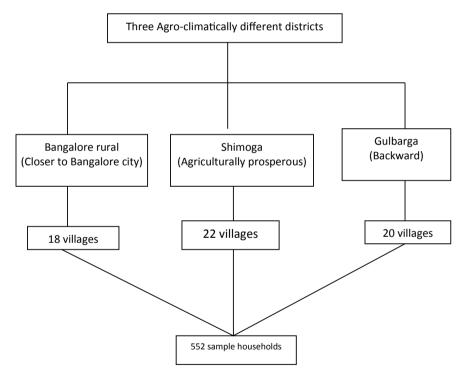


Chart 4.1 Methodology

⁴This chapter is culled out from Rajasekhar and Manjula (2012).

⁵Farmers and wage labourers in agriculture as well as officials such as Secretary of Cooperative Society, GP staff.

⁶For more details on methodology, see Rajasekhar and Manjula (2012).

of them were selected. If more, a sample of 15 households was randomly drawn. Data were collected from 552 sample households from 60 sample villages. The information was collected by trained field investigators (in 2011), through a structured questionnaire which collected information on basic household details such as caste, housing, access to drinking water, electricity and ration cards, income, etc. awareness among households on Yeshasvini scheme, experience with regard to enrolment and utilisation, and factors influencing the status of enrolment and utilisation.

Table 4.1 on the profile of sample households shows that exactly 14% of the households belonged to disadvantaged caste categories of SC/ST, while close to 60% belonged to dominant and upper castes. Over 90% of the sample households were residing in their own houses. Nearly 95% had electricity connection. About 55% of the households were having Below-Poverty Line ration cards; the proportion of households having Antyodaya card, sanctioned to the poorest, was, however, less than 5%. Interestingly, over 40% of them were possessing Above-Poverty Line ration cards. *Thus, most of the sample households belonged to dominant caste groups and were better-off.*

Table 4.1 Profile of the sample households

Particulars	Sample households (N = 552)
SC/ST households (%)	14.0
Households (%) belonging to dominant and forward caste	58.9
Households (%) living in own house	91.6
Households (%) having electricity	94.9
Households (%) having Below-Poverty line card	54.5
Households (%) having Above-Poverty line card	40.4

Source For this as well as the following tables and figures the source is primary data, unless specified otherwise

⁷The average number of households covered per village is nine because in most of the sample villages the total number of households having membership (currently or in the immediate past) in Yeshasvini was much less than 15.

4.2 Awareness on Yeshasvini

Within the first two years of initiating Yeshasvini in the state, the scheme was started in about 64% of the sample villages, and a couple of years later in the remaining villages. Thus, the scheme was in operation in the sample villages for 7–8 years at the time of collecting data for the study. The Primary Credit Cooperative Society (PACS) took the lead in the initiation of the scheme in most of the sample villages, while the Milk Cooperative Society took the lead to initiate the scheme in 28% of the sample villages. It is in this context that the following questions are addressed: Who provided awareness on Yeshasvini in the sample villages? How was it provided? How were households motivated to join in the scheme?

4.2.1 Who Provided Awareness?

Discussions with key informants in sample villages revealed that in Bangalore Rural, the Secretary of the Milk Producers Cooperative Society (MPCS) took the lead to provide awareness on Yeshasvini in half of the villages. In the remaining villages, elected Director of cooperative society, Supervisor and Bank staff took part in spreading the awareness together with the Secretary of MPCS. In Shimoga, the Secretary of PACS provided awareness in almost all the villages together with his support staff, barring two villages where MPCS took the lead to initiate the scheme. In a majority of the sample villages of Gulbarga, the Secretary of VSSN took the lead in providing awareness on Yeshasvini, at times, with the help of members of the society and other staff. Thus, the Secretary of MPCS took the lead in providing information where the milk society was present. If there was no MPCS, the Secretary of PACS provided information to members of the credit cooperative society.

This is corroborated by the data collected from the sample households. Over 93% of the sample households stated that they heard about Yeshasvini from the Secretary of MPCS or PACS (also called as VSSN) or the bank supervisor from the District Cooperative Bank (Table 4.2).

Yeshasvini				
Source of information	Bangalore Rural	Shimoga	Gulbarga	Total
Milk dairy/cooperative society secretary	82.4	58.5	70.3	68.3
Bank supervisor	12.2	33.7	24.1	25.2
Notice board of cooperative society	0.7	3.3	0.6	1.8
Through TV, Newspaper, etc.	0.0	0.8	1.3	0.7
Others	4.7	3.7	3.8	4.0
Total (Nos.)	148	246	158	552

Table 4.2 Distribution of sample households (%) by their response on 'from whom they heard of Yeshasvini'

4.2.2 How Was the Information Provided?

Key informants from half of the villages in Bangalore Rural revealed that members of MPCS were given awareness when they went to deliver milk in milk collection centres. In some villages, information was provided in the monthly meetings or special meetings called for this purpose. Officials such as supervisor attended such meetings. The strategies of putting up the poster on the notice board and undertaking household visits were adopted. In Shimoga, information was mainly provided when members visited the credit cooperative society to take the loan, repay or reschedule the loan and any other such purpose. In a majority of the villages in Gulbarga, awareness on Yeshasvini was provided when society members visited to obtain a loan, repay or reschedule a loan, deliver milk or when people visited the office.

Fixing of a target for enrollment acted as a driving factor for information provision in several villages. It was explained that usually a target was given to the Secretary of VSSN, who made an attempt to achieve the target by motivating members visiting the Office. If this did not succeed, the Secretary was forced to visit houses for this purpose. One VSSN Secretary from Gulbarga stated that "a camp was held in the initial year. Now, people are aware of the scheme. Non-members of Yeshasvini come to know from others. But, I have not provided any awareness in the last couple of years". It was found that this was more or less the pattern in all the districts. A rigour in the provision of awareness, which was visible in the initial years, petered off as the years gone by. At the time of enrolment, if the Secretary achieved the target easily through usual methods of asking those coming to deliver the milk or seeking loans, nothing further was done. Otherwise, additional effort to enrol members was made not necessarily by way of providing awareness to convince them about joining the scheme but through other means.

The help and support from Grama Panchayats and the community-based organisations (CBOs) such as Self Help Groups (SHGs) was not availed. It is to be noted that the decentralised governance has been strong in Karnataka (Rajasekhar et al. 2018), and the number of SHGs in each village is quite high. It has been estimated that on an average 16 SHGs are present in each village (Rajasekhar 2019). Even then the help and support from these local organisations was not taken in spreading the awareness on Yeshasvini probably because this was not considered essential by officials at the top level who implemented the scheme. Secondly, most cooperative societies in the initial years of implementation resorted to automatic membership by paying premiums on behalf of the members and deducting the same from sale proceeds of milk or from loans issued by the credit cooperative society.

4.2.3 How Were Households Motivated?

Members were motivated to get enrolled by conveying the message that the scheme would be handy when a household is compelled to provide treatment to major illnesses faced by its members. Members were also motivated by stating that treatment could be obtained from big, super speciality and expensive hospitals. The other important message was that the household could benefit from free treatment of up to Rs. 2 lakhs with very small premium payment. In some villages, households previously benefiting free treatment under the scheme motivated others to join.

Key informants noted that messages provided across the villages in Shimoga varied. For instance, the key message in one village was "large amounts will be available for treatment if there is any major illness", while in another it was "when there is a major illness requiring an operation, you (the member) can obtain treatment with just Rs. 150". In general, the advantages of the scheme are highlighted by mentioning the amount of treatment available, coverage of 1,600 ailments and treatment in very good hospitals. All these have motivated the people to "register with the hope that the (Yeshasvini) card may be useful when faced with illnesses".

In Gulbarga, members were motivated to join in the scheme by highlighting the advantages such as treatment and surgeries up to Rs. 2 lakhs in very well known hospitals in return of just by paying Rs. 150 of premium per annum. Attention was also drawn to those who have already utilised the scheme. One of the secretaries remarked that "we tell them that illnesses to which the card could be used for. Those who are interested will join and those not interested will not join".

It needs to be, however, noted that key informants from several villages across the sample districts alleged in the open meetings that there was coercion on members of VSSN to join the scheme. This was neither refuted nor accepted by the Secretary of VSSN, who was present in most of these meetings. We will discuss this issue further in the section on enrolment.

4.2.4 Level of Awareness

If households have good knowledge of the scheme then they are more likely to enrol and utilise the scheme. Hence, an attempt is made to assess the awareness level by asking a series of questions on the scheme. The first question was on the key benefits of the Yeshasvini scheme. Over 90% of the respondents stated that free surgeries in the big hospitals located in Bangalore city was the key benefit of the scheme. A few stated that free treatment up to Rs. 2 lakhs was the key benefit. Only about 1% of the households stated that they were not aware of the scheme. *The sample households were thus aware of key benefits provided by Yeshasvini*.

When it came to awareness on the critical aspect of the maximum insurance coverage, only about 12% of the households were aware that the maximum coverage was Rs. 2 lakh per individual (Table 4.3). About 52%, especially from the backward district (i.e. Gulbarga), stated that they were unaware of the maximum coverage. A significant proportion (23% of the sample) provided an incorrect answer that the maximum coverage was Rs. one lakh. The worst part was that about 5% of the sample households thought that there was no limit at all!

Zonao v mi			
Bangalore Rural	Shimoga	Gulbarga	Total
4.1	4.9	6.3	5.1
26.4	24.0	18.4	23.0
12.2	12.6	10.1	11.8
44.6	52.0	58.9	52.0
12.8	6.5	6.3	8.2
148	246	158	552
	Bangalore Rural 4.1 26.4 12.2 44.6 12.8	Bangalore Rural Shimoga 4.1 4.9 26.4 24.0 12.2 12.6 44.6 52.0 12.8 6.5	Bangalore Rural Shimoga Gulbarga 4.1 4.9 6.3 26.4 24.0 18.4 12.2 12.6 10.1 44.6 52.0 58.9 12.8 6.5 6.3

Table 4.3 Distribution of Yeshasvini sample households (%) by their responses on the maximum insurance coverage provided in Yeshasvini

About 73% of the sample households correctly stated that the members of cooperative societies or members of SHGs having bank linkages are eligible to receive the scheme benefits (Table 4.4). Some of the households were not aware of the eligibility criteria. Over 15% of the sample households provided an incorrect response that all are eligible, while 8% did not have any idea.

Pre-existing diseases are covered by Yeshasvini; but, half of the sample households were unaware of this. The proportion of households not aware of this was relatively high in the backward district at 59%.

Typically, beneficiary households were provided information in general terms that they would receive free treatment if they join in the scheme, and they can get surgeries done from very good hospitals. One respondent remarked that 'we are aware that free operations are conducted. We do not know much about the scheme', while another stated that 'we do not have proper information. We have enrolled because we were told that it will be useful to us'. Given that most of the households were informed about the scheme when they had gone to deliver the milk or repayment of the loan at the VSSN, this is bound to happen as the officials could not have spent considerable quality time in explaining them about the scheme.

Table 4.4 Distribution of Yeshasvini households (%) by their responses on 'the eligibility criteria for enrolment'

Responses	Bangalore Rural	Shimoga	Gulbarga	Total
All are eligible	19.9	10.6	18.7	15.4
Members of credit/milk cooperative society	57.6	69.7	57.2	62.9
Member of SHG that has borrowed from bank/cooperative	9.3	12.2	10.2	10.9
Less than 75 years age	2.0	0.8	0.6	1.1
Others	2.6	0.0	2.4	1.4
Do not know	8.6	6.7	10.8	8.4
Total (No.)	148	246	158	552

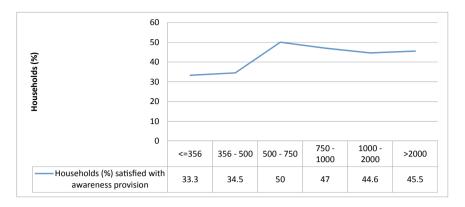


Fig. 4.1 Proportion of households stating that they were satisfied with information provision by per capita income

That cooperatives were not very successful in providing awareness on the scheme is corroborated by the data that over 55% of the sample households stated that they were not satisfied with the information provision. Figure 4.1 shows that the level of satisfaction was high among households with higher per capita income, thus implying that cooperatives were prioritising the better-off among members in so far as the information provision was concerned.

4.3 Enrolment

The membership in the scheme is voluntary. However, in the initial years of implementation of Yeshasvini, most cooperative societies provided automatic membership by paying the premiums on behalf of the members and this was adjusted in the sale proceeds of milk or from the loan amount issued to members. This was often done without the knowledge of members. This could not be done subsequently as the membership fee was increased and there was a stipulation that all the members of a household have to join in the scheme. As a result, the practice of automatic payment of premiums on behalf of members could not be done except perhaps in the case of MPCS. As a result, enrolment suffered. This is borne by the following data.

With the help of village-wise data on Yeshasvini membership during the five-year (2006–07 to 2010–11) period, sample villages are distributed by trends in the membership. Only in 18.3% of the villages was there an increase in membership. In one-third of the sample villages, the membership declined, while in 10% of the villages it remained constant. The decline in membership was relatively high in the backward district. In 28% of the villages, the information could not be obtained because data on enrolment at the village and primary cooperative level was not

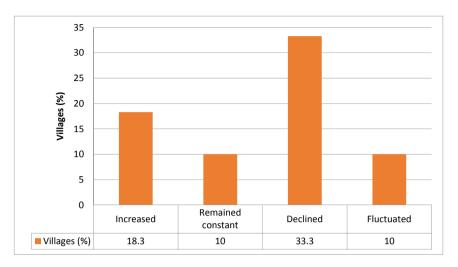


Fig. 4.2 Changes in the Yeshasvini Membership in the sample villages. *Source* Data collected from MPCS and VSSN in sample villages

maintained. This problem was particularly acute in those places where staff turnover was high (Fig. 4.2).

The above is confirmed by the data on Yeshasvini membership provided by the government. Barring Bangalore Rural, there was a decline in the membership in Gulbarga, Shimoga, as well as at the state level (Fig. 4.3). It is to be noted that the decline was sharp in Gulbarga district during 2010–11, due to the introduction of Arogyasri as a competing health insurance scheme in the district.

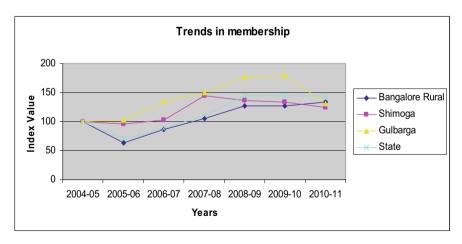


Fig. 4.3 Indices of the Yeshasvini membership in the sample districts and the state. Source Yeshasvini office

What are the reasons for these trends? We have collected qualitative information on contributing factors from key informants and secretaries of cooperative societies from sample districts. Based on this information, the following are cited as important reasons.

First, the introduction of the rule that all the household members should compulsorily be enrolled into the scheme has not gone too well with the member households as this would mean more expenditure towards the membership fees. The Secretary of credit cooperative society from a Gulbarga village stated that: "higher officials have asked us to compulsorily enrol all the members of the household. When we tried to enrol all the household members and deduct the premium from the sanctioned loan, farmers started to quarrel with us. A household consisting of 5 members will have to pay Rs. 750 towards the premium. In a loan of Rs. 10,000, this is a very significant amount. Hence, we stopped to enrol as this was becoming troublesome. We will only enrol those households that voluntarily come forward for registration". A secretary from Shimoga district noted that "our only option is to deduct the premium amount from the loan sanctioned. If we do that members will quarrel with us. We also feel bad of deducting almost 10% of the total loan towards the premium". Many households from Bangalore Rural did not renew their enrolment on the grounds that "we do not like this scheme. Why should all the family members be registered into the scheme"?

The rule of enrolling all the household members was introduced as a response to the problem of adverse selection. However, members did not appreciate this as awareness programmes organised by cooperative societies did not provide a correct understanding of health insurance. In the absence of such awareness, member households wanted to have Yeshasvini membership only for the sick or those likely to be ill (such as elderly), from their households. This was clearly against the principles of health insurance.

Under these circumstances, the approach of staff member also did not help. In order to meet the target fixed by the cooperatives, one secretary of cooperative society paid membership fees from his own pocket with a hope that this will be paid by members later. As the enrolled members refused to pay money, the Secretary did not bother about the target on enrolment in the following year. This implies that the authorities were relying on a bureaucratic method of fixing targets rather than taking the more sustainable, but the painstaking, path of educating members about the concept of health insurance and its utility. The painstaking method of educating members could have been easily undertaken if the Secretary of cooperative societies has taken the help of local organisations such as grama panchayat, community-based organisations of Self-Help Groups. The help of District Cooperative Unions which are meant for cooperative publicity and propaganda could have been availed. However, this was not done.

Second, enrolled members did not appreciate that the scheme was applicable only to surgeries for major illnesses. Several households from a Bangalore Rural village complained that they obtained Yeshasvini membership as it was informed

⁸For more details see, Rajasekhar and Manjula (2012).

that free treatment will be provided for all types of illnesses. The enrolled households subsequently learnt that the treatment could be obtained only for surgeries for major illnesses. As they did not have any major illness the scheme could not be utilised. They did not renew in the next year by stating that 'why should we pay high premiums when we do not utilise the scheme'. *This shows that the member households did not understand the concept of insurance.*

People also perceived that they did not have those ailments that qualify the treatment under the scheme. Here, the cooperation with the health department would have been helpful. If village level cooperatives had conducted health camps in cooperation with the health department, members may have come to know of ailments that needed to be treated and this would have, in turn, improved the utilisation and thereby enrolment.

Third, the bad experiences with network hospitals forced some of the households to withdraw from the Yeshasvini scheme. Only 4 out 722 households from a Gulbarga village enrolled into the scheme. When reasons for this were asked it was revealed that the enrolled households did not have good experience with empanelled hospitals. This was also shared by the staff of cooperatives. The Secretary of credit cooperative society from a Gulbarga village noted that renewal was low in his jurisdiction because the response of empanelled hospitals was not very positive and faster treatment is not done.

Fourth, the starting of new health insurance schemes by the government and NGOs where the premium was nil also contributed to the declining membership in Yeshasvini. The state government introduced Arogyasri, where membership was automatically provided to all the poor in a village and there was no need to pay membership. After the introduction of free health insurance scheme, people completely stopping enrolling into Yeshasvini. An NGO from Shimoga introduced the subsidised health insurance scheme and motivated many poor households to join. Since the poor peasants had to pay for membership in Yeshasvini, they chose to join in the NGO health insurance scheme.

Fifth, the poverty was also cited as an important reason for many households withdrawing from Yeshasvini membership. The Secretary of credit cooperative society explained that most of the households in his jurisdiction derive sustenance from wage labour, and hence do not wish to continue the membership.

Sixth, credit cooperative societies in the study districts have only one staff. In view of the long distance between cooperative headquarters and villages where members reside, the contract is not regular with member households. For instance, secretary of a credit cooperative from Gulbarga stated that the distant location of the society is coming in the way of regular interaction with members (one village is located as far as 15 km away from the VSSN). This has come in the way of providing awareness to members on Yeshasvini or persuading them to join in the scheme. Here again, the importance of interface with the local organisations in providing awareness becomes important. If there was cooperation with Grama Panchayat and SHGs the problem of distant location could have been overcome.

4.3.1 Membership Among Different Categories

In this section, we will look at the enrolment patterns. Enrolment rate is defined as the proportion of households having membership in the scheme to total households in 2010–11. About 91% of the sample households stated that they obtained membership in the scheme this year.

As is evident from Fig. 4.4, about 50% of the enrolled households belonged to dominant caste categories of Vokkaliga, Lingayath and Reddy. The proportion of enrolled households belonging to SC, ST and minorities was comparatively less.

The households which are highly dependent on wage labour income are comparatively less enrolled in the programme (Fig. 4.5). Figures 4.4 and 4.5 thus imply that Yeshasvini membership was skewed in favour of dominant caste groups and those belonging to better-off in rural areas.

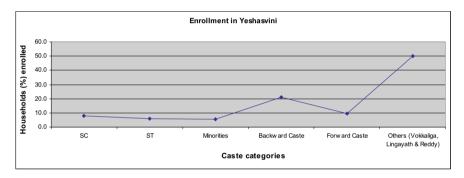


Fig. 4.4 Caste-wise distribution of enrolled households into Yeshasvini programme

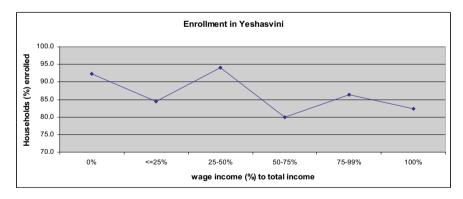


Fig. 4.5 Enrolment rates among wage labour dependent and non-wage labour dependent sample households

4.3.2 Membership Among Household Members

In the context of Yeshasvini, making a rule that all the household members are to be enrolled in the scheme, it becomes interesting to see the extent to which this has been achieved. The data on enrolment status shows that only about half of the members of sample households across the selected districts were found to be having Yeshasvini membership. Thus, the rule of compulsory membership of all household members in Yeshasvini was not strictly followed in practice.

Figure 4.6 shows that the proportion of members in Yeshasvini was higher among men as compared to women in all the districts. Thus, there was distortion in the enrolment pattern.

To which age group did enrolled household members belong? Figure 4.7 provides the distribution of membership into Yeshasvini by age groups. It can clearly be seen that the proportion of non-members is high in the case of younger age groups (of less than 6 years, 6–17 years and 17–35 years). In the case of the other age groups, the reverse is the case. In the case of older age groups, the proportion of members is higher than non-members. This implies that sample households prefer to enrol older members of the households as it is perceived that they would be more prone to illnesses. This is moral hazard behaviour which happens in the case of voluntary membership into the health insurance scheme.

4.4 Utilisation

Members of Yeshasvini could avail free treatment from the empanelled hospitals for a large number of diseases. We posed a question to the sample households as to whether enrolled persons were treated after obtaining Yeshasvini membership.

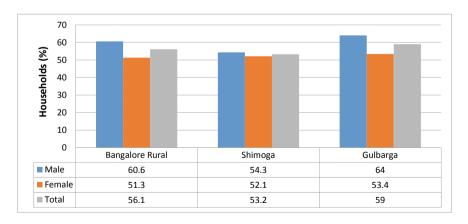


Fig. 4.6 Distribution of members of Yeshasvini (%) by sex

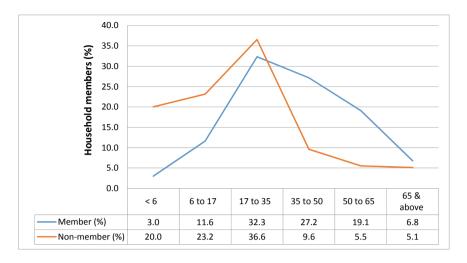


Fig. 4.7 Distribution of members of Yeshasvini (%) by age groups

Table 4.5 Distribution of sample households (%) by whether they have utilised Yeshasvini scheme

Whether utilised the scheme	Bangalore Rural	Shimoga	Gulbarga	Total
Yes	10.1	23.2	25.3	20.3
No	89.9	76.8	74.7	79.7
Total	148	246	158	552

Table 4.5 shows that about 20% of the sample households utilised the scheme after becoming members while the rest could not utilise. The utilisation rate is good given that Yeshasvini provided treatment for mainly tertiary healthcare and to some extent secondary healthcare. At the same time, given that the utilisation rate pertains to the entire duration of membership, it can also be termed that the utilisation rate is not very high.

An important reason for not utilising the programme, as reported by sample households, was that the need for utilisation did not arise (Table 4.6). Interestingly, although the scheme was in operation for eight years at the time of collection of primary data, 3.4% of the sample households stated that lack of awareness on the network hospitals hindered the utilisation. There were also a few cases, especially in Gulbarga, wherein it was stated that the empanelled hospitals denied the free treatment on some grounds or the other.

Reasons for not utilising	Bangalore Rural	Shimoga	Gulbarga	Total
Need to use the card did not arise	87.2	91.0	83.1	87.7
Lack of awareness on which hospital to go	4.5	1.6	5.1	3.4
Not aware of diseases for which the card can be used	0.8	1.1	0.8	0.9
Empanelled hospital denied free treatment	2.3	1.6	3.4	2.3
Health condition not covered in the scheme	1.5	1.1	1.7	1.4
Others	3.8	3.7	5.9	4.3
Total (Nos.)	133	189	118	440

Table 4.6 Distribution and Households (%) by their responses on factors influencing the utilisation of Yeshasvini benefits

4.4.1 Welfare Loss

If 80% of the sample households did not utilise the scheme, it does not mean that they did not face any health problem. Over 32% of the sample households stated that they faced at least one major health problem during the reference period of one year before the date of the survey (Table 4.7). This does not go well with the fact that many households reported that the need to utilise the Yeshasvini scheme did not arise. This can be explained as follows. When sample households reported that the need to utilise the card did not arise, they meant that the need for surgeries did not arise. However, they still faced major health problems that can be cured under Yeshasvini but they were unaware whether these could be treated at the empanelled hospitals.

The households, that had faced at least one major crisis, visited different types of hospitals to obtain treatment. Nearly 53% of the sample households visited private hospitals to obtain treatment for health problems (Column 2 in Table 4.8). The proportion of sample households visiting private hospitals was relatively high in Gulbarga district. About 30% of the households depended on hospitals that were empanelled under Yeshasvini for obtaining treatment. Such dependence was relatively high in

Table 4.7 Distribution of Yeshasvini sample households (%) by number of major health shocks faced by them during the last one year

Number of major health problems faced during	Districts			Total
the reference period	Bangalore Rural	Shimoga	Gulbarga	
Zero	71.6	62.6	58.9	63.9
One	25.7	33.7	36.1	32.2
Two	2.7	3.3	5.1	3.6
Three	0.0	0.4	0.0	0.2
Total (Nos.)	148	246	158	552

Place of treatment	Cases (%) treated	Total expenditure (Rs.)	Average expenditure (Rs.)	Amount reimbursed through the Yeshasvini (Rs.)	Amount borne by the household (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
Government hospital	9	589,000	29,450	0	589,000
Private clinic	6.8	138,800	9,253	0	138,800
Private hospital	52.9	3,403,900	29,093	0	3,403,900
Network/empanelled hospital	29.9	2,888,905	43,771	1,573,700	1,315,205
Others	1.4	10,520	5,270	10,000	520
Total	221	7,031,125	31,815	1,583,700	5,447,425

Table 4.8 Contribution of Yeshasvini to health care treatment and expenditure

Gulbarga and Shimoga districts. The dependence on government hospitals was in general low, particularly in Gulbarga.

The total expenditure incurred by the sample households for obtaining treatment was Rs. 70.31 lakhs (see column 3 in Table 4.8). Over 48% of the total expenditure was incurred on treatment in private hospitals. The proportion of expenditure incurred on treatment in hospitals empanelled under Yeshasvini was about 41%.

An interesting pattern is that although the proportion of patients visiting private hospitals was the highest, the average expenditure was lower (see column 4 in Table 4.8). This was, especially so in Shimoga and Gulbarga. On the other hand, although the proportion of patients getting treated in hospitals empanelled under Yeshasvini was lower, the average expenditure was relatively high. This implies that the sample households visited empanelled households for those ailments where it was perceived that the expenditure will be higher. Or, alternatively, empanelled hospitals charged them more than what a normal private hospital would do.

How much benefit did the sample households obtain from Yeshasvini scheme? This question is important as the sample households are members of the scheme, and potentially, they could get all the treatment done in the empanelled hospitals. There is also a need to analyze the following questions to ascertain the welfare loss. How much of health expenditure incurred at network hospitals was reimbursed through Yeshasvini scheme? How much of health expenditure was borne by the households? How did they mobilise money to meet the expenditure on their own?

Column 5 in Table 4.8, shows that of the total expenditure of Rs. 70.31 lakhs incurred by the sample households, not the entire expenditure incurred at empanelled hospitals was reimbursed by Yeshasvini. The total amount reimbursed to the sample households was only Rs. 15.84 lakhs. This means that only 22.5% of the total health expenditure was reimbursed to the sample households. This implies that the welfare loss was as much as 77.5%!

Another point to note is that not all the expenditure incurred in hospitals empanelled under Yeshasvini was reimbursed. Of Rs. 28.89 lakhs of health expenditure at empanelled hospitals, 54.5% was reimbursed by empanelled hospitals and the rest was borne by the households. The qualitative evidence collected from the sample households shows that although the sample households went to empanelled hospitals with a hope that the entire expenditure will be reimbursed by the hospitals they were informed on arrival that not the entire claim will be met by Yeshasvini and that they will have to bear the remaining expenditure. Some expenditure was related to charges levied on special room or hospital beds; but, hospitals also found some ways to overprescribe the diagnostic tests, procedures and medicines not covered by Yeshasvini.

How was the money mobilised by the sample households? The data to answer this question are presented in Table 4.9. Nearly half of them had fallen back on their savings to meet their HH health expenditure. Quite a few households (30.4%) in Bangalore rural had borrowed from relatives and friends. Dependence on moneylenders/pawnbrokers was around 20%. The dependence on moneylenders was somewhat less because the sample households were relatively better-off who could meet the additional expenditure from their own savings.

4.5 Conclusions

Yeshasvini is a social innovation to provide social protection to cooperative farmers in Karnataka. The processes and outcomes relating to the provision of awareness, enrolment and utilisation of the Yeshasvini scheme are discussed in this chapter with the help of data collected from a large number of sample households. In the sample districts, the membership in Yeshasvini was more skewed towards the households belonging to dominant castes of Vokkaliga, Lingayath and Reddy, and towards wealthy households.

The scheme was initiated in the sample villages by credit cooperative societies in Gulbarga and Shimoga districts, while in Bangalore Rural, milk cooperative society has taken the initiative in spreading the awareness. In general, the awareness on Yeshasvini scheme among the sample households was low especially regarding the exact features of the programme. This is further corroborated by the fact that over half of the sample expressed dissatisfaction with the provision of information on Yeshasvini scheme. This proportion was relatively high among lower income households.

Important reasons attributed to the low awareness on specific features of Yeshasvini and the importance of health insurance were the following; (i) Inadequate staff in the credit cooperatives; (ii) distance location. This was especially the case in credit cooperatives as there was a considerable distance between headquarters and the villages covered by the cooperative. It is here that Yeshasvini could have done something different keeping social innovation principle of effective alliances in

Table 4.9 Distribution of health problems (%) by the source of meeting the expenditure

			•)	•					
District	Sources of me	Sources of meeting the expenditure	diture							Total
	Own sources	Money lenders/Pawn brokers	Relatives and friends s	Partially own Partially sources and moneylender partially and partially Yeshasvini	o o	Partially relatives/friends and partially Yeshasvini	Fully Other covered by insurance Yeshasvini covered	Other insurance covered	Free treatment	no. of cases
Bangalore 45.7 Rural		13.0	30.4	4.3	0.0	2.2	2.2	0.0	2.2	46
Shimoga	45.1	19.6	3.9	11.8	8.8	0.0	8.6	1.0	0.0	102
Gulbarga	41.1	24.7	0.0	15.1	4.1	0.0	12.3	1.4	1.4	73
Total	43.9	19.9	8.1	11.3	5.4	0.5	0.6	6.0	6.0	221

mind. Cooperatives could have entered into an effective alliance with local government (Grama Panchayats) and community-based organisations of Self-Help Groups (SHGs). Karnataka is well known for the effective functioning of local government. As far as SHGs are concerned, it is estimated that on an average there are 16 SHGs in every Indian village, covering a large number of households. These institutions could have been roped in by the Department of Cooperation for the provision of awareness on general features of Yeshasvini and the importance of health insurance for the poor. Such an alliance could have overcome the problems of inadequate staff and distant location. The qualitative evidence shows that the lack of alliance was due to turf-war (for instance as SHGs were formed by the Department of Women and Child Welfare, the Department of Cooperation did not want to have any truck with them).

Lack of vision also played an important role. In the initial phase, the Department of Cooperation adopted the policy of deducting the premium amount from the payment towards milk supplied to dairy cooperative and from the sanctioned loan amount by credit cooperative. Such practices helped the Department in the initial stage in the expansion of membership; but, they proved to be detrimental to the scheme especially in the member education on the importance of health insurance. Such practices also paved the way to adverse selection in terms of upper caste and wealthy households, men and elderly dominating the membership. This has also resulted in moral hazard practices of members getting treatment with Yeshasvini card and withdrawing from the membership soon after that.

The enrolment into Yeshasvini increased in the initial years. However, in the subsequent years, there was a decline in the membership, especially in Gulbarga district. An important reason for the decline in the enrolment was higher membership fees and lack of awareness on the importance of health insurance. The enrolment rate further declined in Gulbarga after the introduction of Arogyasri in which there was no membership fees!

Only 20% of the sample households utilised the scheme. An important reason mentioned for this was that the households did not have any health problem. However, the evidence on the incidence of illness and expenditure incurred on treatment in private hospitals shows that sample households indeed faced health problems. This could have been overcome with the help of collaboration with the Department of Health in the conduct of health camps. If the Department of Cooperation has facilitated the conduct of health camps for members of Yeshasvini to identify the ailments that could be treated under the scheme, this would have enabled member education, contributed to wider use of the scheme and more households becoming part of the scheme. This is another area where Yeshasvini did not follow the principles of social innovation.

Interestingly, although the scheme was in operation for eight years at the time of the survey, some households stated that lack of awareness on the network hospitals came in the way of utilisation of the programme. When we look at the amount spent on the health expenditure, the average expenditure has been substantial in the case of network hospitals, though the dependence on them was low as compared to private hospitals. Overall, about 23% of the total health expenditure was reimbursed by the

Yeshasvini scheme. This implies that 77% of the health expenditure was borne by members despite having membership in Yeshasvini. The households have depended on their own sources to meet the health expenditure.

To conclude, Yeshasvini was a social innovation to provide the much needed social protection of health insurance to cooperative farmers in Karnataka. Social innovation succeeds when there are effective alliances between small and big organisations for the idea to grow and scale up. But, Yeshasvini was not successful in forging an effective alliance with community-based organisations of SHGs or with the other government departments in the provision of awareness on, enrolment into and utilisation of health insurance. It can be, therefore, argued that Yeshasvini as a social innovation adopted by cooperatives would have become successful if there were effective alliances with the other local institutions such as community-based organisations, local government and so on.

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Chapter 5 Community-Based Tourism Through Cooperatives in Sabah, Malaysia



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Abstract The tourism industry is one of the largest and most influential industries in the world. The National Cooperative Policy 2011–2020 identifies tourism as one of the sectors that can offer high-income to cooperatives. The tourism industry provides an opportunity for the cooperative sector to be involved in community activities, particularly in rural areas, which can have immeasurable positive benefits for the local environment, societies and cultures. The societies could create downstream tourism activities as part of community-based tourism (CBT) and provide a stimulus for entrepreneurs among the communities. Despite the remarkable potential that the tourism industry can offer, only 12 (0.98%) out of 1,223 Sabahan cooperatives have actively become involved in tourism businesses (Malaysia Cooperative Societies Commission, 2015). Therefore, this study attempts to investigate the potential of the CBT industry as operated by cooperatives in Sabah. The current study employed a case study approach. The data obtained from the three sample cooperatives are analyzed by using a combination of within-case analysis and cross-case analysis. The findings showed that the CBT started with one specific activity and rapidly expanded to include many tourism downstream activities. The expansion of activities directly contributes to an increase in income to the cooperatives. The success of the CBT is reinforced by a variety of factors, such as the commitment of the cooperative board members and support of the local community. These findings are essential for promoting the tourism industry as one of the most critical potential businesses in cooperatives and as an input to relevant parties to support the growth of the tourism industry in Sabah.

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Keywords Community-based tourism · Social innovation · Tourism cooperative · Sabah cooperative · Local community

5.1 Introduction

Cooperatives are autonomous, exercising democratic control and economic participation of member associations. Typically, a cooperative is formed by a group of people who come together to meet their common needs; they wish to improve their socio-economic status (International Co-operative Association- ICA 1995). Cooperatives are operated, managed and controlled by its members who share the benefits from the business activities (USDA 2011). The concept of cooperation among members is a basic premise in the cooperative establishment. The cooperatives may be formed at the level of villages, districts, states, or countries. The members may be groups of government servants, farmers, families, or groups by functions; agriculture, insurance, housing, consumers and school. Hence, the community-based tourism (CBT) concept is normally practiced in rural areas in an attempt to uplift their socio-economic status based on cooperative principles and concerns for the local community. Accordingly, they are able to generate income to members and local communities through various downstream tourism activities such as accommodation, food and beverages, transportation, souvenir shop and so on (Mohd Nazlie 2016). Hence, the tourism industry can be seen to be very closely related to the community, especially in rural areas. This effort is important in supporting the role of cooperatives in helping to improve community income, to alleviate poverty and contribute to economic growth.

A study conducted by Norlida Hanim et al. (2015), found that there has been a remarkable increase in the tourism sub-sectors of hotels, restaurants, transportation, entertainment and recreation, as well as retail trade. Therefore, it was seen as appropriate for the cooperative movement in Sabah to establish a cooperative which will undertake the management of community-based tourism. According to statistics, 90 percent of the cooperatives in the state are micro and medium-sized (Malaysia Cooperative Societies Commission 2015). Some are located in rural areas that are rich in natural resources. It is hoped that the establishment of community-based tourism cooperatives will expand financial capital resources and human capital in order to mobilize a cooperative in an effort to offer a variety of downstream tourism activities.

Sabah is popularly known as the "Land Below the Wind" which is rich with natural diversity resources such as beautiful beaches and islands, wildlife reserves, Mount Kinabalu and unique cultures (Sabah Tourism Board 2017). As a state that has unique attractions, cooperatives should take tourism as one of their activities. The success of the Sabah tourism industry among cooperative members will support the government's aspiration to strengthen cooperatives through downstream tourism activities that mostly involve communities around the cooperative. The Ministry of Rural and Regional Development (KKLW) has created the Desa Lestari Programme for the selected villages. This program is funded by the Ministry and managed by

a cooperative. The objective of the Desa Lestari Programme is to transform a rural area into a developed area with a high-income population. The local community will plan and implement development projects in their area, including village tourism, retail, agriculture and farming (KKLW website 2016; Syahirah 2016). Hence, this study was conducted to identify downstream tourism activities and the potential for tourism business based on local community cooperation. This study also identifies successful practices among cooperative management. The results of this study can be used as an initiative and guide for other cooperatives that have not yet explored the potential of business in the tourism sector. Based on these findings, relevant parties can develop programmes and policies to assist cooperatives in being actively involved in the tourism industry.

5.1.1 Methodology

This exploratory qualitative research uses a case study method with a semi-structured interview schedule as the main instrument to collect primary data. Three cooperatives were selected using purposive sampling with criteria based on high annual revenue, tourist location and those having many downstream tourism activities. A semistructured questionnaire was developed as a guide for conducting an interview with the board members and staff of Koperasi Kakitangan Taman-Taman Sabah Berhad (KOKTAS), Koperasi Walai Tokou Kundasang Berhad (KOPSTAY) and Koperasi Keluarga Osman Jaafar Berhad (KKOJ). The membership of KOKTAS comprised the staff of Taman-Taman Sabah (Sabah Parks), one of the state government tourism agencies. The KOPSTAY membership consisted of the community in the district of Kundasang, whereas KKOJ was made up of family members of Osman Jaafar. All information gathered from interviews and documents was analyzed using a combination of within-case analysis and cross-case analysis. The three samples selected are among the active cooperatives from 12 (0.98%) out of 1,223 Sabahan cooperatives involved in tourism businesses (Malaysia Cooperative Societies Commission 2015). Therefore, this study attempts to investigate the current downstream tourism activities and the potential of the CBT industry operated by cooperatives in Sabah and also the spirit of entrepreneurship among the cooperative management.

5.2 Literature Review

5.2.1 Community-Based Tourism (CBT) Through Cooperative Business Model

Community-based tourism plays an important role in promoting the development of local communities through their active participation in tourism downstream activities

(Goodwin and Santilli 2009). Literature shows that many CBT organizations have encountered problems with weak business models that cannot support the development of CBT downstream activities. One of the initiatives for solving the issue is through the application of community cooperatives. Community involvement in tourism activities will encourage community collaboration and joint decision-making (Asker et al. 2010). CBT can generate additional income and improve economic, social and political conditions (Rosazman and Velan 2014; Kayat 2013; Rafee et al. 2012; Pakshir and Nair 2011). Thus, the cooperative business model that emphasizes participation and community members, as well as democratic decision-making, equality and solidarity, is appropriate for conducting a community-based tourism business.

5.2.2 Success Factors of Cooperatives

A cooperative is an organization that should be administered like a business entity. In fact, the Cooperative Act 1993, also suggested that the board members and management should manage the cooperative in the spirit of businessmen and entrepreneurs. They should act as a trigger for cooperative economic growth. They should be smart and always seek and seize business opportunities that have the potential to be developed, as well as being ready for any risks that arise in business (Webster Third International Dictionary 1961). In managing the cooperative, the leaders should appreciate the staff and cooperative members. Therefore, the leader of cooperative should communicate effectively, hold integrity and listen to the member's voice (Zwilling 2012).

Prout (2017) has drawn up guidelines that can be considered important in building successful cooperative enterprises using these criteria. These guidelines comprise of the following: (i) fulfilment of the needs of members and community; (ii) establishing a founding group with one person as a leader; (iii) commitment to a vision of the ideals and values implicit in cooperative enterprises; (iv) conducting a feasibility study to evaluate the perceived need objectively; (v) setting out clear aims and objectives through consensus; (vi) development of a sound business plan; (vii) ensuring the support and involvement of the members; (viii) establishing a presence in the best possible location in the community; (ix) obtaining skilled management in business, financial, legal and accounting fields and x) continuation of education and training, particularly for communication and interpersonal skills. Some of these criteria are supported by Habib (2013). Certain dominant elements in a business's Critical Success Factors (CSF) include top management commitment, leadership, staff cooperation, knowledge and practical skill, as well as cooperation in groups.

As member-based organizations, issues of member cooperation and involvement are important for the survival of cooperatives (Aini et al. 2012; Sushila et al. 2010). In addition, the participation of members and community support can assist in the development of ecotourism (Sharpley and Telfer 2008). Accordingly, a study by Shemshad and Mohammadi (2012), suggests that the cooperative should provide

adequate training to members on ecotourism downstream activities. It is envisaged that the training would equip members with the necessary skills to enable them to become service providers for cooperative activities.

In terms of the management of cooperatives, many previous studies also discussed the success factors relating to them. Among the identified critical factors that drive the success of cooperatives are experience and availability of competent leaders (Norhayati and Juliana 2013). A study by Bruynis et al. (2001), found that in order to succeed in the emerging agricultural marketing cooperatives, both board members and managers should have previous cooperative experience and undergo continuous management training. Emphasis on training is one of the main agendas in the process of human capital development. For example, the security guards at Premier Security Cooperative Singapore (SCL), were constantly exposed to new knowledge when carrying out their duties. This was to ensure they were updated with the latest developments in safety aspects. In addition, management staff members were exposed to training and courses relevant to their work (Mohamad Haswardi and Frank 2012). Experienced, professional team members with suitable academic qualifications and skills among the board members and staff can help the administrative management and cooperative operation to work efficiently and effectively (Ahmad Faizal and Yusri 2012).

Besides having relevant knowledge and experience, board members must also possess the commitment and good leadership skills. A case study by Noranita (2012), found that board members in India were active in promoting cooperatives by providing a high degree of commitment to the organization. The board members possess a business-oriented style with a clear goal and direction towards cooperative business. This can be attributed to the nature of the leadership style of board members. Sushila Devi et al. (2010) indicated that visionary leadership is an important factor in influencing the success of cooperatives in Malaysia. Carlberg et al. (2006) found that the existence of strong local leadership was paramount in the beginning stages for the development of New Generation Cooperatives in the United States. The tireless efforts of initiators who spent their own time and money organizing meetings with farmers had supported the start-up. This was supported by Garnevska et al. (2011), in which a dedicated initiator and leader were influential in the successful development of farming cooperatives in northwest China. They also revealed that government financial and technical support, as well as appropriate external support from professional NGOs, was vital in enhancing the performance of cooperatives.

Government assistance programmes have had a strong positive effect on the performance of cooperatives in Malaysia. Hence, the government has several strategies to boost the tourism industry by means of increased tourism products, enhanced service quality, development of a suitable marketing strategy, enhancing governance and intensification of domestic tourism (RMK-11). According to Ramlan and Dino (2012), the Working Capital Fund and grants awarded by various government agencies have assisted cooperatives in expanding their business activities.

Maina (2006) and Mbugua (2005), in their studies on Key Success Factors (KSFs), suggested that location was one of the factors that need to be considered in strategic planning. In the context of tourism, choosing a location that has diverse natural

resources is crucial to attract potential tourists. Tasik Kenyir, for example, is enriched by various types of flora and fauna and has become a unique attraction for ecotourism visitors (Set et al. 2015). According to Set (2014), Malaysia has a considerable number of varied geographical landscapes, and each of the regions has its own local attraction that can be promoted as an ecotourism product. Statistics released by the Sabah Tourism Board indicate that the primary motivation for the majority of tourists who visited Sabah in 2016, was for the purpose of a holiday. Thus, in order for cooperatives to fulfil the demands of potential tourists seeking relaxation and lifestyle holidays, the business must be located in a pleasant area surrounded by nature.

5.3 Results and Discussion

5.3.1 The Background of the Tourism Cooperatives

This study involved three tourism cooperatives in Sabah, Malaysia. The first cooperative is Koperasi Kakitangan Taman-Taman Sabah Berhad (KOKTAS). KOKTAS was established in 1986, by the staff of Sabah Parks, a conservation-based statutory body established in 1964. The organization is responsible for promoting and managing the various protected reserves in Sabah, in particular, and those designated as national parks. KOKTAS is offering a variety of downstream tourism activities at eight locations of Sabah Parks. The locations include (a) Kinabalu Park, Kundasang; (b) Manukan Island Park, Kota Kinabalu; (c) Sapi Island Park, Kota Kinabalu; (d) Tawau Hills Park; (e) Mamutik Island Park, Kota Kinabalu; (f) Hot Spring, Poring, Ranau; and (g) Padang Point Gaya Island, Kota Kinabalu. Thus, KOKTAS has a huge number of customers from the seven popular tourism locations around Sabah. Given the opportunity in front of their eye, the staff of Sabah Parks decided to establish KOKTAS in 1986.

The second tourism cooperative is Koperasi Walai Tokou Kundasang Berhad (KOPSTAY), which was established in 2008. KOPSTAY continues the legacy of Walai Tokou Homestay that was managed by Mr. Kohidie. He is the native of Sinisian Village, where the Walai Tokou Homestay is located. The term "WalaiTokou", in the local language, means our house. By the recommendation from the Malaysia Cooperative Societies Commission (SKM), the individual, yet community-based, homestay entrepreneurs at Sinisian Village established the KOPSTAY in 2008. KOPSTAY is located in the district of Kundasang, Sabah. There are many famous tourist destinations around Kundasang which help the area to attract both domestic and international tourists. Kundasang is located near to Kinabalu National Park, which was designated as a World Heritage Site in 2000. Besides, there are many other attractions in and around the area, such as Poring Hot Water, Kettle Farm, Sabah Tea garden and Sungai Tagal in Kampung Luanti. With all these attractions on hand, the community-based

homestay in this area has gained high demand not only from local but also foreign tourists that come from various countries.

The third tourism cooperative is Koperasi Keluarga Osman Jaafar- *Cooperative of Osman Jaafar Family* (KKOJ). KKOJ was established by the family members of Mr. Osman Jaafar in 2011. KKOJ is located at Lingkungan Village, in the area of Weston, Sabah. The Borneo Probosics Monkeys is the main attraction in this area. The local community provides a river cruise boat service for tourists to watch closely the monkeys on the mangrove trees. The boat service for tourist was started in 2008, and managed individually by Mr. Osman Jaffar's wife. However, in 2011, she decided to establish KKOJ due to the increasing demand for boat service from tourists. KKOJ involved 25 members from an extended family of Mr. Osman Jaafar. They work collaboratively to fulfil the demand for boat service. Besides that, KKOJ also provides homestay and restaurant services.

5.3.2 The Growth in Downstream Tourism Activities

Results from this study showed that KOKTAS, KPOSTAY and KKOJ started with one tourism activity which is souvenir shop, homestay services and boat service, respectively. Other activities were offered after the cooperative began to experience demand from tourists. Following this, opportunities were created for activities for which tourists expressed a need. These activities were in addition to the basic services that the three cooperatives were already offering.

The first activity of KOKTAS during the establishment is the souvenir shop, which is located at Kinabalu Park. After that, KOKTAS established more tourism downstream activities in eight tourism parks under the management of Sabah Parks (Table 5.1).

KOPSTAY has evolved from providing homestay services only to tour package offers such as (a) 4-day package mountain climbing; (b) national student package: 5, 4, 3 days; (c) 5-day package for students group tour. The activities offered in the packages include the following (a) cultural and heritage performances; (b) handicrafts production; (c) restaurants; (d) transportation services; and (d) licensed tourist guides. The tourist packages play an important role in supporting the growth of new tourist downstream activities as the supplement to homestay service. Similarly, KKOJ, which only started with boat rentals to tourists, eventually created homestay accommodation and restaurant businesses to accommodate growing demand from tourists.

Various activities undertaken by cooperatives have gained member and community interests to join cooperatives after witnessing the positive effects of such involvement. This was proven when KOKTAS, which began with only 127 people, managed to attract Sabah Parks' staff to join the cooperative (which now consists of 509 members). At the beginning of the establishment, KOPSTAY had a total of 55 people made up of the community and has subsequently expanded to comprise 180 active members. These findings indicate that family cooperatives experienced limitations

Table 5.1 Tourism downstream activities by KOKTAS

Location	Year	Tourism activity
Kinabalu Park, Kundasang	1987	Kinabalu souvenir shop
	1990	Transportation- car rental
	2000	* Timpohon Gate Shop & Corner (café, mini market, souvenir shop) * Restaurant Panataran – (café, shop and souvenir)
	2013	Tahubang Lodge – accommodation
Tunku Abdul Rahman Park, Manukan Island, Kota Kinabalu	1990	Scuba diving centre & Souvenir Pulau Manukan (restaurants, snack corner, Kafe, barbeque, souvenir and scuba diving equipment rental)
Tunku Abdul Rahman Park, Pulau Sapi, Kota Kinabalu	1990	Souvenir, snack corner & Bot Pulau Sapi
Blok N, Lot 3, Ground Floor Ranau district	1997	Restaurant KOKTAS Ranau
TawauHills Park	1999	Tawau Hills Resort & Restaurant Begonia (chalet, hotel, souvenir shop, building rental, camping equipment rental, canteen)
Tunku Abdul Rahman Park, Mamutik Island, Kota Kinabalu	2004	Souvenir Pulau Mamutik (restaurants, snack corner, Kafe, barbeque, souvenir and scuba diving equipment rental)
Hot Spring Parks, Poring, Ranau	2007	Poring Shop & Corner
Padang Point @ Gaya Island, Kota Kinabalu	2013	Souvenir shop, snack corner & cafe padang point

Source Najmah et al. (2015)

in providing the various tourist services required. This was due to low membership numbers (only 25 people) since membership was limited to family members. KKOJ proposed the amendment of a by-law and opened its membership to the community after seeing the need to involve the local community, especially when the tourist season in Weston required additional travel services.

Scott and Bruce (1987) identified five phases of development with various characteristics in the field of small business. They are inception, survival, growth, expansion and maturity. Tourism cooperatives in this study had undergone the inception phase consisting of product development and marketing. In the context of this study, the KOPSTAY and KKOJ were in the survival phase and are now entering the growth phase. The studied cooperatives have crossed into the growth phase in which the businesses are developing, and competition exists. For KOKTAS, this cooperative has reached the expansion level where the downstream tourism activities expanded from only one branch at the Kinabalu Park into the other seven Sabah Parks locations.

5.3.3 The Growth of Incomes

All the three cooperatives stated that their annual tourism activity income was encouraging. KOKTAS invested a total of RM 18,000 for operating the souvenir business in 1987. In 2012, KOKTAS reported an annual revenue of RM5.68 million, which increased to RM6.71 million in 2013. However, the annual revenue experienced a decline of RM 0.28 million in 2014, bringing it to RM6.43 million, due to external factors such as the dual tragedies of missing flight MH370 and MH17, which was shot down over Ukraine. It affected the reputation of Malaysia Airlines and the country in general. KOKTAS believed that the decline was temporary and came up with several strategies to move forward.

KOKTAS operated at seven locations of Sabah Parks and four of the parks are island area. Most of the tourists came from overseas. Unlike KOKTAS, KOPSTAY operated around mount Kinabalu only. The decline in foreign tourists did not adversely affect KOPSTAY because mount Kinabalu area is one of the popular local tourist destinations, especially from Peninsular Malaysia. In Peninsular Malaysia, there are several island-based parks as compared to mountain scenery.

KOPSTAY also indicated that it achieved a considerable increase in revenue per year. In 2012, its annual income was RM 9,387.80 and amplified to RM 50,145.17 in 2013. KOPSTAY managed to double its annual revenue in 2014, with a total of RM 119,222.75.

KKOJ also reported that in 2013, they managed to record total revenue of RM 300,000. KKOJ was, however, not able to provide its audited financial statements to be analyzed by the research team. This finding was one of the challenges related particularly to the board members' competency in the field of financial management. Moreover, this situation can be connected to the issue of transparency. This is not in line with the cooperative principle of democratic participation and equal distribution of income among members. Therefore, this calls for more strategies regarding the transparency in the financial management of the cooperative.

Overall, it was found that cooperatives engaging in tourism activities performed well both financially and non-financially. The ability of the cooperatives to grow from providing only one activity to offering a variety of activities has enabled them to increase their annual revenue, subsequently providing employment opportunities to both members and local communities. This proves that the cooperatives have realized the potential of increased revenue through the tourism chain concept. According to Abdul Aziz (2007), the concept of the tourism chain is to provide facilities for tourists to move, stay, eat, shop for groceries and be involved in leisure activities. Tourism cooperatives in Sabah perceived this development as an opportunity to add creativity value in enabling tourists to receive everything they need from the cooperative. Nieuwenhuizen and Kroon (2002) expressed the view that creativity in producing a unique product is one of the successful key factors for supporting an entrepreneurial project.

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5.4 Factors Influencing Performance of Cooperatives

The study showed that the three cooperatives have the potential to succeed in the tourism industry. Although KKOJ did not provide audited statements the increase of members, as well as the expansion of downstream activities from boat services to restaurants and homestay, indicates that there was a positive development in this cooperative as well. The success of cooperatives that have survived and remain relevant by providing tourism products was supported by a number of internal and external factors.

5.4.1 The Internal Factors

The study results showed that the commitment and leadership of board members was a dominant internal factor in supporting the success of all three cooperatives. This commitment included the accountability attitude not only for planning but also in the monitoring of business implementation. The importance of top management commitment to a business is one of the success factors, crucial in any type of enterprise (Herzog et al. 2007; Prout 2017). This is necessary because the top management is responsible for ensuring that all plans go smoothly and any problems encountered can be dealt with immediately. Board members need to have a business-oriented nature, which allows them to clearly understand the objectives and the principle of a cooperative, as well as an understanding of the direction and activities carried out by the cooperative (Noranita 2012).

The second internal factor concerns the competency of the cooperative board members. According to Lussier (1995), businesses run by well-experienced people in their respective fields have the potential to succeed rather than those who have just started to learn their businesses. In this study, the KOPSTAY chairman's experience as the Deputy Chairman of the Malaysian Homestay Association helped the growth of the cooperative because he already had considerable exposure to homestay business activities. Similarly, with KOKTAS, having been on the staff of Sabah Parks, staff members have knowledge and experience of relevant relationships with tourism-related affairs in Sabah. KKOJ, on the other hand, continues to run the businesses started by their families. Lussier (1995) believed that an entrepreneur who has a family background in the business would have the potential to succeed rather than those who start their own businesses. Knowledge and experience (either from their own families or other sources) are very useful for a realistic business plan to be achieved with available resources (Abdolvand et al. 2008). For example, the Cooperative Trading Service (Tricoop) in Vietnam, was supported by experienced leaders in the field who had the vision to help the success of the cooperative (Norhayati and Juliana 2013).

The third internal factor is the cooperation of members of the cooperative. In this study, KOPSTAY's success in developing its business activity was the result of

members' cooperation. The members not only contribute financial capital but also provide ideas and commitment by being actively involved in the activities carried out by the cooperative. For example, the members became the singers, musicians and dancers of the cultural group established by the cooperative. According to Lussier (1995), a business that is based on sharing by many members will be more developed than a business initiated by an individual. This is because an individual business may face significant problems in terms of its ability to plan and monitor the business. Thus, the active participation of members in the cooperative is one key to the success of cooperatives.

5.4.2 External Factors

The success of the tourism cooperative also supported by several government initiatives, especially through the Ministry of Tourism, Malaysia (previously known as the Ministry of Culture, Arts and Tourism). In 1998, the Homestay Programme was introduced as one of the alternatives accommodation provided for the tourist (Rosazman and Velan 2014). This is part of the government initiatives to support the development of the tourism sector in Malaysia. Homestay offers a distinctive style of living with an emphasis on warm and friendly hospitality within the private and enclosed concept of accommodation (Merilyn et al. 2017). The homestay operators are required to undergone training related to homestay management. As shown in this study, most of the KOKTAS members participated in the homestay management course organized by the Institute Of Rural Advancement (INFRA)—the government training agency under the Malaysia Ministry of Rural Development. Furthermore, the Malaysia Cooperative Societies Commission (SKM) is the government agency responsible for monitoring the development of cooperative in Malaysia.

Social networking, support and cooperation of other agencies such as the government have assisted in advancing the cooperatives. KOPSTAY, for example, not only received financial assistance but also gained recognition awards and the opportunity to promote their homestay abroad with the help of the Ministry of Tourism, Malaysia. The Sabah State Ministry of Tourism, Culture and Environment (KePKAS) plays a role in financial support to KOPSTAY in the landscape project. The KOPSTY also accredited with three-star recognition by the Malaysia Cooperative Societies Commission (SKM). In fact, as mentioned earlier, SKM is the organization that recommended the establishment of KOPSTAY. In general, the financial assistance, as well as training and marketing business opportunities from the government, can help improve the entrepreneurship success of Bumiputera small and medium entrepreneurs (Mohd Nor Hidayat 2011).

The Malaysia government has allocated a huge amount of money for the development of the tourism sector, as well as tax exemption for tourism operators (Rosazman and Velan 2014). The tourism development in Malaysia is guided by the National Key Economic Area (NKEA), which identified five themes to enhance the tourism sector in Malaysia. The themes include: Affordable Luxury, Nature Adventure, Family Fun,

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Events, Entertainment, Spa and Sports, and Business Tourism (Malaysia 2010). All these initiatives indirectly contribute to the development of tourism activities that managed by KOKTAS, KOPSTAY and KKOJ.

In addition, local community support is another external factor underpinning the success of cooperatives. This supports the concept of community-based tourism (CBT), in which the members of the community work together to provide the best services to tourists (Asker et al. 2010). For example, during the tourist arrival season, KKOJ had to borrow boats from non-members. The willingness of local communities to assist in meeting the demand for tourist arrivals significantly helped KKOJ's running of the business. KKOJ was aware that failure to provide any of the downstream activities (such as having insufficient restaurants and accommodation) would burden the tourists and undoubtedly affect their future interest in visiting the area.

The composition of the membership in the cooperative also plays an important role in the success of tourism cooperative. Cooperatives comprising local communities of family or non-family members can carry a variety of tourism activities due to mobilization efforts in finance, energy, ideas and expertise in providing the best services to tourists. Similarly, cooperatives with government employees have the advantage of direct access to information due to the existence of a good social network. Social networks have an important influence on the competitiveness of a business (Noorasiah and Mohd Nasir 2007). This advantage is adapted by KOKTAS to gain information regarding tourist activities around Sabah and the services needed in their workplaces. This serves as an invaluable opportunity for KOKTAS to expand its activities in tourism-related business.

The final external factor influencing the success of cooperatives is the selection of a business site. In this study, the location decision was supported by the demand for services related to tourism activities. Cooperatives have traditionally chosen a very strategic location in coastal lowlands and mountainous interiors that have an advantage in offering nature and adventure ecotourism products. KOKTAS conducts its business in islands, beaches and mountainous areas of Sabah, such as Tuanku Abdul Rahman Marine Park, Kinabalu National Park and Tawau Hills Park, respectively. KOPSTAY operates in the area of Mount Kinabalu, which is a famous tourist destination in Sabah for outdoor activities such as hiking, jungle trekking, bird watching and mountain climbing. Similarly, KKOJ functions in the coastal area, which provides activities for tourists such as fishing and river cruises. Table 5.2 shows a summary of these findings.

No	Success factors	KOKTAS	KOPSTAY	KKOJ
Internal fac	etors			
1	Commitment and leadership of board members	√	✓	√
2	Competency of the cooperative board members	√	✓	√
3	Cooperation among members		√	
External fa	ctors			
1	Support from the local community			√
2	Social networks	√	√	
3	Support from government and external organizations	√	√	
4	Location	√	√	√
5	Safety and security	\	1	1

Table 5.2 Success factors of tourism cooperative in Sabah

Source Najmah et al. (2015)

5.5 Conclusion

CBT has a significant role in increasing the economic benefits to the local community; but, for this to happen it is vital that an appropriate business model is in place. This study shows that the cooperative business model is strongly supportive of the running of CBT for enhancing the economic and social development of the local community. This is in line with the goal to create "one community one cooperative" in order to match the "one district one industry" aim emphasized by the Malaysian government. Through the case study of three CBT cooperatives in Sabah, it can be concluded that downstream activities showed a high potential for expansion on a large-scale. The potential can be seen from the success of the three CBT in many tourist downstream activities, the increase of income and the strong cooperation among cooperative members.

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Chapter 6 Failed Market-Oriented Society and Working Co-ops' Biodiesel-Based Food Systems After the Great East Japan Earthquake



Akihisa Nonaka

Abstract The Great East Japan Earthquake disturbed all commodity markets for a month. Previous studies indicated that the government could not dispatch relief food due to a shortage of trucks and fuel. Many co-ops, engaged in biodiesel recycling as a part of co-ops' social innovation to build a sustainable society, made biodiesel from used vegetable oil which was collected from local small food businesses and households. If biodiesel had the strength to face disasters, it would prove the advantage of the movement against a market-oriented society. This article discusses the status of biodiesel in the Tohoku region immediately after the 2011 earthquake and provides evidence that local biodiesel in consumers' co-ops worked as a fail proof social system. The research, which was conducted immediately after the disaster, shows that it was almost impossible for regular customers to purchase gas and diesel during the first ten days. Iwate co-op's biodiesel dispatched trucks with their relief food, which were estimated as being one-tenth of those sent by the government during the first ten days. It worked as a fail proof fuel supply; this fact indicates that biodiesel is an important element included in co-ops' social innovation.

Keywords Social innovation · Cooperatives · The Great East Japan earthquake · Biodiesel · Fail proof fuel · Local food system

6.1 Introduction

Almost all commodity distribution systems failed when the Great East Japan Earth-quake struck the Tohoku region's Pacific Ocean coast on March 11, 2011. Doi (2014), reported that the government could dispatch relief food supplies from Tokyo as intended, according to their disaster-response plan. Doi (2014), pointed out that the delay resulted from a shortage of trucks and fuel at that critical time. Doi himself

had engaged in the delivery of relief foods as an officer in the Ministry of Agriculture, Forestry, and Fisheries during the crisis and was responsible for purchasing food and hiring trucks around Tokyo. He reported that food companies produced the merchandise that had been ordered because they had factories in non-damaged regions. However, there was a severe shortage of delivery trucks, so the Japan Self-Defense Force (JSDF) carried the food to stocking centers in the Iwate, Miyagi, and Fukushima prefectures. Doi (2014), also commented that carrying relief supplies was not the mandated responsibility of the JSDF; thus, their involvement indicates the failure of the government's plan to distribute relief goods during crises. The prime operation of JSDF was to rescue people from critical situations such as bringing units to the Tsunami struck area, rescuing victims from the rubble, carrying seriously injured people to the hospital, restoring communications, and so on. The assignment of function of distributing relief supplies JSDF could have disrupted their prime operations. Although no hunger occurred as a result of the earthquake, the breakdown of the food distribution system could be more catastrophic in the future if an earthquake struck a more populated area. Consequently, the relief goods distribution problem during the aftermath of the earthquake raised a serious problem regarding social security and the food system.

Doi's (2014), analysis helps to clarify the market behavior during emergencies because it is based on documents that the government prepares when it orders for food and trucks. As the government acquires the food and trucks for the usual price, we can say that all these activities involve regular purchases by the government at market prices. Thus, from a theoretical perspective, Doi (2014), assessed "how the market did not work." His comment—that the government should adopt a policy to ensure food preparation and truck availability during a disaster—ensured criticism of market-oriented policies and supported social innovation of cooperatives that are intended to build a sustainable society. In other words, experiences after the earthquake established that the market-oriented food system is not adequate to maintain social security. Mistuishi (2011) wrote that the small stores on traditional shopping streets continued to be open for business when all the supermarkets were closed. Further, he pointed out that the local food system, which comprised small-scale food businesses, was resilient during disasters. These discussions on the strength of small food businesses were also intended to indicate that a "market-oriented economy is not enough," and "where the co-ops' social innovation should go." Nonaka and Ono (2011) researched emergency goods operations in the Iwate Prefecture and analyzed the number of trucks hired by the local government. They also indicated that most gas stations were closed for business during the first ten days after the earthquake. They concluded that, as fossil fuels have a centralized distribution system and the tsunami that followed had destroyed the centralized stocking point, the disaster stopped the distribution of all fossil fuels simultaneously. Thus, previous research indicated that the "heart of the market did not work," while "small local businesses worked," and so did biodiesel. Locally made fuels (such as traditional firewood and charcoal, and lately biodiesel and biogas) tend to be criticized for being inefficient products; however, the situation created by the 2011 earthquake showed different and important aspects of these "inefficient" local products.

Biodiesel is produced either from virgin vegetable oil or from used cooking oil. Most biodiesel in Japan is made from cooking vegetable oil that is collected from local food businesses and households as recycling movements and refined by small processors. Usually, it is related to consumers' co-ops as a part of their social innovation movement to build a sustainable society. As the use of vegetable oil comes from the local food system, biodiesel has a strong link to it and its ready availability would have ensured the viability of the local food system during the disaster. This would provide evidence that co-ops' social innovation brings great sustainability to local societies. However, no research has been conducted on biodiesel in earthquake situations. Therefore, this article aims to clarify the status of biodiesel in the Tohoku region, immediately following the 2011 Great East Japan Earthquake, to compare its availability to that of fossil fuel and find evidence that biodiesel of local consumers' co-ops works as a fail proof fuel supply. To this end, we researched prefectural governments, the trucking association, biodiesel refineries, and consumers' co-ops in the Iwate Prefecture. We have already published a short paper in Japanese on fuel shortages and biodiesel with regard to earthquake disturbances (Nonaka and Ono 2011). As the 2011 earthquake revealed the weaknesses of the centralized market and the strength of the co-ops' social innovation, we now extend this research and discussion to international readers.

6.2 Biodiesel in the Tohoku Region

As Kemp (2006), indicated, refining biodiesel from vegetable oil is a simple process that can be completed in a home kitchen. Consequently, there are more than 400 small refineries in Japan. Izumiya et al. (2015) researched 447 refineries and estimated that their research included almost all the refineries. Of these, none use virgin vegetable oil because the cost of growing and milling vegetable oil in Japan is too high to be competitive with fossil fuel. All the refineries included in Izumiya et al. (2015), use waste vegetable oil, and these researchers estimated that the amount of Japan's recycled biodiesel is approximately 20,000 kiloliters annually.

The biodiesel refineries in the Iwate Prefecture run the business as a nonprofit recycling activity; they collect used cooking oil from local restaurants, diners, and food processors. Additionally, workers with disabilities perform most of the work involved in refining biodiesel. Izumiya (2013) indicated that small-scale biodiesel businesses in Japan, typically have connections to vocational aid centers for disabled people because biodiesel might create some earning potential for these centers. However, they have little potential for achieving the profit-making objectives of ordinary businesses. On the other hand, most jobs in small biodiesel refineries are simple enough to be completed by people with disabilities, so this work is suitable for vocational aid centers. Every vocational aid center completes various kinds of tasks simultaneously. The process of refining biodiesel comprises simple tasks that can be performed in a short period, such as turning reactors on and pouring contents into them, after which

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S	4 ,	
Cost Item	Yen	
Methanol	48.0	
Caustic soda	2.8	
Electricity/Water	9.6	
Lease fee of reactor	52.5	
Cost for vehicles, etc	15.3	
Total	128.2	

Table 6.1 Running costs of small-scale plants (per liter)

Source The annual statement of the town of Shizukuishi (Iwate), 2007

the workers spend many hours waiting. Consequently, it is easy to add biodiesel refining to other responsibilities.

City halls usually support vocational aid centers; however, the latest national policies developed for these centers are included in market-oriented policies and include phrases such as "not charity" and "balancing income and expenses"; thus, although the aid centers' biodiesel operations are unprofitable, they still have to be economically viable. Hence, we need to confirm their viability and clarify their cost structures. To achieve these objectives, we conducted a case study in the town of Shizukuishi (Iwate).

Table 6.1 summarizes the costs of refining biodiesel at a vocational aid center in the town of Shizukuishi. This aid center collects used cooking oil from hotels, diners, and small food factories in the neighborhood and refines biodiesel under contract with the town hall. Based on the research we conducted in 2007, we estimated the cost per litre as being 128.2 yen, excluding wages. Although the price of regular diesel at gas stations changes frequently, the biodiesel price in the town is set slightly lower than that for regular diesel and the average price in 2007 was 110 yen per litre. Table 6.1 indicates that the total cost is much higher than the selling price in that year. As shown, the town hall has a budget for the cost for reactors; therefore, it is able to earn a positive income at the end. Although the costs in Table 6.1, do not show positive earnings, this does not mean that biodiesel production is generally inefficient in Japan, if we check its numbers carefully.

Shizukuishi's refinery leases the reactor for 630,000 yen per year. This fee, which is 52.5 yen per liter, is shown in Table 6.1, and is the largest item in the statement; however, if the town could reduce the leasing fee, biodiesel would have positive revenues for 110 yen per liter. The fee for the reactor per liter is based on the total volume of production, which in Shizukuishi is 12,000 L annually. The reactor processes 100 L at once, so the process is only run 120 times per year. If the town produces more biodiesel, the cost will decrease; in fact, the Iwate co-op that we discuss produces much more biodiesel, commenting that its fee for the reactor was much lower than the one shown in Table 6.1. Vocational aid centers have limited staff, which limits their biodiesel production. The Shizukuishi town hall regards its budget for paying the reactor fee as fair enough. Izumiya (2013) indicates that most small biodiesel refineries receive support from their city/town hall because their

business size is limited. On the other hand, as Kemp (2006) showed, the function of a reactor is simple and basically involves mixing and heating; thus, it is possible for one town a reactor. For example, the Akita trucking company (Akita prefecture, Tohoku region), produced biodiesel for its trucks using their hand-made reactors. If the town of Shizukuishi reduced its fee for the reactor by doubling its production of biodiesel or using a homemade reactor, the costs of running the plant shown in Table 6.1, would match the plant's earnings. However, workers are still unable to earn regular wages. First, unlike fossil fuels, recycled biodiesel does not satisfy strict regulatory requirements; therefore, it is not treated as a regular commodity. Izumiya (2013) indicates that the town of Shizukuishi uses the same system, that city/town halls usually purchase a significant part of the biodiesel fuel, and that the rest is used for the vocational aid center's consumption. This self-sufficiency is the second condition that keeps biodiesel economically viable. Thus, we must say that biodiesel is not part of the national fuel market. However, being self-sufficient represents a considerable part of the local economy, as Nonaka and Ono (2015) indicate, which would vitalize the rural economy. Moreover, biodiesel played an important role in the aftermath of the 2011 earthquake.

6.3 Fuel Shortages After the Great East Japan Earthquake and the Delivery of Relief Goods in the Iwate Prefecture

The 2011 earthquake disturbed all kinds of commodity distribution in the eastern part of Japan, especially in the Tohoku region, for almost a month. The tsunami struck the Pacific coastline of the same region (Iwate, Miyagi, and Fukushima prefectures), and commodity distribution systems were severely damaged. The Iwate Prefecture is located on the North Pacific side of the Tohoku region, and the tsunami struck and seriously damaged the entire seaward area. The prefectural government initiated relief operations immediately after the earthquake. Table 6.2 summarizes the relief goods that the Iwate prefecture gathered in the first ten days—most being food and

Table 6.2	List of	relief	goods	for t	he	tsunami	stricken	area	prepared	by	the	Iwate	prefectur	al
governme	nt													

Relief good	Quantity	Units	
Bottled water	142,400	Cases	
Emergency food	6,420,300	Packs	
Blankets	117,512	Sheets	
Tarpaulins	30,454	Sheets	
Generators	378	Sets	
Portable toilets	1,535	Sets	

Source Daily announcements by the Iwate prefectural government during the operation; researched between March 12 and 22, 2011

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	Nun	Number of trucks									
	Mare	March 2011									
	12	13	14	15	16	17	18	19	20	21	22
Japan self-defence force	6	18	10	11	10	1				5	
Prefectural government			29	15	21	19	40	24	23	47	62
City hall etc								2	2		

Table 6.3 Number of trucks involved in the operation of providing relief goods

Note More than half of the trucks are four-ton trucks, while the others are 10-ton trucks *Source* Daily announcements by the Iwate prefectural government during the operation; researched between March 12 and 22, 2011

water; it is apparent that the operation involved providing supplies needed to sustain life.

Table 6.3 summarizes the number of trucks that were dispatched from the prefecture's capital city of Morioka to coastal areas. This shows that the JSDF delivered relief goods immediately following the earthquake, after which the prefectural government assumed a decisive role in delivering relief goods.

As Doi (2014) showed, even the central government took two to three days to prepare the first supply of relief goods to the Tohoku region. The prefectural government was responsible for distributing relief supplies from storage sites in the prefectural capital to coastal areas. However, as it initially needed time to get organized, the JSDF delivered relief goods instead. The prefectural government began distributing supplies on March 14, after which it assumed a central role, as shown in Table 6.3. The operators and trucks of the prefectural government are truck drivers from the Iwate Trucking Association, which has a contract with the Iwate prefectural government to provide assistance in case of disasters.

The operations summarized in Table 6.3, represent the most decisive days. However, these were particularly difficult tasks; the delivery of all fossil fuels had been stopped because they were produced outside the Tohoku region, and the earth-quake and tsunami had destroyed all of the region's distribution routes. The Iwate prefectural government received fuel from local vendors' inventory as part of their relief goods and provided it to the Iwate Trucking Association. Some of the association's trucks were not able to get fuel. Table 6.4 summarizes the results of research conducted over telephone by the Tohoku Bureau of Economy, Trade, and Industry on gas stations in the Iwate Prefecture during the relief goods distribution operation.

Table 6.4 shows that telephone calls were made to 599 gas stations, but fewer than half of the stations responded, suggesting that the rest of the stations were closed. Among those that responded, almost half were open during the day, but most of them supplied fuel only for emergency vehicles, which included ambulances, fire engines, and prefectural government trucks. Table 6.4 indicates that it was almost impossible for regular customers to purchase gas and diesel on the market.

The Iwate prefectural government provided fuel to the Iwate Trucking Association until April 5 because of the daily shortage of fuel. Table 6.5 shows the total number

	Numb	er of ga	Phoned gas station					
	March	n 2011						
	16	17	18	19	20	21	22	
Answered	152	183	195			179	250	599
Open for business	73	103	126			120	184	
Fuel only for emergency vehicles (%)	85	89	79			69	46	

 Table 6.4 Responses to survey conducted among gas stations over telephone

Source The Tohoku Bureau of Economy, Trade, and Industry

Table 6.5 Total number of truck-days and the average number of trucks in operation each day

	Total truck-days ^a	Average number of trucks on an operating day
Japan self-defense force	61	8.7
Prefectural government	280	31.1
City hall etc	4	2.0

Note ^aTotal truck-days means the number of times a truck was operated on these days Source Daily announcements by the Iwate prefectural government during the operation; researched between March 12 and 22, 2011

of trucks and days in Table 6.3, and the average number of trucks active over the ten days.

Table 6.5 shows that the prefectural government operated approximately 31 trucks per day. These are small to midsize trucks; larger trucks could not travel on the narrow, damaged roads in coastal areas, and people had to remove rubble manually to open these roads to traffic (see Fig. 6.1).



Fig. 6.1 Iwate co-op truck at the tsunami site. Source Provided by Iwate consumers' co-op

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6.4 Biodiesel for the Delivery of Relief Goods

During the fuel shortage, the prefectural government obtained fuel by issuing administrative directives. Details of the trucking operation are summarized in Tables 6.3 and 6.5. However, the operation was still constrained by the quantities of fuel that the government was able to purchase. The Chairman of the Iwate Trucking Association commented that it needed fuel even more urgently than operating trucks (than those shown in Tables 6.3 and 6.5), because moving materials from the storage near the prefectural government's office to the coastal area required various kinds of commodity distribution capabilities. Truckers had to drive to the factories and depositories to pick up the goods and take them to the stocking point; doing so required many more trucks than those shown in Tables 6.3 and 6.5. The Chairman commented that they dispatched as many trucks as they could, but this number was smaller than they had expected, based on their contract with the prefectural government.

Owing to the fuel shortage, there were no nongovernmental operations to carry relief goods to coastal areas except for the Iwate co-op, which, despite also experiencing serious fuel shortages, had access to biodiesel.

The Iwate co-op is a consumer co-op that serves the entire Iwate Prefecture. It has approximately 210,000 members, representing almost 41% of all households in the Iwate Prefecture. As the coastal area is included in their business area, responding to people's needs after the tsunami was their top priority. Although they were unable to send goods using fossil fuels, they had stored biodiesel and some materials for producing biodiesel at their refinery in Morioka city. Table 6.6 summarizes the activities of the Iwate co-op in relation to biodiesel, showing that they started collecting biodiesel two days after the 2011 earthquake. They produced biodiesel at their refineries and asked several willing refineries to donate biodiesel.

Most refineries in the Iwate Prefecture are involved with a vocational aid center for people with disabilities called Sanseien, and the biodiesel donations the co-op received were based on this connection. Sanseien, in the city of Morioka, pioneered the involvement of vocational aid centers with biodiesel in Japan and is often addressed in journals related to disabled people. Sanseien staff taught anyone who wanted to start a small biodiesel refinery how to produce biodiesel, including the Iwate co-op and the town of Shizukuishi. Owing to this relationship, the Iwate co-op received a total of 1,950 L of biodiesel on the days shown in Table 6.7—March 14 to 25.

The Iwate co-op could not obtain any fossil fuel on these days; therefore, the relief supplies they sent to the coastal areas depended solely on biodiesel. The total distance covered was approximately 11,000 km. As the distance from the co-op's headquarters in Morioka to the coastal area is approximately 120 km, and the fuel consumption of the co-op truck is estimated to be 5.6 km/L, trucks made a total of 45.3 deliveries.

As Table 6.6 shows, the Iwate co-op moved many kinds of food to the Tsunamistricken area, including rice balls and hot soup prepared by their members, and the co-op's regular retail merchandise (they provided food to everyone regardless

Date	Activities	
March 2011	13	Start running biodiesel plant, ask friendly refineries to sell biodiesel get outdated vegetable oil from the wholesale depository
14 15 16 17	14	Dispatch first biodiesel truck to Miyako city, thereafter send trucks continuously send biodiesel tracks to governmental operation
	15	Distribute food from the central market to all stores in Morioka city
	16	Distribute 3.000 rice balls to Ofunato city, Kamaishi city, Miyako city
	Distribute rice balls and goods to Rikuzentakata city, Ofunato city, Kamaishi city	
	18	Distribute rice balls and goods to Otsuchi town, Kamaishi city, Ofunato city
	19	Wagon retail co-op goods in Kamaishi city
	20	Soup run at evacuation center in Ofunato city
21	21	Soup run at evacuation center in Kamaishi city wagon retail in Rikuzentakata city
	22	Distribute foods to Miyako city
	25	Use last methanol and stop processing biodiesel

Table 6.6 Biodiesel use by the Iwate co-op from March 13 to 25, 2011

Source Interviews conducted in 2014

Table 6.7 Sources of Iwate co-op's biodiesel: March 14 to 25

Producer	Quantity (L)
Co-op's plant	820
Sanseien	870
Other plants in Iwate	260
Total	1,950

Source Interviews conducted in 2014

of membership). They also contributed some of their merchandise to governmental operations, as shown in Table 6.2; in addition, that the various goods sent to coastal areas contributed to the refugees' survival is beyond any controversy. The total quantity of fuel shown in Table 6.7, is considerably small relative to the usual quantities required; however, it is particularly meaningful when we compare the Iwate co-op's supplies of biodiesel to the prefectural government's trucks in Tables 6.3 and 6.4. The average number of trucks hired by the prefectural government on a daily basis was reported to be approximately 31.1 according to Table 6.5. We estimated the Iwate co-op's biodiesel operation to have provided fuel for 45.3 trips/truck to the coastal area; this was more than the average daily number of prefectural government trucks. The Iwate co-op's biodiesel accounted for more than one entire day's travel during the first ten days of the prefectural government's operation.

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6.5 Difficulties with Biodiesel in a Disaster Situation

As the Iwate co-op's biodiesel is based on local, used cooking oil, the Iwate co-op's example indicates that the combination of a local food system and a local small-scale biodiesel refinery worked as a fail proof economic system. However, there was a major difficulty with refining biodiesel during the failure of fossil fuel distribution—the supply of methanol. Table 6.6 indicates that the Iwate co-op stopped producing biodiesel on March 25 after running out of methanol.

We conducted telephone interviews with Sanseien and the refinery in Shizukuishi on March 14, and both informed us that they had stopped refining biodiesel because they had exhausted their methanol supply. Sanseien's inventory of biodiesel shown in Table 6.6, was stockpiled prior to the earthquake.

Nationally networked fuel companies distribute methanol. Usually, gas stations deal with it as end retailers. On March 14, 2011, we conducted telephone interviews with a fuel company that usually delivers methanol to Sanseien and Shizukuishi. They informed us that all the fuel distribution channels, including that of methanol, had been destroyed by the earthquake and tsunami. The fuel companies' main point of stocking is in the coastal area, meaning that the tsunami had destroyed the heart of the fuel supply chain. For safety reasons, small refineries do not stock methanol; thus, once they had ran out of methanol supply, refining biodiesel was no longer possible. Some new methods refine biodiesel without using methanol, although these methods are not suitable for small refineries. The Iwate co-op had leftover vegetable oil when they stopped refining biodiesel.

As Table 6.6 shows, they found outdated vegetable oil at a related food depository on March 13 and used it to produce biodiesel. The outdated oil included fresh oil in packages that the tsunami had damaged, so it came from the co-op's regular commodity supplier. This means that the local food system and biodiesel worked together as a continued food supply system during disasters. Hence, biodiesel ensures that the local food system is fail proof.

6.6 Discussion

We have reviewed biodiesel production in Shizukuisi and the relief operation of the Iwate co-op. The Shizukuishi case indicated that its high cost is biodiesel's negative feature; Shizukuishi's production quantity is extremely small that the cost of the machines pushes the total cost up, beyond the price at which biodiesel is sold. If production quantities increased, the cost of machinery would be lower due to economies of scale. However, the cost of methanol, which also comprises a large share of the total price, does not have this advantage, meaning that all small-scale refineries face this costing problem. Methanol costs 48 yen per litre of produced biodiesel; as the price of regular diesel in Japan is usually 100–120 yen, the cost of methanol accounts

for almost half of the total, making biodiesel a less profitable product. The example of Shizukuishi shows that vocational aid centers tend to engage in the biodiesel business because they manage it as an activity for people with disabilities, which is supported by the town hall. The Iwate co-op's biodiesel production shows characteristics that are typical of the recycling movement: it has much larger production quantities, so its production costs are much lower than those in the town of Shizukuishi. However, the high cost and low profit problem still exists because the Iwate co-op pays the same price for methanol that the town of Shizukuisi pays. The high cost and low profit of biodiesel prevent fuel-related companies from moving into the biodiesel business; it is also the reason that biodiesel remains a considerably minor fuel in Japan.

Even small biodiesel refineries based on the local food system depend on methanol, which is supplied by fossil fuel retailers. As we saw in the case of the Iwate co-op, obtaining methanol is a bottleneck for biodiesel refineries that work as a part of a local food system, failing the fuel system against disasters. Biodiesel's dependence on methanol is the second negative feature; the Iwate co-op produced biodiesel until it ran out of stocked methanol. The cooperation made a great contribution as a relief operation; however, the fact that it stopped producing biodiesel when running out of methanol is evidence that biodiesel is not completely a local fuel.

On the other hand, the Iwate co-op's case indicated that biodiesel and the local food system worked together to ensure the survival of people in the coastal area. The Iwate co-op dispatched trucks to carry many kinds of food, as shown in Table 6.6. Nationwide, networked supermarkets were not open for business during the Iwate co-op's operation, which made it the only food system that worked at that time. Doi (2014), indicated that the central government could not dispatch adequate food supplies to seriously damaged prefectures in the first ten days, and this delay in the relief operation resulted primarily from a shortage of trucks. Doi (2014), pointed out that the JSDF moved 40% of the food supplies to the prefectural stocking point and that this activity was not part of the disaster relief operating plan. These facts revealed that centralized markets did not work.

Our research also clarified that prefectural governments had difficulties dispatching trucks to seriously damaged areas. This is further evident by the fact that the centralized fossil fuel market was not able to ensure people's survival in the tsunami-stricken areas. People became aware that implementing the government's preparations for disasters is an urgent matter and that making local society's fail proof should be one of its basic objectives. Biodiesel is "ineffective" compared to fossil fuels; if we focus on the costs and prices, however, it was "effective" in the aftermath of the earthquake, enabling the local food system to be fail proof. Although methanol problems limit the potential of biodiesel as a fail proof fuel, the Iwate co-op case proved that the linkage between local fuel and the local food system ensures society's sustainability against disaster. The latest market-oriented policies tend to criticize products with low profitability, such as biodiesel and firewood, or cooperative movements that try to protect local food systems; nonetheless, those local

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small productions have a better chance to survive in disasters compared to centralized production and distribution systems. Thus, we conclude that the co-ops' social innovation, which enhances local food and fuel systems, has a much better chance of surviving in a disaster compared to a centralized market economy. In other words, the co-ops' principle that local sustainability must be improved by utilizing various kinds of resources is a key element included in its social innovation plan.

6.7 Conclusion

This article aims to clarify the status of biodiesel in the Tohoku region, immediately after the 2011 earthquake and document the evidence showing that locally made biodiesel worked as a fail proof fuel supply. We considered the role of the smallscale biodiesel refinery in the town of Shizukuish, the production costs of biodiesel, and why vocational aid centers tend to be engaged in biodiesel. Thus, we evaluated the importance of biodiesel in the Iwate co-op's earthquake relief operation. The Shizukuisi town case showed that biodiesel cannot be a profit-earning business; however, it can ensure inclusive local societies that fit the direction of co-ops' social innovation. The case of the Iwate co-op provides evidence that locally made biodiesel works as a fail proof fuel supply when combined with the local food system. Although methanol supplies define biodiesel refining, the Iwate co-op produced biodiesel for twelve days, and the value of this fuel exceeded that of the prefectural government's operation by one day. Therefore, we conclude that local fuel and the food system that consumers' co-ops are building have more sustainability than a centralized market economy in times of a disaster. This fact strongly infers the limited reliability of a centralized market and the need to promote the development of local productsindicating a key element of co-ops' social innovation.

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Chapter 7 Role of Cooperatives in Climate Smart Agriculture



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Abstract Climate change is an important challenge to secure food to the growing world population through improved agricultural production. Hence, 'climate action' is suggested at the global level by formulating Sustainable Development Goal (SDG) of taking urgent action to combat the climate change and reduce its adverse impact on agriculture. Primary Agricultural Credit Societies are currently making efforts to improve crop productivity by providing access to short-term credit. They also have the potential to address mitigation strategies. However, cooperatives do not have the mandate to directly participate in the adaptation activity of development and management of natural resources in rural areas. It is in this context that this chapter seeks to explore the role that cooperatives can play in the promotion of climate-smart agriculture. The chapter finds that farmers have been experiencing climate change and are making efforts to adapt to climate change in order to pursue climate-smart agriculture. However, the farmers adopted the strategies without full information on the pros and cons of them. Cooperatives are playing the traditional role of disbursing the loans for only crop production. In order to meet the unmet needs of farmers, cooperatives need to come up with social innovation of developing an interface with different departments and collaborate with local organisations in transferring the new information and bring economic and social transformation.

Keywords Climate-smart agriculture · Cooperatives · Adaptation · Mitigation · Social innovation

7.1 Introduction

Climate change is a crucial and vital challenge at the global level to secure food to the growing world population through improved agricultural production. Hence, 'climate action' is included as one of the Sustainable Development Goals (SDGs) by

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incorporating appropriate action to combat the climate change and reduce its adverse impact on agriculture. The achievement of the goal will have a direct bearing on the other two SDGs of poverty and hunger.

There is now a realisation that global agricultural production needs to be 'climate-smart'. That is, agriculture needs to adapt to feed a growing world population in the face of changing climatic conditions, without degrading the natural resource base. FAO (2012: 1) mentions that "more productive and resilient agriculture will need better management of natural resources, such as land, water, soil, biodiversity ...". Climate-smart agriculture (CSA), rooted in sustainable agriculture and rural development objectives, is expected to reduce hunger and improve environmental management.

Meinzen-Dick et al. (2010) highlight that the response strategies addressing the two main manifestations of climate change, namely, global warming and an increased number of extreme environmental events, are mitigation and adaptation. Adaptation "involves actions that communities and individuals can undertake in response to changing conditions. These approaches include strategies within agriculture such as ... implementing water harvesting or irrigation schemes. Adaptation strategies within agriculture are connected with effective natural resource management (NRM), such as improved land and water management practices" (Ibid.: 2). Mitigation strategies "reduce the probability of climate change through sustainable practices that mitigate the increased occurrence, severity, and unpredictability of weather patterns resulting from climate change" (Ibid.: 1).

The discussion around CSA has mostly focused on the introduction of new agricultural technologies and practices at the farm level (Scherr et al. 2012). Meinzen-Dick et al. (2013) present a list of such technologies and practices which include crop management (intercropping, crop rotation, new crop varieties, greater crop diversity and value chain and marketing), soil and water management (conservation agriculture, contour planting, terraces and bunds, water storage, improved irrigation, rehabilitation of degraded landscapes), livestock management, agro-forestry and so on. They also argue that climate-smart agriculture will succeed in delivering its promised benefits to poor farmers only when institutions promoting equity are in place supporting the new ideas and innovations. Benywanira and Kumar (2017) find that many developing countries, which have impacted by climate change, have undertaken initiatives to improve the agricultural productivity but such initiatives have not benefitted the smallholder farmers.

Local institutions such as Cooperatives and Panchayat Raj Institutions being self-governing institutions have the potential to promote collective action to facilitate the adoption of agricultural technologies. They also undertake the functions of information gathering and dissemination, resource mobilisation and allocation, skill development, capacity building, leadership to the community, establishing linkages between the decision-makers, transforming coping capacity of poor farmers into adaptive capacity and so on. Meinzen-Dick et al. (2013: 3) note that institutions must "(i) provide information about changing climatic conditions as well as possible responses; (ii) foster innovation to develop and disseminate new practices and technologies; (iii) encourage investment in physical infrastructure and/or in learning new ways and (iv)

provide insurance to cope with risks due to climate shocks and risks of adopting new practices."

In India, cooperatives are local institutions which have the potential to promote CSA by undertaking the above functions. Credit cooperatives, viz Primary Agricultural Credit Societies (PACS) and Primary Cooperative Agriculture and Rural Development Banks (PCARDBs), which help the farmers in obtaining credit for agriculture, agricultural inputs, agricultural machines or equipments, etc. cater to almost all the villages in India. There has been an increase in the number of cooperative institutions that were catering to agriculture from 95,871 in 1980 to 110,000 in 2003 (Mohan 2006). However, when one looks at the number of the PACS, working at the grassroots level, there has been variation in their growth during 2003-04 to 2014–15 (Rajasekhar and Manjula 2018). The credit cooperatives at present are playing the traditional role of providing credit only to crop production; even the credit disbursed to agriculture declined after the reforms were introduced in India since 1991 (Sahu and Rajasekhar 2005), probably because of the tendency to restrict their lending activities to the risky activities in the agricultural sector (Pradhan 2013). This implies that cooperatives are not undertaking the four functions (as mentioned in Meinzen-Dick et al. 2013) that are needed for climate-smart agriculture.

Can cooperatives bring social innovation to promote climate-smart agriculture in India? Mulgan et al. (2007; 7), regard social innovation as 'new ideas that work to meet pressing unmet needs and improve people's lives'. They define social innovation as "innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly developed and diffused through organisations whose primary purposes are social" (ibid.; 8). However, innovation in the social field is missing due to the lack of institutions and funds (ibid.). The four barriers that come in the way of any social change are: (a) Efficiency—people tend to resist reforms because of the short-term threat of worsening performance; (b) Interests—changing the people's interests in the new models of farming; (c) Minds—people's mind gets solidified in the form of assumptions and norms; (d) Relationships—social sector rests much on personal relationships rather than formal organigram (Mulgan et al. 2007).

It is here that cooperatives can bring in social innovations to transform and reorient the current agricultural practices to achieve climate-smart agriculture (CSA), which (a) increase the agricultural **productivity** and thereby improve the farm income; (b) strengthen the resilience through **adaptation** and **mitigation** strategies for agriculture to minimise the short-term risks faced by the farmers and ensure their long term gains.

Credit cooperatives are currently making efforts to improve crop productivity by providing access to short-term credit. They also have the potential to address mitigation strategies such as the promotion of drought resistant seeds, reducing greenhouse gas effects with the help of good agricultural practices. Agrawala and Carraro (2010) study the link between MFIs and adaptation to climate change in Bangladesh and Nepal, and arrive at three categories—(a) 'no link' when MFIs do not have any direct connection to adaptation, (b) 'win–win' where those MFI programmes which would automatically contribute to adaptation to climate change and (c) 'climate proofing'

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which refers to activities which might need to be adjusted to take up the climate change or to facilitate adaptation. However, cooperatives do not have the mandate to directly participate in the adaptation activity of development and management of natural resources in rural areas. In the interest of climate-smart agriculture, cooperatives need to become innovative in assuming new roles and establishing an interface with the local government and other local organisations. In India, an interface between cooperatives and panchayats was envisaged right from the time of independence (Paranjothi 2020).

7.2 Objectives and Methodology

The chapter mainly explores the role of cooperatives in the promotion of climatesmart agriculture. The following questions are addressed in the chapter:

- Do farmers, cooperatives and local government perceive that there is climate change?
- If yes, what changes have they noticed?
- What measures are being taken up by the local organisations and farmers?
- How can the interface between cooperatives and local government be strengthened for CSA?

The methodological approach followed is to have an in-depth discussion with representatives of cooperatives, local government and farmers around issues such as perceptions on climate change, awareness on crops that are suitable for the changing climate, drought resistant seeds, quantum of credit to CSA activities, challenges and constraints in promoting climate-smart agriculture, the need for interface among local organisations and ways forward in this regard. Information on the following variables has been elicited from the farmers: effect of climate change on crop productivity, adaptation measures (such as growing crops or using seeds that are suitable to changing climate), use of traditional knowledge or practices as mitigation measures, credit and other support availed for climate-smart agriculture. In addition, the role currently being played by the cooperatives and its efforts for any social innovation activities are also captured.

Primary data were collected from four agro-climatically different districts of Karnataka since the potential of cooperatives to adopt social innovation in the climatesmart agriculture is likely to be different across differently endowed districts. From each district, one grama panchayat¹ was randomly selected. From the jurisdiction of each of these grama panchayats, one village was selected for the study. The sample households were randomly drawn. However, it was ensured that all of them are cultivators by asking a screening question on the extent of their dependence on agriculture. The household having at least one or more members depending on agriculture was

¹This is the lowest tier of local self-government in India.

covered for the study. In all, primary data were collected from 76 farmers from four villages.

7.3 Profile of the Sample Villages

In the village from the backward district of Gulbarga, there are about 850 households. The numerically dominant caste in this village is scheduled caste. But, the caste groups that are socially and economically dominant are Lingayats, Reddys and Muslims. Since the village is far off from the capital city of Karnataka and located in the backward region of north Karnataka, the village is not developed. The rainfall in the district is scanty and uncertain. The area under irrigation is quite low and the farmers in this village pursue semi-arid agriculture. They grow cotton, red gram and jowar as rain-fed crops. The government offices in this village include grama panchayat, primary health centre and high school. *This is called a backward village*.

The second village is from Kolar district. Of 300 households in this village, most belong to Vokkaliga and Scheduled caste. Vokkaliga is the dominant caste in economic and political terms. Most of the households obtain their livelihood through animal husbandry activities. It has been informed that there was a shift in the occupational pattern in the village from agriculture to animal husbandry due to climate change. Here too, only the older generation has been depending on agriculture and other allied activities. The younger people moved out of the village and are engaged in non-farm activities in Bangalore city. We call this as transition village.

The third village is in Mandya district which is known for Irrigated agriculture, and the cultivation of sugarcane and paddy. This is a small village with about 200 households. Most of the households belong to Vokkaliga caste. People in this village mostly depend on cultivation. *This is called as an irrigated village*.

The last village is from Dakshina Kannada located in the coastal part of the state. The district receives copious rainfall. Although artificial irrigation is not very well developed in the district, farmers cultivate paddy in kharif season (called upland paddy) with rainwater. The farmers also grow areca nut, coconut and other plantation crops such as rubber, pepper and so on. The primary occupation of most of the households is cultivation, although the non-farm employment is also quite high. The district is one of the most developed in the state in terms of human resource development. This is a large village with about 1,000 households. *We call this as a developed village* (Table 7.1).

7.4 Perception of Climate Change

All the sample households across the four villages perceived that there has been a change in the climate (Table 7.2). They basically see the climate change in the extreme weather conditions and timings of seasons. A majority of the households

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Table 7.1 Profile of the sample villages

District	No. of households	Important caste groups	Important occupations	Crops grown
Backward	854	Scheduled caste	Cultivation Agricultural wage labour	Cotton, tur dal, jowar
Irrigated	167	Vokkaliga	Cultivation Livestock rearing	Ragi, vegetables
Developed	1080	Backward caste and minorities	CultivationAgricultural wage labourSalaried job	Areca nut, coconut, paddy, rubber, pepper
Transient	300	Vokkaliga and scheduled caste	Animal husbandry Cultivation	Ragi, eucalyptus tree

Source The source for this, as well as remaining tables and figures, is the primary survey

Table 7.2 Distribution of farmer households (%) by their statement on climate change

Particulars	Backward district [N = 20]	Irrigated district [N = 20]	Developed district [N = 20]	Transient district [N = 16]	Total [N = 76]
Proportion of farmers perceiving climate change	100.0	100.0	100.0	100.0	100.0
Proportion of farmers stating that climate change is reflected in terms of decrease in the rainfall and increase in the temperature	75.0	60.0	70.0	81.3	71.1
Proportion of farme	ers noticing the o	climate change		,	
- in the last 5 years	25.0	65.0	50.0	12.5	39.5
- in the last 10 years	55.0	30.0	45.0	62.5	47.4
- in the last 15 years	20.0	0.0	0.0	25.0	10.5

reported that the climate change reflected in terms of both decrease in the rainfall and increase in the temperature. Interestingly, the proportion of the farmers reporting that there been a decrease in the rainfall and increase in the temperature was relatively less in the irrigated village.

Most of the sample farmers from the transition and backward villages observed the drastic climate change for the last 10–15 years. On the other hand, a relatively large proportion of the sample households from irrigated and developed villages stated that the climate change is more of a recent phenomenon (i.e. in the last 5 years).

In the sample villages, the climate change also contributed to the decline in the groundwater level. A question was asked to key informants from the sample villages on whether there was a decline in the groundwater level,² and if yes, what is the extent to which it has declined. The information collected from key informants shows that there was a decline in the groundwater level in all the villages although the rate at which such a decline took place varied across the villages (Fig. 7.1). As can be seen from the graph, the situation of groundwater level worsened in the last two decades. Two decades ago, the depth at which the groundwater was available in the sample villages was ranging between 100 (in developed village) to 300 feet (in transition village). The depth at which groundwater was available increased in all the villages thus signifying a decline in the groundwater level. The decline in the groundwater level was alarming in the transition and irrigated villages; now farmers in these villages are compelled to drill 800-1000 feet to get water into their bore wells. Key informants attributed such a drastic decline to less rainfall leading to drying up of water bodies. In addition, there was over exploitation of groundwater by drilling more number of borewells in the village. The groundwater level is comparatively better in the developed district. This is only expected as this district is situated in the coastal area and receives relatively more rainfall.

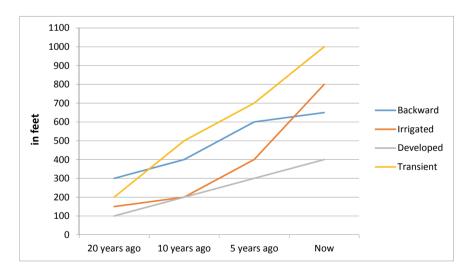


Fig. 7.1 Groundwater level (in feet) in sample villages

²It may be noted that the literature refers to groundwater table to measure the depth of the water level from the upper surface of the saturation zone. However, in this chapter the groundwater level is used to refer to the rough idea of water level at the ground without actual measurement.

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7.5 Adaptation Measures Undertaken by Farmers

Faced with the climate change, did farmers undertake adaptation measures? The response has been affirmative from 69 out of 76 sample farmers (almost 91%). These farmers have undertaken some or the measure to overcome the problems posed by the climate change. Some of these measures could directly help in reducing the risk while other measures may not be that helpful. Some measures such as soil and water conservation will address the problems posed by the climate change. Measures such as migration to a city may help the farmer household to overcome the crisis posed by the climate change; but such a measure does not contribute to climate-smart agriculture. Let us now examine the type of adaptation measures adopted by the sample farmers.

Discussions with farmers revealed that farmers were, however, not completely aware of the different adaptation strategies that can be adopted to address the impact of climate change. Many of them simply reacted to the market changes³! Various adaptation measures that were undertaken by the farmer households are provided in Table 7.3. These are both helpful and not so helpful strategies for climate-smart agriculture.

Nearly 30% of the farmer households reported that they have undertaken water and soil conservation activities such as erecting bunds and constructing farm ponds. These activities are prominent in the backward and transition villages as the following case study shows.

A farmer from the backward village was facing the problem of dwindling groundwater table and inability to irrigate the crops with the help of open well that was dug years ago. He, therefore, devised a method to recharge open well.

In the transition village, several farmers have undertaken the adaptation measures of bund construction and farm ponds with the help of funds from the National Rural Employment Guarantee Scheme implemented by the grama panchayat.

The adaptation measure of agro-forestry was undertaken by 30% of the farmers. Under this, some of the farmers from the backward district planted trees in their farmland or on bunds. Some of the farmers planted neem trees in their field, which seem to be beneficial in improving soil fertility and neem leaves are used for cattle feed.⁴ A few farmers reported that they planted trees that would provide fodder to their cattle. From the transition village, farmers have started to grow horticultural crops as these would require less water.

³Study by Howden et al. (2007) note that adaptation to climate change is an ongoing process and is influenced by several factors such as changes in market forces or institutional or other factors.

⁴Illamurugu (2005) highlights many good properties of the Neem tree and leaves. This paper notes that the planting Neem tree increases the farm productivity by about 30 per cent. The Neem tree basically rejuvenates the land that is exposed to chemical fertilizers, improves soil fertility and has a water holding capacity, and it also protects the standing crops against gusty winds thereby preventing soil erosion (ibid.).

Table 7.3 Distribution of farmer households (%) by their statement whether they have undertaken any adaptation strategies

Adaptation measures	% of sample households saying "Yes"						
	Backward	Irrigated	Developed	Transient	Total		
Helpful							
Planted more trees/Afforestation	45.5	0.0	31.8	22.7	28.9 (22)		
Undertook water and soil conservation activities	36.4	13.6	18.2	31.8	28.9 (22)		
Changed the cropping pattern	27.3	0.0	27.3	45.5	28.9 (22)		
Changed the seed variety	56.3	3.1	25.0	15.6	42.1 (32)		
Started using different type of fertilisers/pesticides	37.7	13.2	35.8	13.2	69.7 (53)		
Started using new technologies	38.1	19.0	26.2	16.7	55.3 (42)		
Not so helpful							
Reduced the cultivable land	14.3	0.0	28.6	57.1	18.4 (14)		
Started to seek non-farm employment	17.1	39.0	24.4	19.5	53.9 (41)		
Distress migration to urban areas	25.0	56.3	6.3	12.5	21.1 (16)		

More than half of the households reported that they have gone for new agricultural technology. The new technologies adapted differed across the villages. In the transition village, some of the farmers have gone for plastic mulching as this technology helped them in conserving moisture, reducing the need for irrigation water, lowering expenditure on weeding and so on. A few of them have also gone for drip irrigation. Farmers adopting these measures were happy with the results as the water use efficiency has gone up.

In the other villages, especially in the backward and irrigated villages, farmers have gradually shifted from ploughing of land with animal power to tractor ploughing. The shift or dependence on tractors or tillers was essential because of the following reason. With the climate change, scanty and uncertain rainfall and unseasonal rains, the farmers could not grow those crops which will provide fodder to animals. Even if farmers wanted to cultivate these crops they could not simply do so as they did not have control anymore on the timing of rains. Such a change, which often

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recurred, meant that the farmers gradually did not have fodder for livestock. Under these circumstances, they sold away their draught animals and switched to tractor ploughing. So much so that the tractor technology is now used for land preparation, sowing, weeding, harvesting and so on.

About 42% of households reported that they have changed seed variety (Table 7.3). This was more common in the village from a backward district, while it was not at all common in the irrigated village. In the olden days, they were storing seeds of crops grown in the previous year and use the same for sowing in the next year. However, farmers, not having control on the timing of the rainfall, could not use seeds stored and, in the process, were compelled to sow crops other than what they had planned. In such cases, they had to approach the shops for buying of seeds. With the timing of rainfall becoming uncertain every year, most of the farmers have stopped to store seeds. Now they only depend on shops for the seeds.

In some of the cases, farmers stated that the new seeds proved to be better in the context of climate change. The farmers could now sow drought resistant seeds, which were also short maturing. The farmers opined that the new seeds grow better and faster as compared to the traditional ones. In the transition village, officials from the horticulture department visited the village to provide information on drought resistant seeds and also supply them.

Most of the sample farmers reported that they started to use chemical fertilisers and pesticides because of two reasons. First, with the decline in the livestock population, the quantum of organic manure decline in the study villages. This has compelled them to use chemical fertilisers for better yield. Second, climate change has resulted in the emergence of new pests and farmers were of the opinion that the application of pesticides is a must. Similarly, a different type of fertilisers was applied to the crops in order to ensure better yields.

Nearly one-third of the farmers have resorted to a change in the cropping pattern. For instance, a farmer from the backward village reported that earlier he used to grow red gram. The precipitation for this crop should be optimal; in other words, precipitation should neither be more or less. Given the scanty and uncertain rainfall, farmers shifted from red gram to cotton cultivation.

In response to the climate change, some of the farmers have also adopted those strategies which are not so helpful to reduce the climate change. Nearly 54% of the sample farmers stated that they have undertaken non-farm activities, while 21% of them migrated to urban areas under distress (Case Study 1). This proportion was high in the irrigated district, which is closer to Bangalore city. Nearly one-fifth of the farmer households reported that they have reduced their cultivable land. This is especially the case in transition village. It was reported that because of the shortage of rainfall or water, most of the farmers in transition village started to plant eucalyptus trees or mango trees in their farmland and started to depend on non-farm work especially on animal husbandry. The households eke their livelihood through dairying.

Case Study 1: Ineffective adaptation strategies led to migration

A marginal farmer belonging to SC caste, from the backward village, has been cultivating red gram, cotton and jowar with borewell irrigation. However, with the declining water table, it has become progressively difficult to irrigate crops with borewell. This problem continued despite groundwater recharge measures undertaken by him. Hence, one of the household members had to resort to migration to the city to work as a wage labourer in the unorganised sector

When did the farmers adapt to climate change? Most of the sample farmers stated that they have adapted to climate change since 2005 (Table 7.4).

How did they farmers mobilise funds for adaptation strategies? The farmers basically constructed farm ponds in the field with their own sources or through a government programme, namely, MGNREGS (Table 7.5). Only activities such as water and soil conservation were supported by the watershed department or taken up under MGNREGS. Subsidy for drip irrigation was provided by the horticulture department. Activities undertaken with the help of a loan from a cooperative society were miniscule.

 $\textbf{Table 7.4} \ \ \text{Distribution of farmer households (\%) by their statement on when was the adaptation strategies undertaken}$

When was adaptation strategy adopted							
	Before 2000	2001–2005	2006–2010	2011–2015	After 2015		
Planted more trees/Afforestation	40.9	4.5	22.7	31.8	0.0		
Undertook water and soil conservation activities	9.1	0.0	27.3	54.5	9.1		
Changed the cropping pattern	9.1	18.2	27.3	31.8	13.6		
Changed the seed variety	9.4	31.3	25.0	34.4	0.0		
Started using different type of fertilisers/pesticides	3.8	39.6	34.0	20.8	1.9		
Reduced the cultivable land	28.6	0.0	50.0	21.4	0.0		
Started using new technologies	7.1	19.0	47.6	26.2	0.0		
Started to seek non-farm employment	17.1	22.0	34.1	24.4	2.4		
Distress migration to urban areas	0.0	6.3	31.3	62.5	0.0		

	funding required	provided	cooperative societies	from others	sources	Others
Planted more trees/Afforestation	31.8	4.5	0.0	0.0	50.0	13.6
Undertook water and soil conservation activities	18.2	50.0	4.5	0.0	22.7	4.5
Changed the cropping pattern	36.4	0.0	0.0	4.5	50.0	9.1
Changed the seed variety	34.4	0.0	0.0	3.1	62.5	0.0
Started using different type of fertilisers/pesticides	30.2	0.0	3.8	1.9	60.4	3.8
Reduced the	100.0	0.0	0.0	0.0	0.0	0.0

0.0

0.0

0.0

Table 7.5 Distribution of farmer households (%) by the source of funding for adaptation strategies

Loan from

Loan

0.0

2.4

0.0

31.0

51.2

0.0

21.4

4.9

0.0

Own

Others

CD

No

47.6

41.5

100.0

0.0

0.0

0.0

7.6 Role of Cooperatives

cultivable land
Started using new

technologies
Started to seek

urban areas

non-farm employment

Distress migration to

Discussions with the president and secretary of PACS from the sample villages revealed the following. PACS were mostly involved in four important activities: (i) distribution of rations to ration card holders by operating public distribution shop; (ii) distribution of fertilisers; (iii) pigmy collection; and (iv) provision of loans. When it comes to loans, PACS provided crop loans, salary based loans, business loans and vehicle loans. The PACS stated that they merely provided loans for the cultivation of the crops but not for any innovation towards climate-smart agriculture.

About 46% of households reported to have obtained the loan from cooperative societies in the last 5 years. The proportion of households obtaining a loan from cooperative societies has been relatively high in the irrigated village and the least in a developed district. Nearly 63% of them obtained crop loan for the purchase of seeds, fertilisers, etc. while remaining obtained loans for the purchase of cattle/poultry or sheep rearing (Table 7.6).

Remaining households have not obtained due to several reasons such as not aware of the cooperative society, not needed as unable to repay the loan, etc. Lack of access to credit seems to be a major constraint for not taking up adaptation measures in Ethiopia and South Africa (Bryan et al. 2009).

	Backward	Irrigated	Developed	Transient	Total		
Proportion of HHs borrowing loan from cooperative societies	45.0	60.0	35.0	43.8	46.1		
Reasons for borrowing							
Crop loan	100.0	33.3	100.0	28.6	62.9		
Dairy farming/cattle rearing	0.0	66.7	0.0	42.9	31.4		
• Poultry	0.0	0.0	0.0	14.3	2.9		
Sheep rearing	0.0	0.0	0.0	14.3	2.9		

Table 7.6 Distribution of farmer households (%) by the status of borrowing loan from cooperative societies

The above shows that the cooperatives have continued to play a traditional role in disbursing the loans. It was reported that the loan can only be provided to the landholders who possess proper titles and land documents. Another major issue is that cooperative loans were renewed year after year, especially given that the rate of interest is zero. Manjula (2020) notes that though the cooperatives are contributing to the welfare of agriculture, they are merely playing the traditional role of providing credit to the crop production and hence these institutions need to relook the role to address the manifestations of the climate change.

The discussion with cooperative staff (president and secretary), revealed that they have not interfaced with the other local organisations such as grama panchayats, horticulture department, microfinance groups and so on. On the whole, the role of cooperatives was inadequate, especially in the context of climate change and the need to promote climate-smart agriculture.

7.7 Conclusions and Policy Implications

Farmers in the selected village have been experiencing climate change, which is getting reflected in terms of less rainfall, increased temperature and declining ground-water table. Farmers have been making efforts to adapt to climate change in order to pursue climate-smart agriculture. However, it needs to be noted that these strategies are not undertaken with full information on their pros and cons. The discussion makes it amply clear that the farmers are simply responding to climate change and market impulses. Here, the cooperatives should play an important role in providing information on climate-smart agriculture with the help of grama panchayats and self-help groups in the village, and prepare them.

In the absence of adequate information on adaptation strategies for climate-smart agriculture, farmers have been adopting negative strategies which may have future consequences. Here, cooperatives can play an important role in converting coping strategies as those enabling the farmers to adapt to climate change. Asrat and Simane (2018: 1) note that "any intervention that promotes the use of adaptation measures

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to climate change may account for location-specific factors that determine farmers' perception of climate change and adaptive responses thereof."

Cooperatives need to interface (Rajasekhar et al. 2020) with horticulture and agriculture department, or Farmer Producers Organisations to obtain new information for its members on the improved seeds and technologies for the agriculture. This is, however, not being done. Cooperatives should also provide credit to farmers to adapt to climate-smart agriculture. They are, however, playing the traditional role of disbursing the loans for only crop production. The mere renewal of loans is also not becoming effective given the climate change. Cooperatives have, therefore, not yet become social innovators and consequently, there are several unmet needs of farmers.

Social innovation takes place when there are unmet needs (Mulgan et al. 2007). Given the climate change, there are several unmet needs of farmers. This calls for social innovation to address the issues relating to agriculture. Climate-smart agriculture through cooperatives is a new idea that will meet the unmet needs of the farmers. In other words, one would like to see the cooperatives adopt the new idea of promoting climate-smart agriculture so that the needs of farmers are fulfilled. The unmet needs of farmers are: not able to obtain credit for new and innovative agricultural technology and for undertaking new cultivation practices. Another unmet need is undertaking soil and conservation activities in their farms.

Cooperatives cannot do so many activities on their own. They need to collaborate and work with self-help groups, panchayats and line departments such as horticulture and agriculture departments.

Mulgan et al. (2007: 5) note that "many of the most successful innovators have learned to operate across the boundaries between these sectors and innovation thrives best when there are effective alliances between small organisations and entrepreneurs (the 'bees' who are mobile, fast, and cross-pollinate)". The same analogy can be extended to cooperatives as well. Cooperatives should operate beyond the boundary of disbursal of credit for crop production and collaborate with other organisations such as self-help groups, panchayats, line departments etc. There is a need for cooperatives to be "mobile" to go around the villages, reach the farmers "fast" and "cross-pollinate" just like bees.

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Chapter 8 Social Media as an Effective Tool for Social Innovation in Indian Cooperatives



Sanjay Kumar Verma

Abstract Fostering innovation is a big challenge of the competitive economy with the focus on digital technology. In the recent times, cooperatives have made impressive strides in various areas of social innovation. There is a strong realization that if cooperatives do not innovate they cannot compete in the market economy. Cooperatives and social media both work on the principle of empowering people in their own ways. However, despite the wide network and reach, cooperatives have not been able to utilize social media effectively. The literature on social media and cooperatives with the focus on social innovation in India, is almost non-existent, except for a few general articles on the subject. Delving into this unexplored field, the methodology of my chapter will be exploratory, based on secondary sources. The chapter will explore the potentialities of social media as an effective tool, and find out its scope in the field of social innovation. The chapter will point out that cooperatives with their wide network, reach and based on members' strength can emerge as a lead player in social innovation.

Keywords Social media · Facebook · Social innovation · Communication · Digital

8.1 Introduction

The cooperative movement in the digital era today faces a big challenge to build up connectivity and forge wide-ranging collaborations at all levels (membership, internal and external stakeholders, wider community, public and so on) so as to usher in innovations which can enhance the well-being of the people in the society. This is not only the demand of the competitive economy, but also highly imperative for image-building of the cooperative sector. Cooperatives are emerging strongly in the field of social innovation, whether they are elderly care cooperatives, waste picker associations, driver cooperatives, platform cooperatives, snake catchers' cooperatives, etc. In cooperatives, being member-driven organizations, social innovation is

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driven by the collective force of members and this will lead to an improvement in social relations, communication, solidarity, shared values, etc.

Cooperatives and social media work on the same principle of empowering people in their own ways. The tools of Social Media (Facebook, Twitter, etc.) give the citizens a free platform to engage as well as strengthen their connections which pave the ground for social innovation. The cooperatives in India, despite their wide network and reach, have not been able to utilize social media to build up strong connectivity within their membership base and build wide-ranging collaboration with the government, civil society, private sector, etc. This is because there is a big knowledge gap about this in the sector. Further, the awareness for social media amongst cooperatives is very low.

The cooperatives have not been able to utilize the power of social media to highlight the stories of social innovation which can tackle the problems of unemployment, poverty, inequality, sustainable development, etc. Besides, the cooperatives have also not been able to strengthen their voice through social media which can enable collaborative forces to not only innovate, but also influence the policymakers to give due recognition to cooperatives in the socio-economic policies of the country.

Viewed against this backdrop, the chapter will define 'social innovation', and review the literature in the field. The chapter will explore how social media can be an effective tool for social innovation, its potentialities in the functioning of cooperatives. The chapter will also provide a roadmap in this regard.

The academic literature on Social Innovation goes back to Max Weber who defined the concept of social action. Social innovation re-emerged as a concept in the 1990s, as a way to cope with results of economic restructuring, changes introduced by IT developments and mass unemployment. In the new context, social innovation has a broader meaning, it can be at the level of macro, micro, structural or local, introduced by an entrepreneurial spirit and through solidarity, either to improve the functioning of an organization or transform the organization into a social enterprise. Stanford Social Review (Phills et al. 2008) defines social innovation as a 'novel solution to a social problem that is more effective, efficient, sustainable or just the existing solutions and for which the value created accrues to society as a whole rather than private individuals.' A review of recent literature in social innovation shows the presence of a multi-disciplinary approach which further enriches this subject and gives it a varied dimension.

Due to rapid advances in the field of social media, the literature in this field has broadened its horizons through interlinkages with the subject of social innovation. The recent trends in literature broadly acknowledge the role of social media with its emphasis on dissemination of messages, building up collaborations, etc. in facilitating the process of social innovation.

We find that there is a lack of substantial literature in the field of cooperatives, social innovation and social media, though few of the articles have covered this field. A recent article by Esim and Katajamaki (2016), emphasizes the need for "multi-dimensional approach to social innovation that is well grounded in locally identified needs and priority areas of action."

A review of the literature related to cooperatives, social media and social innovation shows that there has not been any effort to explore the linkages between these aspects in India. Thus, this chapter explores these linkages with the help of cases collected through secondary sources.

8.2 Social Innovation and Social Media

Social Innovation has become important for organizations wanting to meet the scale of current global challenges, increase their impact, find solutions to the problems of the community despite having limited resources, and stay relevant in the changing times. Innovators should show different levels of competence, social entrepreneurship and new ways of combining and organizing productive resources. Ideas for innovation should come from all quarters, from both internal and external stakeholders.

For social innovation, a participatory approach in social change is the key. This happens when members of the community freely share their values and encourage others to join them. Mass communication channels play an important role as a catalyst in this as they forge interconnections between the individuals which provide a stimulus to change the system through wide dissemination of messages by the people who feel involved to act and make a difference. Social media in the recent times has played an important role in spreading messages of the organizations, both business and promotional as a result of which the organizations have been able to target their audience, expanding their business, as well as promoting cause. The various tools of Social media like Facebook, Twitter, etc. are good examples of how communities around the world are interconnected.

No doubt, social media has created a space for the ideas of an individual which plays an important role in social innovation. It has given the world a voice needed for powerful expression. The mainstream media without the involvement of people in a participatory role has its own limitations in building up connections amongst the people. Social media by providing a free platform to citizens to strengthen their connection has given them a powerful tool to initiate a change and organize themselves towards social innovation.

8.3 Cooperatives in India: Spread and Social Innovation

Late Taimni (1993), an eminent cooperative academician is of the view that cooperatives have to combat and eliminate exploitation of all types from the society. With more than 8 lakh cooperatives covering 100% of the villages, the cooperative movement is the largest in the world. The cooperatives have a significant presence in all

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the areas of socio-economic activities. While cooperatives such as AMUL, ¹ Indian Farmers Fertiliser Cooperative (IFFCO)² and Krishak Bharati Cooperative Limited (KRIBHCO)³ are the success stories, there are numerous cases of small cooperatives which have played an important role in socio-economic transformation both in the rural and urban areas.

Due to rising levels of poverty, inequality, lack of resources, etc. cooperatives in India, have embarked on the path of social innovation having an impact on the local communities. This innovation is fuelled by the collective strength of members, and their eagerness to improve not only economic condition, but also make a social impact. Self-Employed Women's Association (SEWA) is a fine case of social innovation in India which employs trade union with open membership to self-employed women workers all over India. SEWA empowers these workers to start incomegenerating activities and, in the process, saving them from middlemen. SEWA Bank, a cooperative of women, is now a successful case of innovation after facing the initial problems to develop banking habit amongst the poor illiterate women workers.

Similarly, Shri Mahila Udyog Lijjat Papad, a women cooperative, has provided self-employment to mostly urban poor women, whose core product is papad, exported worldwide. This cooperative through innovation supports local production and develops creative skills of women to support their families thus creating social impact.

On the other end of the spectrum, Irula Snake Catchers' Cooperative near Chennai is a good example of social innovation as it uses indigenous skills of tribals to produce snake venom which is commercially used for medicinal purposes providing self-employment to the poor tribals who were earlier facing problems of very survival.

Swachh Cooperative⁴ in Pune is another notable example of social innovation where the cooperative of rag-pickers has taken up the challenge of providing effective and sustainable waste management services, through doorstep waste collection initiative, thus in the process improving their income and working conditions. Of late, some cooperatives have made effective interventions in solar power generation which is environment friendly, considering the high cost of electricity, as these are run by unemployed village youth providing them a viable mode of employment.

8.4 Communication Strategies for Cooperatives and Social Media

The communication strategies for cooperatives in India are weak due to which the vibrant functioning of the cooperative movement, its success stories, their strengths and unique features and stories of social innovation are not well communicated to

¹https://www.amul.com/.

²https://www.iffco.in.

³https://www.kribhco.net/.

⁴https://swachcoop.com.

both internal and external stakeholders. There is no proper awareness of cooperatives amongst the general masses due to the absence of professional communication strategies, lack of effective campaigns to generate people's interest and poor media relations. While the internal cooperative media consisting of the cooperative journals lacks a professional approach in highlighting the success stories of the cooperative movement and coming up with lively stories of the innovative action of the cooperatives at the grassroots level. The mainstream media generally ignores the issues of the cooperatives because cooperatives do not have a pro-active policy in highlighting their stories in the daily newspapers as well as magazines. For example, National Cooperative Union of India (NCUI)⁵ magazine 'The Cooperator' is the only recognized national level magazine of the cooperative sector with a national level perspective, despite the presence of other national level cooperative organizations. In mainstream newspapers like Times of India, Economic Times, Hindustan Times, etc. the coverage of cooperatives gets a low priority. Though some success stories of cooperatives are reported time and again, these are very few considering the widespread reach and impact of the cooperative movement in the country. The electronic media, of late, has been highlighting the issues of the cooperatives, but a specialized treatment of this subject is lacking, instead, the issues relating to cooperatives are clubbed with those on agriculture. Some of the resourceful and cash-rich organizations like AMUL and IFFCO have good budgetary resources for PR and communications due to which they get good publicity. However, for most of the cooperatives, communications remain their weakest link.

Considering the depth, wide penetration, and stronghold of the cooperatives, with wide- ranging impact on the communities, it is felt that a participatory mode of communication with a two-way approach based on dialogue, engagement and feedback can be the best way of communications to tap the dynamism of the cooperative sector, and highlight and upscale the stories of social innovation. While there may be many stories of social innovation in Indian cooperatives, not all innovations have upscale potential through the medium of social media, which has a big role in highlighting these stories of social innovation.

8.5 Social Media for Social Innovation: Potentialities for Cooperatives

The stories of social innovation in cooperatives in India, neither make a wider impact due to lack of information nor find supporters due to the absence of a collaborative platform. It is here that the Social Media (such as Twitter, Facebook, Instagram, etc.) can play an important role in bridging this gap. Social Media helps in creating this awareness because of its easy outreach, Further, it is a cost-effective solution which enables instant communication, inspires further innovation by generating ideas amongst like-minded people devoted to a cause, builds up a cohesive community of

⁵https://ncui.coop.

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users and also catalyzes civic action. Social media is an effective platform to disseminate the messages of social innovation to a wider audience, who may feel encouraged to take suitable action to upscale the innovation. It has been seen that the strong advocates of the cooperative concept are not brought together into a common platform through two-way communication. This hampers the ideas of innovation to flow in the cooperative sector. Social media opens the avenues of two-way communication which leads to better feedback, constructive criticism/suggestions which open the ground for social innovation.

It has been found that many of the cooperative organizations are not utilizing the potentialities of social media platforms for effective communications. Let us analyze the presence of social media in some of the cooperative organizations and see what lessons can be learnt.

NCUI being an apex organization of the cooperative movement, over a period of years it is slowly becoming active on social media. The followers on Twitter are more than the followers on the NCUI Facebook page. Being primarily, an education and training organization, the posts related to training programmes inauguration, valedictory ceremony, occasional success stories of innovation etc. are posted on a regular basis. Sometimes, the videos related to speeches of important speakers during training and other programmes are also posted on these social media sites. Videos related to views/opinions of the participants during the training programmes are also posted on the social networking sites. Live streaming of training programmes, on a few occasions, has been posted on the social media sites. The coverage of important events like Cooperative Week, Vaikunth Bhai Mehta Memorial Lectures, visits of foreign delegations are also posted regularly. Re-tweets of the important posts on indiancoop.com and other sites like ICA are done regularly due to which sometimes the number of likes is more. Comparatively, NCUI is more active or Twitter than Facebook. The posts on Facebook are more or less related to Twitter. However, the number of likes and shares on Facebook are more. Similarly, the comments on Facebook are also more.

IFFCO, a well known global fertilizer cooperative over the few years has emerged as a leader of social media through its Twitter, Facebook and other platforms. The official Twitter handle of IFFCO has a large number of followers, and there are also a large number of likes. The posts are generally related to IFFCO's business growth, success stories, innovations in business technologies, diversification in new areas, reports, visits of key officials to IFFCO plants, etc. The posts related to Nanotechnology field trials became very popular recently. Few posts related to benefits of individual farmers from IFFCO products are also uploaded. With a good number of likes on Facebook, IFFCO is also active with a large number of followers on Facebook too. IFFCO's social media strategy has got a boost by the Managing Director of the organization who is very active on social media, his regular daily tweets are related to his visits to various fertilizer plants, his speeches at major events, his views/opinions on new IFFCO products, the impact of IFFCO technology on farmers, meetings with key government/international officials, etc. IFFCO MD's tweets are liked and retweeted by many, due to which there are an increasingly large number of likes and

re-tweets every day. The popularity of his tweets can be estimated by the fact that many of his tweets are re-tweeted by IFFCO's twitter official handle.

IFFCO's YouTube channel has a large number of subscribers more than anyone else. Live streaming videos of important events, and successful/impactful stories of farmers who have benefitted from IFFCO's programmes, speeches of eminent personalities, etc. are there on this channel. IFFCO's strong foray into social media has got strong echoes in its subsidiary organizations also venturing actively in the field. For example, IFFCO's Kisan Sanchar Ltd., has a good number of followers on Twitter, and the daily posts are related to latest developments on crops, farmers, new technology products, etc. which cater to the key constituency of the organization, i.e. the farmers. Re-tweets of IFFCO's posts by IFFCO Kissan Sanchar Ltd., clearly indicate the growing social media horizons of both the organizations.

Krishak Bharati Cooperative (KRIBHCO), another well known global business fertilizer cooperative has a comparatively weak social media profile despite many successful stories of innovation and landmark achievements in production and profits as compared to IFFCO. It has a Facebook page, but has not been updated. National Cooperative Dairy Federation of India (NCDFI), an apex body of dairy cooperatives with a promotional role has a good number of followers on Facebook, but the posts are not updated regularly. National Federation of State Cooperative Banks Ltd (NAFSCOB), an apex body of state cooperative banks, and National Federation of Urban Cooperative Banks and Credit Societies Ltd (NAFCUB)⁶ which is an apex body of urban cooperative banks with a promotional role do not have social media links on their websites, though NAFCUB's Facebook page is becoming active. NAFCUB President is active on social media with occasional tweets related to demands/issues of urban cooperative banks on various occasions. The other national federations like National Cooperative Housing Federation, National Federation of Fishery Cooperatives and National Labour Cooperative Federation with a promotional role do not have a social media presence. National Cooperative Development Corporation (NCDC), an apex cooperative financing institution is slowly making its presence felt on social media, with NCDC's MD leading the way with his active engagement on social media. NCDC has a Facebook page where there are regular posts, related to growth, achievements and success stories with an increase in likes and shares.

AMUL is a well known global milk cooperative like IFFCO with a roaring business has a very strong presence on social media, and with AMUL's MD again showing the way with his active engagement. The posts on Twitter have a lot of creativity focusing on innovative AMUL products like AMUL Taaza, AMUL Chocolate, etc. The posts have a middle class traditional appeal, which is in accordance with a cooperative spirit. Cooperatives are above political party affiliations. This is very well portrayed in the post under "AMUL Topical", with a tweet captioning "For Every Party" which got a large number of likes and re-tweets. Some of the posts of AMUL have incredible views, and AMUL has a good presence on Instagram with good visuals of all AMUL products. On YouTube AMUL channel, there are thousands of subscribers. AMUL

⁶https://www.nafcub.org.

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cheese video on YouTube advertises the uniqueness and innovative nature of AMUL cheese, as it mentions that AMUL cheese is made from milk and does not contain any vegetable oil. This is a trust-building strategy for a cooperative whose foundation is built on strong relations with its members.

Uralungul Labour Contract Cooperative Society (ULCCS)⁷ a well known primary level workers' cooperative in Kerala has a Facebook page with a good number of followers. The posts highlighting activities/programmes/growth of ULCCS are regular, with many likes and shares. ULCCS is not present on other social media sites like Twitter, Instagram, etc.

Saraswat, 8 a well known urban cooperative bank with its huge cooperative business success story has a good social media presence with many followers on Twitter. The posts are more customer-centric highlighting the bank's products and their benefits for the customers. An attempt is made here to have two-way communications with the customers. The post related to winning the award for the bank from Indian Banks' Association got good likes. The Facebook page has a good number of followers and the likes on the posts as compared to Twitter, thus, indicating that Facebook followers are from all sections of the society.

On the whole, it may be assumed that national level cooperative federations may lead in social media initiatives for the cooperative sector, the picture that emerges is not encouraging. When we take the case of IFFCO, we find that IFFCO being a truly autonomous cooperative organization through the medium of social media it is truly working in accordance with the 5th Cooperative Principle, i.e. Cooperative Education and Training. Making available speedy instant information about its activities and programmes, gauging the opinion/reaction of the farmers to its products, highlighting success stories of the farmers and cooperatives, etc. have been the hallmark of its social media policy. This is well reflected in its large number of followers, several likes, re-tweets, shares, etc. Not merely IFFCO MD, but the fact that all the senior officials of IFFCO are active on social media clearly indicates that there is a lot of awareness for using social media for spreading information about their organization. A strong media/PR team in IFFCO is also an advantage which can conceptualize new posts based on a keen analysis of the growth of the organization based on the latest happenings.

In the case of NCUI, the social media presence is slowly growing as the training programmes are primarily well covered in the varied posts on social media. The suggestion/feedback from the participants of the training programmes and other esteem dignitaries on the occasion of various events is a positive trend which proves that information should not be only one-way, but two-way based on regular feedback. However, advocacy/lobbying, which is also a prime function of NCUI, is not well reflected in social media posts. The Facebook page of NCUI is more popular as board members and various committee members like, or react to various posts. However, lack of full awareness on utilizing the full benefits of social media,

⁷https://ulccsltd.com/home.

⁸https://saraswatbank.com/.

limited staff support, etc. are the bottlenecks. National Cooperative Dairy Federation's social media presence is there, but the optimum utilization of it for the members/stakeholders and masses is not seen considering the fact that dairy cooperatives are a vibrant segment of the cooperative movement, and NCDFI has a wide representation of all the major cooperative dairy institutions. Top management like MD of IFFCO, Chairman of NCDFI, are personally active on Twitter with their instant posts clearly showing that the cooperative leadership is becoming aware of the benefits of social media. NCDC's social media presence is slowly picking up, but considering the fact that NCDC has a wide array of activities and programmes which benefit all sections of the society for which providing constant information is imperative, there is a lot of scope for further enhancement of social media profile.

As mentioned above, the national level cooperative federations representing credit, sugar, housing, labour, fisheries, etc. do not have a strong social media presence. The activities of these promotional organizations in advocacy, lobbying, training, organizing events/workshops, running projects, etc. are not conveyed through sharing of information at regular intervals through social media. While lack of well trained staff in social media may be an inhibiting factor, the lack of ongoing and continuous programmes, or absence of strong business orientation as that of IFFCO are the other inhibiting factors in this regard. Besides, there is also a feeling that active presence on social media may lead to more controversies through dubious pasts.

A look at AMUL's social media presence very well establishes the fact that like IFFCO, AMUL being a total autonomous organization, has a vibrant social media presence. The popularity of all its social media platforms with a large number of likes, followers, re-tweets, shares, etc. clearly indicates that it has a strong appeal amongst the youth who buy its wide-ranging products. There is a creative use of AMUL's branding shown in the advertisement of its products through posts or social media with a strong cooperative ethos, which builds up strong connect with the masses. Being a highly successful urban cooperative bank, Saraswat Cooperative Bank's presence in social media is in accordance with the need to connect with its customers in an instant manner. So, regular information is imparted to customers through daily posts which help them to understand the benefits of being associated with a cooperative bank. Many cooperative banks now understand the need to venture into social media because they need to have a connection with their customers who are internet-friendly. Though the readiness or willingness to adopt social media exist, the lack of staff support, or a visionary leadership in projecting the communication needs of the cooperatives in accordance with their autonomous character is missing.

The case of Uralungul Labour Contract Cooperative Society's social media presence on Facebook is in accordance with its autonomous character and the wide range of its activities/programmes and initiatives which it has been undertaking.

SEWA Federation's growing presence on social media platform through twitter is an example for other women cooperatives to follow. Varied posts including success stories of innovation and also posting profiles of women who have benefited from SEWA's programme is again a good way of sharing balanced information. Women cooperatives need to spread their information far and wide so that they are able to connect with those who can understand the benefits of such cooperatives.

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In India, many of the cooperatives have Facebook pages, but they are inactive due to the lack of professionals who can leverage the platform for forging wide-ranging collaborations. Similarly, as seen in the cases of social media presence of cooperative organizations, except IFFCO, AMUL, Saraswat Cooperative Bank and few others, we don't see a constant dialogue and effective communications with the members and other external stakeholders due to which the issues are not discussed with shared concern. As a result of the problems remain unresolved, and ways are not found to find solutions. If cooperatives in India use Facebook and other social media platforms effectively, then effective collaborations can lead to impactful solutions to the problems. Organizations can share not only success stories, but also innovative solutions to understand each other's problems and build up necessary strategic alliances. We have seen that good potentialities of the use of social media exist in business cooperatives, more particularly fertilizer, credit and banking institutions. Good use of social media by such institutions can bring them more close to their customers.

Due to lack of two-way effective communication, except successful cooperative business organizations like IFFCO, KRIBHCO, AMUL, etc. as mentioned above, the cooperative business organizations are not able to handle effectively their product innovation which is very important considering the need to strengthen their brand based on customers' feedback. If the cooperatives use social media effectively, they can change the relationships between them and customers to the partnership. Social innovation can be in-built here as the customers can tell a cooperative what is important for them. For example, it has been found that customers of fertilizer cooperatives, dairy cooperatives and cooperative banks are very loyal. However, if through the professional use of social media, their inputs/suggestions are regularly taken into account in product design/better delivery of services, then social innovation can be strengthened in a significant way. For those cooperatives that have to solve their problems of resources by strengthening and widening their customer base, this can be a very good exercise to strengthen innovation by taking the customers' feedback. However, for this, professional monitoring and engagement with the customers is very important.

For cooperative organizations, live video streaming is an effective way to enhance their reach and impact to the new audience both nationally and globally so that new forms of networking emerge which lead to innovation. Except a few cooperatives like AMUL, IFFCO, and few other cooperatives, cooperatives today are not able to come out of their closed domain, i.e. extend their reach beyond cooperative world to non-cooperative organizations. Live video streaming of the cooperative events/launch of new products or brands can be a very good experience which can benefit the cooperatives in social innovation. While geographical boundaries do not remain a constraint in these live video streaming events, audience feedback also plays an important role in building up ideas for innovation.

Digital story-telling is an effective method to communicate the stories of social innovation in cooperatives at a time when it is felt that the lively success stories of cooperatives are not effectively communicated to a wider audience in an interactive format with the first-hand experiences of the cooperative officials, beneficiaries, etc. The actions of people who are the initiators of change in these stories are not

highlighted in a powerful manner. Compelling motivating stories create emotional resonance and human connection while serving strategic purpose such as driving people to take meaningful action. The cooperatives must embrace digital story-telling in their communication strategy. Except for a few cooperatives like IFFCO, AMUL, etc. the cooperatives today lack an effective communication strategy to tap the power of YouTube video considering the immense popularity of visuals. Such videos on stories of cooperative social innovation can inspire youth to take up a career in cooperatives.

Social media for social innovation consists of utilizing tools for developing a voice for the sector which can bring in innovation and lead to influencing government policy. It has been found that cooperatives in India, do not have a strong voice as they are not able to unite on issues, or challenges which can build up pressure on the policymakers. For example, the cooperatives every year are neglected in budget formulation. They are not included in the five-year plans. They have been denied tax exemption too. The promotional national organizations like NCUI, NAFCUB, NCHF, NAFSCOB, etc. through social media are yet to play an important role in bringing in innovation and putting up adequate pressure to influence government policy. It is also seen that promotional cooperatives in India, with some exceptions, remain aloof from effective campaigning of the causes they stand for, like environment protection, poverty-reduction, gender equality, etc. through social media. On these issues, the cooperatives can combine together to prepare an online petition on Twitter or www.change.org so that people can sign these online petitions which can reach the concerned authorities so that a policy change in favour of cooperatives is initiated.

Here, Castells' (1996) theory of network society has importance for social innovation as we all belong to various networks in the society which now thrive on technology. Social innovation presents many opportunities for crystallization of new ideas, which can lead to the creation of digital platforms which are managed by members of cooperatives who provide services and sell products through collective ownership and governance. While these types of cooperatives are fast emerging in other countries, the potentialities of development of such cooperatives are enormous in India, due to rising level of unemployment amongst youth, the need for marketing of products online globally, and also re-designing the products based on the feedback of the users on the digital platform. If these platforms are supported by social media, then their impact would be more in the wider dissemination of messages and building up strong collaborations However, cooperatives have yet to venture in this unexplored area.

Many of the cooperatives in India as mentioned in the examples above do not have effective mechanisms for collaborative decision-making despite the presence of cooperative democratic structure. Inputs/suggestions from all the stakeholders are not taken into account due to the lack of good communication. Widespread use of social media in this regard with the active participation of users can enable collaborative decision-making which can lead to social innovation.

Late Puri (1979), a well known cooperative academician says that a long strategy of cooperative development must give high priority to member education through

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effective training programmes. However, there are many constraints due to which cooperatives in India, are not making effective use of social media. They do not have proper awareness regarding use of social media, as there are no training programmes conducted in this field, nor the heads of cooperative organizations, exceptions being IFCCO and AMUL, lead from the front in using social media for active propaganda of their organizations. The cooperatives also do not feel the need of experts of social media who can devise and implement effective communication strategies for these organizations. The cooperatives suffer from an old mind-set which relies more on traditional forms of media for effective communications. Moreover, the PR set-up in many of the organizations is very weak, and this specialized work is clubbed with other departments.

8.6 Conclusion

Social Media has emerged as an important cost-effective communication tool for the cooperatives in India; the opportunities for the growth and development are tremendous in this field. At a time when social innovation has emerged as a prime area of concern for all the institutions in the wake of global social challenges like rising inequality, sustainable development, climate change, etc. the policymakers want to encourage social innovation which can solve the problems and reduce wide disparities in development despite the limitations of resources. The cooperatives in India with their wide network, reach and based on members' strength can emerge as a lead player in social innovation if they devise effective policies to tap the power of social media. This can also turn out to be a big image-building opportunity for the cooperatives.

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Chapter 9 A Phenomenological Study of the Lived Experiences of PHCCI Summer Youth Program Tutees Turned Lab Coop Officers



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Abstract One of the pressing challenges of many cooperatives is ensuring secondliners and successors who will continue a movement in a genuinely cooperative way. The aim of this chapter is to highlight how PHCCI-MPC Tacloban has successfully run a youth arts program for 13 years, and, in the process, producing six of its tutees as incumbent officers of the PHCCI Laboratory Cooperative and potential future leaders of the guardian cooperative. This chapter specifically delves into the youth's significant experience in the Summer Tutee-Friendly Program, and how this arts program has transformed the young lives of these tutees into Lab Coop officers. This phenomenological study gathered data using key informant interviews as source materials. The chapter concludes that PHCCI-MPC's Tutee-Friendly Program has discovered and developed not only the talents and skills of the young but also subliminally developed their leadership potentials. Furthermore, this study encourages cooperatives to continually invest on and empower the youth, having much to give through their positive ideals and courage as they respond creatively and innovatively to the pressing challenges that they experience. This will, in turn, develop them as responsible second liners and the bloodline of the cooperative movement.

Keywords Cooperative youth leaders · Laboratory cooperative · PHCCI-MPC tacloban · Youth development · Social innovation · Youth arts program

9.1 Introduction

Philippine national hero Dr. Jose Rizal believes the youth is the hope of the motherland and that the future lies in their hands. These young people have to be prepared in their formative years so that they will bring along with them as they mature, the wisdom of the old and the great opportunities of the present times fully equipped with efficiency, responsibility and integrity. Indeed, investing in the next generation of leaders is critical in achieving inclusive growth in organizations and across communities everywhere. One of the pressing challenges of many cooperatives is ensuring successors and second-liners who will sustain the works of the movement in a genuinely cooperative way.

This chapter puts forward a proposition that investing on the youth's interest, specifically on art programs, is a leadership transformational and innovative opportunity because along the process they subliminally develop self and social confidence, and the valuable competencies needed for adulthood. This aligns with the UN 2030 Agenda for Sustainability of which one of its fundamental principles is no one shall be left behind with a special regard on the youth. Specifically, the Youth 2030, The United Nations Strategy on Youth, recognizes the possibilities and potentials of the youth as agents of change (2018). The United Nations (2015), in its work as a global leader in empowering the youth towards the achievement of SDGs, sees the young people as a dynamic source of innovation. Having young blood as Board of Directors of a Laboratory Cooperative, who independently manage their Lab Coop affairs, although closely supervised by adults, is a social innovation of youth sustainability and empowerment.

The aim of this chapter is to highlight how Perpetual Help Multi-Purpose Cooperative (PHCCI-MPC) Tacloban has managed the Summer Tutee-Friendly GR.O.W.T.H Program (shortly called Tutee Program/Workshop), an education and arts development program, for 13 years, thus producing six of its tutees as incumbent officers of PHCCI Kiddy and Y.E.S (Youth Enthusiastic Savers) Laboratory Cooperative and potential leaders of PHCCI. This chapter then will substantiate that the youth's involvement in Tutee Program was a relevant preliminary exposure for them to develop their leadership skills, as they exemplify confidence and competence in rehearsals and recital, work out healthy social interactions with co-tutees and cultivate discipline and responsibility in performing assigned tasks. All these were empowering, thus, they embrace easily the opportunity to serve as an officer in the Laboratory Coop, and perceive themselves as potential second-line leaders of PHCCI.

It has been established that youth development programs (McLaughlin et al. 2004; Benson 1997) are gaining prominence as a way to help young people become competent, engaged and responsible adults. Participation in organized youth arts activity has been found to improve aspects of young people's social and emotional wellbeing (Ennis and Tonkin 2018). Multiple studies have highlighted the positive effects of community arts participation (Daykin et al. 2008; Kay 2000; Lowe 2000; McHenry 2009) which include increases in self-esteem, confidence, artistic and communication skills, the creation of positive social connections, feelings of belongingness and sense of identity and community. Meanwhile, Dawes and Larson (2011) posit that for youth to benefit from many of the developmental opportunities provided by organized programs, they need to not only attend but become psychologically engaged in program activities. Self-confidence, being one of the most significant impacts of developmental programs, is considered as the most valuable attribute of leadership (Barthold 2014). Having been developed by arts programs, creativity, therefore, is a

core; Fukada et al. (2001) believe that creative leaders will be in a better position to find alternate solutions or ideas when solving problems or reaching goals.

Many of the youth arts programs are offered in schools as part of their extracurricular activities only. These co-curricular activities, however, are not specifically geared towards tapping young leaders but focus more on talent and skills enhancement. Instead, potential young leaders are mostly observed in leadership development activities like scouting, sports and, most especially, in the establishment of the school's student government where students run for candidacy and get elected by their fellow students as the campus officers. Meanwhile, community-based groups like cooperatives seldom have arts programs fostering second-liner development. These activities, instead, just stand as pass time summer activities for young people. While extensive studies have been conducted on the positive effects and holistic developmental perspective of youth development programs, there is a literature gap or not many studies connecting these positive effects to leadership development. Also, much of the youth program researches focused on the community and political outcomes instead of the processes of change and effects to the youth participants (Moguel 2015). The current chapter aims to show the connection and advocate for its value.

9.2 Methodology

This qualitative study utilized Ricoeur's hermeneutic phenomenology (Tan et al. 2009) in interpreting the findings of the research questions: (1) How has PHCCI Tacloban managed a youth arts program for 13 years, thus producing six of its tutees as incumbent officers of its Lab Coop and potential leaders of the guardian coop? (2) How has the tutee workshop experience fostered the youth's transition in becoming a Lab Coop officer? What experiences may be attributed to the Tutee program participation that contributed to being a Lab Coop officer; and, (3) How has the tutee and Lab Coop experience affect the youth? What changes are associated with the experience?

Phenomenology seeks to describe accurately remaining true to the facts (Groenewald 2004) and the researcher with its connection with the participants shall be able to see the world from their perspectives. When using phenomenological interviewing, the purpose is to generate detailed and in-depth descriptions of human experiences (Moguel 2015).

Purposive sampling is a non-probability sampling method that involves the researcher's sound judgment or rationale for the inclusion of qualities or elements applicable to a restricted number of people in a target population. Thus, purposive sampling was used to identify the six participants because they clearly fall under the sample criterion which is a present Lab Coop officer but has been a tutee first prior the officership. This type of sampling is deemed appropriate to gain detailed and a varied range of data on the phenomenon of the arts program's influence on the youth's leadership development. One of them has been a consistent tutee for 11 years

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and has been a tutor for the recent two summers, and moreover has been an officer in the Lab Coop since its early organizational years. The 11-year-old officer has consistently enrolled since she was 3 years old in different workshops and became an assistant tutor this summer; she has been an officer since 2013. Likewise, another 11 years old has regularly enrolled every summer for four different workshops since he was 6 years old, and just this year he made it as a BOD. Meanwhile, the two siblings enrolled in different workshops for four summers, and have volunteered to be assistant tutors this summer. Both of them became officers for this year, too. The remaining one attended two workshops for three summers and has been a BOD since 2015. Only two among them are not children of incumbent officers of PHCCI. Their mothers have been a big influence as to why they became young cooperators. Their parents are all members of PHCCI for the longest time and for some, they have served the coop as officers for quite a time already.

Data collection consisted of in-depth, open-ended and semi-structured one-on-one interviews, and secondary source materials. Appropriate follow-up questions were asked for obtaining clarifications. Each interview was audio-recorded and transcribed by the researcher. Ricoeur's hermeneutic phenomenology interpretation was utilized in the data analysis commencing with naïve reading, followed by thematic structural analysis; then concise abstraction into everyday words; further abstraction to create sub-themes; and finally, the creation of major themes (Lindseth and Norberg 2004).

Questions of the interview guide were subjected to validation by professionals in the field. As part of ethical principles of research, the researcher sought consent from the participants and their parents since they are still minors, obtained permission to record and publish and ensured confidentiality of shared information.

9.3 Results

This part discusses the results of the qualitative interviews and gathered secondary source data in order to answer the research questions. Interpretations of the findings are presented on how this study fills existing literature gaps.

9.3.1 PHCCI Tutee-Friendly Summer GR.O.W.T.H Program

Summer season in the Philippines is a break from school, a breather from academic routines. This is also the time for the children to explore different extracurricular activities like sports and arts development programs. Public schools do not offer these programs because teachers are on their vacation leave with pay, only private institutions do. Because of this, summer programs have been pricey that only a selected few with extra income can afford. PHCCI then came up with a program of its own, offering academic and arts development tracks with a minimal registration fee. The program culminates with the distribution of certificate of completion,

awarding of exemplary tutees who receive collection item tutee pins and certificate of recognition, and the recital where tutees get to perform at least twice for every enrolled track.

The "Tutee-Friendly" GR.O.W.TH (GRoup Of Workshops, Tutorials & Help) Program started in 2005 with an aim to discover and develop potentials and talents, for children to gain knowledge in the subject area they have chosen and express themselves through their creative outputs; boost their self-esteem and self-confidence; and appreciate the gains and fruits derived from hard work.

Tutee Program started with six academic tracks in Math, English and Computer, and three tracks for arts development (Arts and Crafts, Voice and Dance). Later, the academic subject tutorials were turned over to the subsidiary school of PHCCI; Tutee program just focused on the workshops, with Speech/Theatre Arts and Guitar as additional tracks. As of now, this self-liquidating program has been enjoyed by youth members for 13 years and still counting for more operational years to come.

9.3.2 PHCCI Kiddy and Y.E.S Laboratory Cooperative

One of the expectations of the Tutee program is that potential tutees will be tapped for other activities of the youth program. Having these tutees emerged as Lab Coop officers is a fulfilment of such expectation.

Even before the mandate of Philippine Republic Act 9520 to establish laboratory cooperatives, PHCCI already started its Kiddy Program in 1988 and its Y.E.S. Youth Program in 1995. The savings deposit mobilization aimed to instil the value of thriftiness in every child. Sooner, General Assemblies exclusive for the children members were conducted. Young leaders were tapped to spearhead the activities for the young cooperators. Different batches undertook leadership training, and later, writing workshops were offered for the revival of PHCCI's official newsletter exclusively managed by the youth. The young leaders were also given the chance to work with PHCCI officers as they were allowed to witness and participate in their local and international activities.

In 2010, PHCCI started the establishment of the laboratory cooperative with its interim officers. Finally, by January 2013, PHCCI Kiddy and Y.E.S. Laboratory Cooperative was registered with the Cooperative Development Authority as the first Lab Coop in the region, with 45 incorporators and among them are 7 Board of Directors and a paid-up share capital of 35,000 pesos.

The purposes for which the laboratory cooperative was organized were (i) to serve as a training ground for its members in preparation for regular membership and (ii) to instil cooperative values, principles, financial discipline and leadership skills among its members.

Currently, there are 24 incumbent officers occupying the elective and appointive positions for the Board of Directors, Secretary, Treasurer, and the five different committees. Officers' ages range from 7 to 17 years old.

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9.3.3 Lived Experiences

The participants are three girls and three boys whose ages range from 11 to 16 years old. All of them repeatedly enrolled in the tutee workshop for 3–13 times.

Five recurring themes were identified reflecting the lived experiences of these tutees developed as Lab Coop officers. These themes are parental influence, self-discovery and development, self-confidence and social confidence, interpersonal skills and 'living it' journey.

These themes are discussed herein, with relevant qualitative information from the interviews

Theme 1: Parental Influence

Parents play a fundamental role in their children's development (Maccoby 1992) and the dynamics of such influence. All participants expressed that it was their mothers who registered them as members of the PHCCI Youth Program and enrolled them in the Tutee Program. Their mothers were officers, except for two who were only regular but active members, ¹ of the coop at the time when they first became tutees. Since they were young then, they did not know anything till they grew up older.

My first school was Tutee's Arts and Crafts at 3 years old when I could barely hold a pencil. Then Dance track was added two years later. From the initial decision of my mother, I freely enrolled in academic subjects, continued my Dance workshop, and added Guitar track to my repertoire (Participant 6).

I understand from my mother that, I first attended Arts and Crafts because it was the only program that accepted 3-year-old children, but after participating rehearsals informally in the Dance class, I was eventually accepted by the tutor and performed in the recital still with my diaper on. Since then, I enrolled in the Dance track (Participant 4).

My mother enrolled me in the Arts and Crafts because I was very shy. She wanted me to interact with my fellow tutees and gain friends. I was six then and turning Grade 1. The following year, I joined the Dance and Voice tracks. Thereafter, I enrolled two programs every summer and added Guitar lessons to my list of tracks (Participant 2).

The assertion of the mothers on their children's' participation in the tutee program and the likelihood of compliance of the children demonstrated Maccoby 'systems of

¹At the time of these children becoming tutees, their mothers were officers of PHCCI-MPC. Two mothers were not officers, but regular members and active in all the cooperative activities such as patronizing the products and attending assemblies. Because of this, they were able to send their children to attend this summer art program. Since these tutees were very young then, and were not consciously aware of the significance of their participation in the arts program, they just had pure fun and did not know anything until they grew up.

²The age admission for the Dance Program starts at 6 years considering the behaviour and the attention span of a child. She learnt from her mother that they went all over Tacloban to look for a summer program that will accept her since she was only 3 years old then. Only PHCCI Tutee Program took her in as a regular dance tutee.

reciprocity' between mothers and children on their shared cooperation and the enjoyable interactions in which both of them experienced positive results (1992). Later as they grew older, they voluntarily involved themselves in the summer program.

At first, it was just Mom's decision to register me and my sister in the Dance program. Eventually, I stayed in the same program because I knew I have the talent and I was enjoying dancing with my friends (Participant 3).

I always loved singing; that is the reason why I gladly chose to re-enrol in the Voice class in the succeeding workshops. Though I also enjoyed the Dance class, I finally decided to stick with my first love that is singing (Participant 1).

Just like my sister, I also enjoyed my Dance workshop but sometime in 2014, I was challenged to take up Speech/Theatre arts to my own volition (Participant 5).

Though shared facts fully support the successful influence of their mothers on them, it was lessened overtime as they themselves braced the positive impact of such influence, and freely participated in the workshop.

Theme 2: Self-discovery and development

They discovered and developed their talent through the tutee program, just a childhood play initially considered by the participants.

"Play is the work of the child" is a commonly repeated anthem among early child-hood educators (Ceglowski 1997). Children's programs are designed to be opportunities for fun, play and learning altogether. Since these children were initially motivated only by their mothers to become tutees, they never thought of the workshop as a learning episode; it was simply a "play experience" for them when they would report daily to their classes to do their thing. However, the daily exposure enhanced their innate creative thoughts through their "play" (Billman and Sherman 1996) in the tutee program, thus slowly discovering their talents and developing them eventually. The tutee program became a genuine breakthrough in discovering and developing their talents in singing, dancing, playing the guitar, dramatics and creating arts and crafts. The following shared experiences prove it all:

Maybe I would never know how to dance, or even have the guts to dance before a big audience had it not been my dance workshops for probably eight consecutive years. Videos would show my improvement each year. First, I felt dancing like a pro since I was innocently performing at 5 then but when timidity hit me, cameras caught me looking on the floor; but in the following years, I was already grooving enjoyably. I feel so much elated and proud when I receive compliments like "you did great!" and "very good". Furthermore, the Tutee program, although music may really run in the blood, first discovered that I have the ears for music and fingers friendly to musical instruments. Praises given after my performances confirm my effort in putting my best foot forward (Participant 6).

I had my first dance recital still on my diapers at three years old. A video could tell that I barely memorized the steps but I was seriously putting my best in doing my routines. This became a yearly workshop for me and as time progressed, I realized that I have the groove for dancing as confirmed by those who watched me danced. Praises after performances became my validation of the talent I discovered (Participant 4).

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Just like any other kid, I already have the heart for dancing but performing one in reality was an opportunity I got from the Tutee program. Surprisingly, I also discovered that I could carry out drama, take on lines to memorize, and host a program; all these were my "first time" when I enrolled in the Speech and Theatre Arts (Participant 5).

Being known to be shy, I was supported by my mother on discovering what I could do and eventually I was able to overcome my shyness. Enrolling in four different programs enabled me to discover that I have the hands for arts and crafts, do some drawing, dance a little, sing very well, and play the guitar. Since I joined when I was only five years old, all these have been developed and improved for six years that I consistently enrolled every summer (Participant 2).

My experience in singing and dancing was mostly in school. I have the opportunity to sing with my chorale group but I got the opportunity to sing solo and in trio during the Tutee's recital, before a big audience. I also got the chance to dance hip-hop with my fellow teens (Participant 1).

Indeed, one of the objectives of the program, which is to discover and develop potentials and talents is believed to have been achieved as per the aforementioned revelations of the participants.

Theme 3: Self-confidence and Social Confidence

Two common things shared by the six participants that they owe to the Tutee Program is the development of their social skills and confidence.

Play contributes to the development of positive peer relationships (Hartup 1993; Rubin 1980). Reporting daily to the workshop and performing with fellow tutees enabled them to build beautiful friendships. They were able to adjust to different personalities and accept individual uniqueness even at an early age. To cite, they said:

Even if we come from different schools and we have different ages, we are able to talk about different topics, jam and play without misunderstandings. We let everyone in (Participant 4).

During break time or after lessons, we stay for a while and share stories. We exchange mobile numbers and have ourselves friends in FB, even creating a group chat so that we could still communicate even if the workshop is over. When the next summer is approaching, we convince each other to re-enrol and invite other friends to join us. Our friendship does not end in the workshop because we keep in touch with each other through FB (Participant 1).

Sharing ones thoughts in opportunities of conversational encounters even when they just met for the first time taught them how to trust people and feel accepted:

Because of the Tutee Program, I gained friends from other schools. Since some of my fellow tutees became my classmates in the opening of classes, I became very happy because I already have friends in school. I used to be bullied but with my new friends around, their friends became mine, too. I feel accepted this time (Participant 2).

Social anxiety sets in when you work with others whom you do not know or they are not your friends. Since they made friends easily, doing their tasks in the workshop became easier. They even help and support each other by teaching dance steps, practice their songs and guitar jam by themselves. Mentoring each other and their constant interaction develop their communication skills and self-confidence as well.

I was surprised at first when our tutor assigned me to help the younger kids in our class. It felt so good that I gained the trust of our mentor. It really meant a lot to me that it boosted my self-confidence (Participant 1).

When I accepted the assignment to assist the younger tutees, I had this sense of satisfaction that I was given the trust and the responsibility. I really did my best so that these young kids will look up to me as a role model. This pushed me harder to refine my craft, develop hard work and discipline (Participant 6).

Theme 4: Interpersonal Skills

Their experience in the tutee program paved the way to their officership in the Lab Coop and their anticipation of being an officer of the mother coop given the opportunity.

Equipped with skills and talent that they discovered and developed, deciding to be an officer in the Lab Coop was an easy decision for all of them. Had it not been for the tutee program, they will not know the existence of PHCCI and the programs that it offered; their entry point to the Cooperative was their becoming a tutee. Becoming an officer meant a year-round activity for them in the Coop.

When we conduct education seminar to incoming members, I feel like the guardian coop officers whose tasks go beyond for themselves but for others too. I feel charged and responsible to convince the newbies to be members and experience what we do with fun and joy (Participant 3).

Playing and competing during the Sports fests with the PHCCI family was enabling and overwhelming. They rooted and cheered for us while engaging in the activities. It was really surprising (Participant 4).

Promoting our products during the PHCCI Co-operators' Area Conference and convincing people to buy what we were selling was empowering. Earning money is indeed not easy but the fruit of thy labour is sweet. Selling and performing intermission numbers before thousands of audience was self-conquering (Participant 1).

An extension of their short stint in the tutee program was what they were looking for. Nurturing friendships and keeping constant communication with fellow tutees were motivating factors of running for officership. Of course, the influence of their mothers remains in their decision except that this time, they were no longer unconsciously pushed to get into the matter. Another factor that made the transition easy was the presence of friends who are also tutees turned officers.

These children also perceive themselves as future officers of the mother coop. When asked why they love their experience in PHCCI, everybody shared a common answer: a big portion of who they are now is the work of the tutee program and Lab Coop. They further ascertained that they could do more for PHCCI in the later years when they are more matured, equipped, and developed.

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Growing up, I see myself in the Coop as a leader. Being a lab coop officer and observing young incumbent Board of Directors of the mother coop inspires me to be one like them (Participant 2).

I want to make use of the training given to us by serving fellow coop members. When one time asked by a peer as to what do I get from being an officer even without remuneration, I told her that there is an unexplainable fulfilment and joy which is evident when I religiously and enjoyably attend all our activities. Like my mother, her officer ship is one great opportunity to be of service to others (Participant 1).

PHCCI invests on us because they trust us and they see in us the potentials of being quality leaders. To be specific, they allow us to join in activities where we are able to work with the staff and officers; they don't just allow us to sit and observe but instead, they give us tasks to prove our worth. They give us the opportunity to exercise responsibility and discipline. This is trust in concrete ways (Participant 6).

Still, they want to follow the footsteps of their mothers whom they see happy and contented despite the joggling of their busy schedules. Their mother's influence towards their choices in life is evident.

Theme 5: 'Living It' Journey

The participants' journey from tutees to Lab Coop officers forms part of their middle childhood experience. It greatly influenced what they have achieved and developed now in their academics and extracurricular activities.

Middle childhood repertoire of concepts and skills continually grows and greatly influence future choices. The acquisition of a variety of intellectual, social and artistic skills contributes to the development of self-concept (Collins 1982) which dictates the choice of activities in and out of school. Middle childhood is the stage of self-development that can best be characterized by the conviction 'I am what I learn' (Erikson 1959 quoted in Collins 1982).

I never thought I could either speak before a large audience or act seriously. I owe it to the Tutee Program when I became one of the casts of the movie 'Taklub' that won in an International Film Festival in 2015. I enrolled in the Speech and Theatre Arts prior to the shooting of Taklub. I was the main emcee of the whole culminating activity, and also had a drama stint together with my fellow tutees. The things I learned in that summer motivated me to audition for the role in Taklub, plus my theatre arts experience made me confident to give justice to my role. Luckily, I was taken in that one big lifetime experience and finished with a bang because I won the "Best Child Actress" in the international scene for that cli-fi movie. Such prestigious award was not only my personal feat but also that of my fellow Yolanda (aka Typhoon Haiyan) victims and the Tutee Program (Participant 5).

It all started when I learned to play five songs through my guitar, which looked ridiculous on me because at that time, it was too big for me yet. That was my first time. Fast forward, I am currently in the Special Program for the Arts with musical instruments as my specialization. It fulfils me when I am praised for my live and uploaded piano playing performances. Now, I have my own band where I alternately do the guitar Rhythm and play keyboard; perform in the different special programs of the school; compete in and out of school contests; and I am an accompanist in a

church choir. If there's one great leap that is when I was considered a tutor of the Guitar track for two consecutive summers now. As one of the tutees who discovered and developed my guitar playing skills in the program, I definitely know the feeling when you know nothing yet come out learned (Participant 6).

Since the tutee dance workshop is on hip-hop, I explored another form of dance which was exactly the opposite of what I started learning. It was a challenge for me to take ballet lessons but I'm still into it in poise and grace. I embraced both worlds of hip-hop and ballet with love and joy in my heart. I owe my talent and love for dancing to the Tutee Program which started it all (Participant 4).

My guitar lessons in the Tutee Program helped me become a member of the Rondalla group in our school. I was basically a raw starter in guitar playing and I'm happy that I ended up not only playing guitar but banduria as well. Through my Tutee workshops, I realized that I have the talent in playing musical instruments which allows me to perform before a big audience with confidence. I am also happy that with my developed confidence and leadership skills, I am now a Patrol Leader in Boy's scouting. With the support of my many friends now, I have better grades which make my *nanay* (father) and *tatay* (mother) so proud of me (Participant 2).

Essentially, the aforementioned experiences are captured in one fact:

One thing I realized that the foundation of what I am now is my Tutee program experience. What used to be a childhood play thing paved way to my significant and colourful experience of my teen life now. It awakened the "creative" in me and developed not just my talent but my personality, too (Participant 6).

The child's increasing interest in learning and developing new skills culminates in a personal "sense of industry"—a basic sense of competence that is relevant both to the mastery of more sophisticated learning tasks and to cooperation (Collins 1984).

9.4 Discussion

Investing in the next generation of leaders is critical to achieve growth within organizations and across communities everywhere. Not only growth is realized but also an extension of existence, thus ascertaining the sustainability of adults' endeavours today. Empowering the youth through establishing developmental programs embolden them to take on responsibilities; and working with them hand in hand is a decision to make if one seeks for lifeline security.

Two developmental youth programs of PHCCI-MPC Tacloban are the Summer Tutee-Friendly GR.O.W.T.H Program and the PHCCI Kiddy and YES Laboratory Coop whose objectives include discovering and developing the talents and potentials of the youth; and boosting their self-esteem and self-confidence; and instilling cooperative values, principles, financial discipline and leadership skills among its members respectively. Though not specifically designed to foster youth leadership, its objectives overlap with important aspects of leadership.

Commonalities found among the participants are the impact of the Tutee Program on the young people's social and emotional wellbeing that is they were able to develop

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their social and communication skills, self-confidence and value of discipline and responsibility.

Wellbeing benefits have been associated with dance (Oliver 2009), theatre (James 2005) singing (Hampshire and Matthijsse 2010), as well as combinations of these and other art forms (Karkou and Glasman 2004). Youth arts activities are thought to contribute to self-confidence and self-esteem (Bungay and Vella-Burrows 2013). The participants' experiences are confirmed by Ennis and Tonkin (2018) who aver that positive effects of engaging in arts have been found to increase in self-esteem, confidence, artistic skills, communication skills and the creation of positive social connections. Several studies on the effects of extracurricular creative activities towards young people (11–18 years old) reflected positive effects 'on behavioral changes, self-confidence, self-esteem, levels of knowledge and physical activity' (Bungay and Vella-Burrows 2013: 45).

The transformational experience of the participants from being tutees to Lab Coop leaders may be divided into three phases: Awakening Stage, Becoming Stage and the Enabling Stage.

The 'Awakening Stage' speaks of the first theme, the parental influence whereby the mother, being an officer or member, became the instrument for having them in the PHCCI Youth Program. Three of the participants were only 3–5 years old and the other three were 7–10 years old, still so dependent that it is either they mirror what parents do or succumb to whatever parents like them to do. Being minors, most of their activities are dictated by parents and the activities that they tend to like at a later phase. This is what happened when they were enrolled in the Tutee workshop unaware, yet found themselves staying in the program. Had it not been for the prodding of mothers, their inclination and interest could not have been awakened.

The 'Becoming Stage' accounts themes 2 and 3, the moment when they started enjoying what they were doing, and there was much self-discovery and development working. Finding a safe place to 'be yourself' is another reason why youth arts activities are beneficial to young people (Trayes et al. 2012).

As shared, they first discovered and developed their talents through the tutee program, which they eventually shared with confidence in school and community. All these became possible because they were able to develop self and social confidence through their daily interactions. Finding a group composed of people with same interest was one big factor that made the interaction among them easy. They just did not talk about their talent but they expounded on their school and family life, interests and hobbies and even young love experiences. Having each other's trust and acceptance was highly valued. Expressing oneself then became natural, thus communication skill was also improved.

Group dynamics and team learning as part of the workshop process opened opportunities for the participants to develop their discipline and sense of responsibility. Owning up and taking charge of responsibilities entail self-confidence. Coming and finishing on time, meeting target goals, listening and sharing, formed part of their discipline. They became accountable for each other's progress and collectively aimed for the "team goal" for their recital. Being able to create art with others requires the

ability to be open, spontaneous and embrace playfulness (Karkou and Glasman 2004), hence strategizing and collaboration for them was both fun and learning episodes.

Self-conquer and self-confidence meant having your performance witnessed by others and being a witness to others' performances, plus overcoming nervousness and taming the overwhelming feeling when performing before a large audience utilizing skills and knowledge. Participants found in the Tutee workshop not only opportunities for talent validation but also to be listened to and make relevant contributions.

Having their ideas taken seriously, being responsible and having the opportunity to do things without parental involvement or judgment, were all seen as ways in which young people were treated 'as adults' (Ennis and Tonkin (2018).

The 'Enabling Stage' captures themes 4 and 5 which are the development of 'interpersonal skills' and the journey of 'living it'.

The participants' transition from being a tutee to a Lab Coop officer accounts for their willingness to take on higher responsibility. Their feeling of belongingness to the group made the transition easy. This is also the time when interpersonal skills are highlighted such as the development of 'leaderships skills', 'empathy', 'creative thinking' and 'communication skills' (Ennis and Tonkin 2018). Their tutee workshop stint was not enough for them because summer workshops were just short. Becoming an officer gives them a year-round responsibility for projects to be planned and accomplished. The officership goes beyond the rehearsal routines and the recital performance; this time, they get to work with the guardian coop officers and staff, and they end up to accomplish the given tasks not only for the Lab Coop but for the entirety of PHCCI. Reality strikes and sets in. The Lab Coop activities switched on their leadership and communication skills, and creative thinking to get across working with others and meeting their goals.

As their leadership opportunity is also extended to school and community activities at present, they also see themselves as PHCCI Regular Officers if given the opportunity in the future. This suggests that their tutee-friendly and Lab Coop experience may provide the foundation needed to foster a profound transformation of being a PHCCI youth to a PHCCI leader.

The journey of 'living it' is a work in progress. This is the stage which can be perceived as the desired result of the first two stages. As the participants go out from their comfort zones in PHCCI and get to emerge themselves in the real world, they realized the way they have been influenced through evolving into a performer with 'real skills' and/or coming to understand the role of arts as integrated into their system.

Indeed, youth art activities have been found to offer young people emotionally diverse experiences (Larson and Brown 2007). This could be the reason why all the participants have continued their involvement in the same creative and performing arts, and added even more like exploring to ballet and playing other musical instruments which were not offered in the tutee program, either as a hobby or curricular activities. Even at an early age, they are living the coop life integrated into their field of choices, establishing that their journey from being a tutee to a Lab Coop officer has influenced what they have achieved and developed now in their academics and extracurricular activities.

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9.5 Conclusions

Youth development programs are gaining prominence as a way to help young people become competent, engaged and responsible adults. Yet, many adults do not know how to involve youth in meaningful leadership opportunities (Mortensen et al. 2014). The road may have been long for PHCCI, but investing on and trusting the power of the youth is priceless. The lived experiences of these participants prove that the youth arts program and Lab Coop are effective opportunities for leaders to be discovered and developed. They are living testimonies. The silo that youth are contained to of being only the "leaders of tomorrow" is contested in the results. They are leaders now. Of course, leadership skills change throughout a leader's lifetime, but with the youth's continual and consistent exposure and training in the cooperative, they become a competent and efficient bloodline of the cooperative movement. By tackling the responsibility of growing leadership skills in today's youth, society ensures effective leadership for tomorrow (Seevers et al. 1995).

From this study, the researcher recommends that coops without programs for the youth start redefining their vision for the future leaders of their own organizations. May cooperatives continue advocating and supporting them to be able to develop second-liners when the current leaders exhaust their eligibilities to become directors or committee officers.

Finally, it is recommended that a similar study be conducted in other cooperatives that have active youth programs or laboratory coops so as to compare the findings.

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Chapter 10 Cooperative and Social Innovation in Finance—A Case Study of Mann Deshi Mahila Sahkari Bank



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Abstract Social innovation essentially means a novel solution to a social problem that is more cost-effective, efficient and sustainable. While several institutions, NGOs and charity organizations are found to have come out with innovative solutions to social problems, financial institutions are usually not found in this space. The study of the banking model of Mann Deshi Mahila Sahkari Bank provides an assessment on the feasibility of a bank-led model of social innovation in finance and ascertains the scope for its wider replicability. The cost structure of Mann Deshi Bank provides an insight into the fact that innovative and customized products may be costlier but they are socially sustainable. The chapter highlights the point that a wider replication of this model could be a game changer for the financially excluded population across the globe.

Keywords Social innovation \cdot Cooperative bank \cdot Socially sustainable \cdot Product designing

10.1 Introduction

If we trace the genesis of cooperative movement, we find that cooperative system itself is a social innovation. The origin of the credit cooperative movement in India can be traced back to the close of the nineteenth century. Inspired by the success of the cooperative movement in Britain and Germany, similar societies were formed in India. The first Cooperative Bank in India was Anyonya Cooperative Bank Limited (ACBL) which was established in 1889 with the name Anyonya Sahayakari Mandali Cooperative Bank Limited, with a primary objective of providing an alternative to exploitation by moneylenders for Baroda's residents. When it was started in 1889, it

The views expressed in the case study are the personal views of the author and do not reflect the official views of the Reserve Bank of India.

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had just 23 members and capital of Rs. 76. The collapse of several commercial banks during 1913–14 resulted in the flight of customer deposit from commercial banks to cooperative banks and it gave a fillip to cooperative banking movement in India.

People having wealth and property usually get favourable treatment from the banking system because of the collateral asset that he/she owns and which could be mortgaged to the bank. As the poor do not own property, the collateralized lending system of banks makes it difficult for the poor to access the formal financial institutions. As opposed to this, cooperative credit institutions (both bank and non-banks) are not averse to small-ticket uncollateralized lending to their members. Further, they are better suited to customize credit products and introduce an innovative delivery mechanism as per the needs of their members.

The primary cooperative banks, popularly known as Urban Cooperative Banks (UCBs) in India are registered as cooperative societies under the provisions of, either the respective State Cooperative Societies Act(s) of the state concerned or the Multi-State Cooperative Societies Act (2002) of the union of India. These are essentially cooperative societies, licensed by the Reserve Bank of India, for conducting banking business. UCBs have a heterogeneous geographic and size-wise distribution in India. As on March 31, 2019, out of the total 1544 UCBs in India, three states had the maximum number of UCBs, namely Maharashtra (32%), Karnataka (17%) and Gujarat (14%). In terms of business, as on March 31, 2019, there were 1544 UCBs with an aggregate deposit and advances of ₹4843 billion, and ₹3030 billion, which were about 3.8%, and 3.1% of the aggregate deposits and advances of the scheduled commercial banks, respectively (RBI 2019). While the bigger entities among the UCBs have generally adopted commercial bank like a working model, banks like Mann Deshi Mahila Sahkari Bank finds its niche market in the poor women of the society.

10.2 Objectives and Research Methodology

Mann Deshi Mahila Sahkari Bank, headquartered at Mhaswad in Satara district in the state of Maharashtra, India, is one of the small but iconic urban cooperative banks in India for women, known for its exemplary social innovation in the field of banking to reach out to the financially excluded population in its area of operation. The objective of this chapter is to study the product design, delivery model, in general, and product cost structure, in particular, and to ascertain how this UCB succeeded in making significant changes in the lives of women beneficiaries of the bank which many others failed to do. For this purpose, Mann Deshi Mahila Sahkari Bank was purposively selected because of its innovative approach to the provision of credit to women members.

The study is based on both primary and secondary sources of information.

• Study of all the available literature on social innovation by banks.

- Visit the head office of the bank and its Pune based branch to gather detailed information about the selection of niche market for the bank, loan products, pricing of loan products, loan sanctioning process, delivery mechanism and loan recovery process, etc.
- Fifty women clients of bank were randomly surveyed to understand their approach towards bank's product and cost structure and its acceptance by the customers.
- Socio-economic impact analysis of innovative schemes through random interviews with 35 beneficiaries of the bank.

10.3 Social Innovation

Social innovation was discussed in the writings of experts such as Peter Drucker and Michael Young in the 1960s. There are numerous definitions of social innovation found in the literature. Murray et al. (2010: 3) defined social innovation as "...new ideas (products, services and models) that simultaneously meet social needs and create new social relationships or collaborations..." Phills et al. (2008: 39) defines social innovation as "a novel solution to a social problem that is more effective, efficient, sustainable, or just than existing solutions and for which the value created accrues primarily to society as a whole rather than private individuals". The Young Foundation, in order to distinguish between social and business innovation, stressed that social innovation is developed and diffused via organizations, whose primary purpose are not centred on mere profit maximization (Mulgan et al. 2007). Pol and Ville (2009: 881) suggest the following definition of social innovation: "an innovation is termed a social innovation done if the implied new idea has the potential to improve either the quality or quantity of life".

There is abundant literature on the concept of social innovation and innovative works done by several institutions and NGOs impacting the quality of human lives. Banks and credit institutions have always been at the forefront of the economic development of society. However, owing to their profit orientation, they have largely failed in providing innovative solutions to social problems that are effective, efficient and sustainable. While cooperative institutions in India and abroad have come out with innovative socially sustainable initiatives, cooperative banks generally restricted themselves to traditional ways of banking. It was, therefore, a subject of research interest why banking institutions, which have been the engine for economic growth for countries across the globe, could not be equally effective in sustainable social development. Keeping in view the limited research works and very few instances of bank-led socially sustainable finance model, the study of the banking model of Mann Deshi Bank may fill in the research gap and provide an assessment for the possible wider replicability.

¹For example, Gavron, Dench (eds.) *Young at 80*, Carcanet Press, London, 1995 for a comprehensive overview of one of the world's most successful social innovators.

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10.4 Mann Deshi Mahila Sahkari Bank and Its Social Orientation

The social innovation model of Mann Deshi Mahila Bank is more on the lines of the definition provided by Phills et al. (2008). Profit maximization and inorganic growth have never been the focus of Mann Deshi Mahila Sahkari Bank. Originally started as a credit union/credit society in the year 1993, it received its banking license from the Reserve Bank of India, the Indian banking regulator, in the year 1997. The bank began with 550 members, initial capital of Rs. 0.6 million and initial staff strength of seven. After about 27 years of its existence, the bank has 8 branches, 30,431 members, 111 staff members and a total paid-up share capital of Rs. 78.08 mn. So, the bank can boast of a reasonably fair growth pattern. But what has not changed is its niche market and client profile. The bank started with the motto of serving the poor, downtrodden and financially excluded women of the area. After 20 years of its existence, the bank continues to serve the same set of people with past 5 years average loan ticket size of Rs. 41,991 equivalent to \$558 (USD) each borrower. While there was a gradual increase in loan ticket size over the years, the bank once again, as a policy shift, recommitted itself to the people of smaller means and the average ticket size had a downward trend at Rs. 41,771 as on February 29, 2020 (Table 10.1).

As on February 29, 2020, the value of 68% of the loans sanctioned by the bank was less than Rs. 0.5 million. Furthermore, most of the small ticket loans of the bank are unsecured debt. In value terms, total uncollateralized loans of the bank consisted of 28% of the total loans as on February 29, 2020. Till March 2016, the bank was not paying any dividend to its shareholders. It started paying dividend at a meagre rate of 5% for the last 3 years. The bank thus clearly remained focused on horizontal growth rather than vertical growth.

As mentioned in the Report of the Household Finance Committee, July 2017 and as per All India Debt and Investment (AIDI) Survey data, the median size of unsecured loan from non-institutional sources in India is Rs. 38,800. Instead of secured debt, most Indian household debt is unsecured (56%). The data also reflects an unusually high reliance on Indian households on informal, non-institutional sources of lending such as moneylenders and intra-family loans (Report of the Household Finance Committee 2017).

Table 10.1 Loan ticket size

Date/year	Average loan (ticket size) in Rs.
31.03.2016	35,110
31.03.2017	41,885
31.03.2018	44,665
31.03.2019	46,555
29.02.2020	41,771

Source Mann Deshi Mahila Sahkari Bank

Mann Deshi Mahila Sahkari Bank decided to fight the prevailing socio-economic evil of money lending system which is exploitative in nature and a major source of unsecured loans for the poor. While designing weekly market cash credit product for the poor women, the bank, in collaboration with Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ), did the study of daily cash flow of poor households by preparing financial diary of households. Interestingly, the bank also studied the working of some of the moneylenders to get an insight into their lending and recovery processes.

10.4.1 Product Innovation by Mann Deshi Bank

Cash credit product for micro-entrepreneurs in general and vegetable vendors in particular is one of the high-impact product innovations by the bank. Most of the vegetable vendors meet their financial requirements either through short-term debt obtained from moneylenders or by purchasing stock from wholesalers on credit. Mann Deshi Bank observed that the weekly markets in most part of Satara District were common phenomenon but the vendors in these markets, like their counterparts in other parts of the country had invariably no linkage with the formal financial system. The vendors operating in these markets frequently purchased goods on credit from wholesalers. Interview of 134 randomly selected vendors at the weekly market by GIZ team (GIZ 2014) revealed that the average worth of stock bought per day was Rs. 5,050. Purchasing on credit was a common phenomenon. As per the report, 91% of all respondents had bought on credit at least once from the wholesaler. Close to half of the vendors bought their entire day's goods on credit, while the other half bought a small fraction on credit. The wholesalers charged daily interest up to 1.4%. Moreover, it was observed that credit buyers had less bargaining power than cash buyers and they would often be given poor quality goods by the wholesaler.

The product specification is as under (Table 10.2).

10.4.2 Analysis of Product Cost of Mann Deshi Bank

The cost of loan products offered by Mann Deshi Bank is higher than that of commercial banks and even most of the peer group urban cooperative banks. Anecdotal information revealed that interest on cash credit product charged by most of the commercial banks generally ranged from 9 to 13% depending on the credit rating of the borrower. In commercial banks, pricing is usually linked to credit rating of the borrower. However, the normal cash credit product of Mann Deshi Bank attracts a flat interest rate of 15% which is 2% higher than that is charged to the worst-rated

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Table 10.2 Product specifications

	1	
1.	Eligibility criteria	Age between 21 and 59 years Females only Has a business in the weekly market where the loan is to be given. Has been coming to the market regularly for the past 3 months. Business is not seasonal but conducted throughout the year
2	Guarantor/JLG	Two guarantors with a business in the same market as the client are required. Each borrowing member guarantees at least the interest component of the loan of the other two members
3	Required documents	Photo ID (Voter ID, Aadhar card ^a , PAN card, Bank Pass Book) Address Proof (Voter ID, Aadhar card ^a , Bank Pass Book, Electricity Bill, House Tax Receipt)
4	Credit limit	Rs. 10,000 initially, subsequently increased to Rs. 20,000 upon regular payment
5	Loan tenor	Three years
6	Interest rate	26% per annum on reducing balance computed every week
7	Repayment terms	Required payment: Accrued interest every week Recommended repayment: At least 10% of the loan amount
8	Location	Collection of documents, disbursements, repayments and withdrawals take place largely in the weekly market that has been pre-decided. The client has also the option to withdraw or deposit at the bank during working hours

Note ^a Aadhar: It is an easily verifiable 12-digit random number as unique identity proof for Indian people issued by Unique Identification Authority of India

Source Mann Deshi Mahila Sahkari Bank

borrowers of commercial bank. As per the regulatory prescription² for Non-Banking Finance Company-Micro Finance Institution (NBFC-MFI), the interest charged by an NBFC-MFI would be lower of the following: (a) The cost of funds plus a maximum margin of 10% for large MFIs and 12% for the others; (b) The average base rate of five largest commercial banks multiplied by 2.75.

Given this backdrop, the interest rate on weekly market product of Mann Deshi Bank is high at 26%. The justification given by the bank is that servicing cost of this type of doorstep credit product is very high and therefore the higher interest rate. The GIZ study on cost assumption reveals that after adjusting salary cost, commission to agents, cost of technology, bad loans, etc., at an average loan amount of Rs. 10,000 for 225 borrowers, the bank would make a profit of Rs. 5708 only. On the same loan outstanding of Rs. 10,000 for 5,000 clients, the bank would make a profit of Rs. 4.90 lakh. As on February 29, 2020, the total clients of weekly cash credit accounts were 2624 with an average loan size of Rs. 18,733. The average loan size is higher than the figure taken for scenario analysis by GIZ. However, once the number of borrower increases further and the product is scaled up probably some reduction in pricing could be possible for the bank.

²RBI Master Circular—'Non-Banking Financial Company-Micro Finance Institutions' (NBFC-MFIs)—Directions dated July 1, 2015.

Although Mann Deshi Bank type of clientele is not the niche market for commercial banks, many of them, through their Business Correspondents (BC), do provide doorstep banking to their clients in rural areas at cheaper rates. The moot point, therefore, is that despite Mann Deshi Bank being very costly in terms of interest rate why this bank was preferred over other cheaper sources of formal credit channels. As part of the present study, a random survey was conducted through a questionnaire to ascertain the reasons. The respondents were asked the following very direct questions: (i) Were you aware that the interest rate charged by the Mann Deshi was exorbitant? (ii) Whether they approached any other bank before choosing Mann Deshi? (iii) On being informed that other banks are providing cash credit at much cheaper rates whether they would now shift to other banks? The survey revealed that (i) 70% of the clients surveyed had never approached commercial banks for loans as they perceived that commercial banks were not accessible to them. (ii) Thirty per cent of the clients had visited commercial banks but they had a poor experience with them. Most of these 30% of clients had deposit accounts with the commercial bank but no loan account. (iii) Forty-five per cent of the clients were unaware that interest rate charged by Mann Deshi was higher. In fact, out of these interest rate ignorant group, 9% of clients had a sense that interest rate charged by Mann Deshi was rather cheaper than other institutions. (iv) Fifty-five per cent of the clients were aware of the high interest rate charged by Mann Deshi. But these respondents were completely dismissive of any suggestion of availing credit from commercial banks at cheaper rates of interest. Even after being educated that commercial banks are providing cheaper loans, they had no second thoughts on banking with Mann Deshi. Clearly, for these poor clients of Mann Deshi Bank, commercial banks carried a negative image. Fifteen per cent of the respondents attributed it to bad staff behaviour and 12% to delay in the processing of loans. Eight per cent of the clients opined that they did not believe commercial banks give this type of loan. Others did not attribute any reasons but they said that nobody from commercial bank ever approached them.

This brought to the fore the issue of availability versus accessibility. In urban areas, credit channels are available but probably not accessible. The survey reveals that what matters for the poor is not only good and customized product but also efficient delivery channel. The preference for Mann Deshi over others is a case of successful outreach efforts made by this bank which their counterparts lacked. The poor probably needed social inclusion to precede financial inclusion. They needed respect, recognition, timeliness and doorstep service more than interest rate benefits. Mann Deshi Bank probably succeeded in capturing the sense of these excluded segments of society with customized products and delivery mechanism.

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10.4.3 Other Socially/Financially Viable Innovations by the Bank/Foundation

Goat Rearing and Artificial Insemination of Goats

The bank, in association with Mann Deshi Foundation, 3 is helping women of the area in breaking all social barriers to adopt unconventional vocations. One such vocation is artificial insemination of goat project in Satara District. The district, particularly Mann taluka, is a drought-prone area and has faced successive droughts in recent times. Farming is very difficult in this monsoon dependent area. Goat rearing was considered a viable income-generating occupation for this poverty-stricken area. Mann Deshi Bank decided to provide loans for the purchase of goat in a big way which usually cost Rs. 5,000-6,000 each. However, the area had a dearth of qualified veterinary doctors. There was usually only one doctor for four to five villages. Further, in the absence of a higher breed insemination facility, goat rearing was not really remunerative. The Mann Deshi Foundation decided to support women willing to take up the work of artificial insemination of goat. The foundation financed the training of these women with the help of Nimbkar Seeds Pvt Ltd. which imported Boer Goat embryos from Australia in order to make Boer Goat stock widely available throughout India. It also imported semen of Damascus Goats from other parts of the world and started breeding them with locals. Post-training of these women, the foundation financed insemination kit and container, while the bank financed twowheelers to these "goat doctors". Initially, these women faced resistance from the orthodox society as the work was considered non-feminine. In the words of Sunita Kamble, a goat doctor, "It was not easy—my family and neighbours did not support me. However, as the people saw the impact of my work, how my team and I had much higher success rates as compared to local government doctors, they began to believe in us. One day a goat was very ill with dysentery. We looked after it and it survived. People said we brought it back from the brink of death and the word of our success spread. Now I receive 25 calls a day! I visit and talk to 300 women every month. They say, the goat doctor has come and offer me a chair, and I feel so proud. And now my husband is proud of me too". Sunita belonged to Dalit community (a community considered socially low in hierarchy of caste group) and educated only up to 9th standard. As reported by the foundation, her monthly income is in the range of only Rs. 6,000-Rs. 7,000 and the foundation was still providing her financial support of almost equal amount. But what has changed significantly is her social status and recognition. Her work has been recognized by the Government of

³Mann Deshi Foundation: Mann Deshi Foundation was founded in 1996 by Chetna Gala Sinha in Mhaswad, Maharashtra to empower women to make their own choices by equipping women with the knowledge, skills, courage, access and capital to become successful entrepreneurs with more control over their lives. Supported by domestic and global partners like NABARD, HSBC, GIZ, British Asian Trust, Accenture, National Skill Development Corporation, Unicef, Yale, Johns Hopkins, Hindustan Lever, Bajaj, etc. The foundation is running various welfare progammes through its various schemes like Business School, Girls on Wheels, Water Conservation, Mann Deshi Champions, Chambers of Commerce, Community Radio, etc.

India and she received NITI Aayog's⁴ Women Transforming India Award 2017 on 29 August 2017. Clearly, such initiatives by the Mann Deshi Bank and the foundation brought about change not only in the life of an individual but in the mindset and value system of the entire society.

The Demonetization and Innovative Solution by Mann Deshi Bank

The discussion in this section is based on the presentation made by Ms Rekha Kulkarni, the CEO of the bank, during my visit. In addition, reports published in two local (Marathi language) newspapers also referred. Withdrawal of legal tender character of Rs. 500 and Rs. 1000 old series banknotes in November 2016 created certain temporary operational challenges for banks in India. With over 0.2 million account holders, the bank anticipated huge rush to its branches for exchange of withdrawn banknotes with legal tender. The bank was quick to sense that the customers who are mostly of smaller means were not comfortable with higher denomination notes of Rs. 2,000 which usually other banks were giving in exchange for withdrawn currency. Mann Deshi Bank came up with an innovative solution. It came to the knowledge of the bank that lower denomination notes and coins were lying idle with some of the commercial bank branches of the area. The typical commercial bank customers were generally reluctant to accept coins in exchange. Here was an opportunity for the bank. The local branch of a commercial bank responded positively to the request of Mann Deshi Bank and agreed to exchange its idle stock of coins with them. The bank hired a van to collect coins. The coins were sorted and put in a pouch of Rs. 500 each. Every day the Mann Deshi van visited a weekly market and exchanged withdrawn Rs. 500 and Rs. 1000 denomination notes for pouches of coins. This enabled the bank to serve a maximum number of people. Outside the van two counters—one for women and the elderly and the other for general public were set up. In the course of 2 weeks, nearly 5,000 people from six weekly markets benefitted from this initiative. Due to the innovative approach of Mann Deshi Bank, some of the beneficiaries of the banknotes exchange facility opened new accounts with the bank and became customers! This initiative of Mann Deshi Bank during a difficult time received widespread appreciation and accolades in the local media.

10.5 Impact Analysis of Innovative Weekly Market Cash Credit Product

In the impact analysis survey conducted by GIZ, the clients of Mann Deshi Bank reported an increase in profit by about 30–100% on availing the loan. This was primarily because they could now buy more goods at a lower price and of better

⁴NITI Ayog: The National Institution for Transforming India, also called NITI Aayog, was formed via a resolution of the Union Cabinet on January 1, 2015. NITI Aayog is the premier policy 'Think Tank' of the Government of India, providing both directional and policy inputs. While designing strategic and long-term policies and programmes for the Government of India, NITI Aayog also provides relevant technical advice to the Centre and States.

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quality and hence their sale increased as did their profits. Secondly, the interest rate charged by the bank was lower than rates charged by wholesalers or moneylenders. Some of the clients interviewed by GIZ, however, had a different story to tell. They said that their wholesaler sold on credit without charging any interest.

It was gathered from the bank that the economic impact of the absence of linkage with formal financial system was not the same for all. The social phenomenon of caste system⁵ had a differential impact on the cost of credit depending upon whether they belonged to the so-called high caste or low caste. The bank informed that moneylenders gave preferential interest rate treatment to the borrowers if they belonged to the same caste group. The bank found that higher caste individuals had more lucrative networks; they were able to borrow from their peers interest-free while lower caste individuals did not have that option (Sinha 2012).

So, for the poor, it is not just the economy (class) but also the social status (caste) that matters. It is a double whammy for a poor if he/ she comes from a lower caste. The weekly market cash credit product of Mann Deshi Bank, though primarily aimed at economic upliftment of the poor, also resulted in the upward social mobility of these deprived sections of the society.

As per the information provided by the CEO of the bank, the major chunk of bank's loan (54.50%) was for business and other productive purposes. Seventy-two per cent of the borrowers of business/productive purpose loan could significantly improve their economic status. There were a few failures also but such cases were low at 10% only. The condition of 18% of the borrowers neither improved nor worsened. The most popular businesses, women chose to set up or expand, were dairy farming, goat farming, catering, poultry farming, ladies shops, grocery shops and street stalls. During the course of study, visits were made to certain successful entrepreneurs of the bank and a phenomenal change in the life of these ladies were observed. Women beneficiaries like Laxmi Mann Singh Ingole, a tea/snacks seller, Usha Balu Jadhav, bamboo basket maker, Sangita Santosh Mapate Melbani, catering business, Sunita Sanjay Pawar, religious CDs and photo frame sellers, Sunanda Phadtare, a vegetable seller, Rekha Prakash Kumble, a tailor and Sneha Sanjay Devgirikar, seller of chutney and papad all had an almost similar story to tell. They all were living in penury and now some of them are earning more than Rs. 25,000 a month. Further, they all started with the initial loan amount of Rs. 10,000-Rs. 20,000. In subsequent years, the loan amount kept on increasing after successful repayment of an earlier round of loans. In a span of 6–7 years, the life of some of them transformed from job seekers to job givers. Once they attained some affluence most of them wanted to acquire property and sought housing loan from the bank.

⁵Caste System: The caste system divides Hindus into four main categories—Brahmins, Kshatriyas, Vaishyas and the Shudras. It is believed that the system originally divided people on the basis of "karma" (nature of work or occupation) but later on it created discrimination on the basis of birth, i.e. a person's social status got defined on the basis of his/her caste in which he/she took birth.

10.6 Concluding Observations

The preference by the financially excluded women for the "costly" Mann Deshi Bank over others is a case of successful outreach efforts made by the bank. This could happen primarily because of the innovation in product designing by the bank. The innovation of socially sustainable "Grameen" model of banking by the Nobel Peace Prize winner Muhammad Yunus brought a sea change not only in the lives of the financially excluded population of Bangladesh but also in the lives of the poor in many other countries across the world, wherever it was replicated in some form or the other. The innovative delivery model of loan products of Mann Deshi Bank, along with capacity building efforts of Mann Deshi Foundation, succeeded in capturing the sense of the excluded population in the area of its operation. The cost structure of Mann Deshi Bank provides an insight into the fact that innovative and customized products may be costlier but they are socially sustainable. The chapter highlights the point that a wider replication could be a game changer for the financially excluded population across the globe.

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Chapter 11 Cooperative Sector Grading—A Social Innovation in Finance



Arunima Guha

Abstract This chapter argues that a social innovation of rating is a necessary condition for cooperatives to access credit from the banks. The cooperatives serve a larger goal of the distribution of wealth among members and thereby have a positive impact on society. However, in the absence of access to credit from financial agencies, they are unable to compete with profit-oriented enterprises. Based on a review of secondary sources, this paper proposes criteria for and measurement of a rating framework for cooperatives as a social innovation to obtain loans from commercial banks. The proposed rating method contributes to the existing literature on social innovation and helps cooperatives to obtain credit from financial institutions and also promote accountability.

Keywords Social innovation · Credit rating · Cooperative · Accountability

11.1 Social Innovation

In the last few decades, innovations are evaluated by its transformational potential to solve social, economic, environmental and institutional problems. The concept of social innovation has emerged as a popular and widely accepted framework in today's scenario—majorly to deal with global and local problems. The popularity of the concept of social innovation is because the concept is amenable to adaptation. The same is noted by the Young Foundation (2012, 4): "... partly because social innovation is a practice-led field—understanding, definitions and meaning have emerged through people doing things in new ways rather than thinking about them in an academic way". The significance of social innovation is reflected in the Sustainable Development Goals of the United Nations (Portales 2019). Mulgan et al. (2007, 4–5) contend that "social innovation is not unique to the non-profit sector. It can be driven by politics and government (for example, new models of public health), markets

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(for example, open source software or organic food), movements (for example, fair trade), and academia (for example, pedagogical models for childcare), as well as by social enterprises (microcredit and magazines for the homeless)". Thus, ease of use in various situations and flexibility make social innovation popular. The Young Foundation (2012) has mentioned the use of social innovation in six new fields: products and services, processes, markets, platforms and organizational forms and business models. In this paper, I am using social innovation as a new cause—credit rating of cooperative societies.

There is a no omnibus definition of social innovation, but in a layperson's understanding, social innovation includes all innovations that meet social needs. Mulgan et al. (2007, 8) define social innovation as "innovative activities and services that are motivated by the goal of meeting social need and that are predominantly developed and diffused through organizations whose primary purpose are social". Social innovation is different from business innovation in terms of end goal and type of organization (Mulgan et al. 2007). The business innovation is primarily motivated by the idea of profit maximization and it is operated through a profit-seeking organization. However, the motivation of social innovation is to meet social need and it is diffused through organizations that are self-sustainable but are not based on the idea of profit maximization. For example, the farmers' cooperatives are self-sustainable but a larger goal is the distribution of wealth to increase the average income of the farmers.

Portales (2019) argues that social innovation is different from other innovations based on processes and ends. Based on the two elements, Portales (2019) compares social innovation with other types of innovation that he categorizes as, economic, radical, disruptive, bottom-up and social programmes. Portales (2019; 7) contends that "the logic of economic innovations is competition between actors, while social innovations promote cooperation. In this logic, social innovations aim to improve the relations of society by increasing social capital, while economic innovations seek only to maintain ties with their shareholders". Similarly, he argues that radical innovation can transform society but not necessarily improve living conditions; the disruptive innovation may produce low-cost products but for profit maximization; bottom-up innovation may change things at the local level; and, social programmes have welfare perspectives to maintain social structure. However, the motivation of social innovation is to enhance social value, improve living conditions, including marginalized sections, change society at the system level and empowerment.

Thus, social innovation dealing with the innovations that meet the needs of society is a relevant approach for rating cooperatives to obtain credit from lending agencies.

11.2 The Context—National Spot Exchange Limited (NSEL) and Present Arrangement of Rating

The context for this paper is NSEL, ¹ registered in Maharashtra under the Companies Act, 1956, in 2005. Incorporated by MCX, the nominee of NSEL was Financial Technologies of India (FTIL). Commencing live trading on October 15, 2008, this became the first commodity spot exchange of the country. In view of farmers facing a number of problems on account of marketing their produce, governments from six states issued licenses to NSEL under the Agricultural Produce Market Committees (APMC) Act to help farmers to sell their produce at competitive rates and earn a higher income in the next few years (EquityPandit 2019). Soon NSEL became popular.

In order to fill the regulatory vacuum in the commodities market, Forwards Markets Commission (FMC) was appointed in 2011 as the designated agency. As FMC initiated a series of actions causing volatility in the market, NSEL could not continue its trading and suspended the trading of all contracts on July 31, 2013, resulting in a scam (DNA 2015). It was estimated that the total amount involved in the scam was around Rs. 5600 crores (around US\$ 0.9 billion). This was the amount that NSEL could not pay its investors in commodity pair contracts. The farmers were worst affected and they are yet to receive justice.

Scams like this raise the question of how to safeguard the interests of the farmers. In India, cooperatives are in general unstructured and information about them is not fully available to the public. Also, the members are not well aware of their rights as a result of which fraudulent activities are common. Credit rating addresses these issues and tries to formalize the structure as well as provides information on cooperatives to the public. For the members, this is important as they will become aware of their rights and become conscious of their actions.

For taking decisions on investment in big projects, especially those relating to manufacturing, the rating exercise becomes crucial. As far as enterprises dealing with manufacturing of goods, the criteria for rating include detailed project report, statutory clearances obtained, quality assurance and safety plans, processes to monitor work progress, operation and maintenance standard operating processes. Each of these is vetted for its competence and suitability by independent third parties consisting of individual firms or consortia with necessary and relevant expertise. The information/data obtained are reviewed prior to approving the project. During review and analysis, risks relating various processes are identified and the responsibility to mitigate risk is assigned to individuals/parties. These risks are statutory risk (non-compliance of statutory obligation), credit risk (failure to fulfil a contractual obligation and thereby putting the other party to a financial loss), operational risks (arising because of poor internal control, inadequate system and procedures or frauds by employees), market risk (change in consumer preference and availability of replacement goods) and financial market risk (volatility of the interest rate). The

¹For more details, see EquityPandit (2019).

other risks such as currency risk, commodity price risk, equity price risk and so on also seek attention. The "risk" specifically and categorically indicates the possibility or probability of loss in business; hence, the need for cooperative rating.

The job of the credit rating agency is to protect investors. The investor should know that it is receiving adequate compensation against the risk it is taking by holding an investment. Thus, rating agencies are essential to the financial industry and hold a very important position in the financial sector (Smith n.d.). However, rating is generally conducted for manufacturing or services as also for sovereign bonds, etc. There are credit appraisal tools developed by the National Bank of Rural Development (NABARD) for Joint Liability Groups (JLGs) (RBI 2014) but the said tools are of limited use. The cooperatives remain unrated or even if rated they hardly attain the investable grade criteria. As a result, cooperatives cannot approach the capital market, or they get credit from banks at higher rates. The chances of defaults are also high without proper assessment or no formal structure being in place. Moreover, members of the cooperatives are unaware of the functioning of the cooperatives. The question is how credit rating can bring in changes in this structure? And how rating can be related to social innovation? Does it bring economic benefits or increase societal benefits?

The following are advantages to cooperatives from the rating. First, awareness of the strengths and weaknesses of operations of cooperatives can be provided. Second, organizational strength of cooperatives can be enhanced. Third, productivity is improved. Fourth, rating contributes better acceptability in the market leading to improved access to cheaper credit thereby reducing the cost of credit. Finally, confidence among buyers is improved to source material from cooperatives.

The second problem is further exacerbated by the existing credit rating processes or of grading, which focuses on a 'promoter' family or parent with deep pockets and does not factor in the strength of the individual members. Hence, the grading/rating methodology discussed here is being developed to ensure that it explains and aligns the cooperative sectors' features and characteristics, in a manner that can be understood by the financial sector.

11.3 Cooperatives

The International Co-operative Alliance (ICA) set-up in 1895 defines cooperative as "an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise (ICA 2020)". The key ingredient of cooperatives is "association of persons" that jointly owns an enterprise using democratic processes to meet economic, social and cultural aspirations. The purpose of a cooperative is the distribution of wealth rather than return on investment. The value of cooperatives has been recognized as a business model for its concern for the community (ICA 2020). The United Nations (UN) recognized the significance of cooperatives and the General Assembly passed a resolution on 18 December 2009 urging member

states to promote cooperatives (UN 2010). The UN General Assembly declared 2012 as the International Year of Cooperatives to highlight the contribution of cooperatives to socio-economic development, poverty reduction, employment generation and social integration (UN 2020).

According to the UN (2014), less than 1% of the total population of the world is employed by cooperatives and the combined global cooperative economy is fifth largest after France's economy. UN (2014) reports that the cooperative economy accounts for over 10% of the Gross Domestic Product in the following four countries of the world—New Zealand (20%), the Netherlands (18%), France (18%) and Finland (14%). One in every six people in the world is either a member or client of the cooperative. It is also highlighted that two-thirds of the top ten most cooperative economies are able to make to the top countries on Social Progress Index.

The significance of cooperatives in India is highlighted in the Constitution of India that recognizes forming a cooperative society as a Fundamental Right under the Article 19 (1)(i) introduced in 2011 through 97th amendment. A cooperative society is a state subject under entry number 32 in the Seventh Schedule of the Constitution of India. However, it could not be implemented due to litigation. Apart from the Constitution, India also has an institutional structure to support and disseminate the idea of cooperatives. Legislation on cooperatives in India is more than one hundred years old, such as Cooperative Credit Society Act 1904. After the independence, many committees from time to time have recommended legislative changes, such as All India Rural Credit Survey Committee (1954), Committee on Cooperative Law (1957), Committee on Cooperative Law for Democratization and Professionalization of Management in Cooperatives (1987). An important point in cooperative legislation was the amendment of Companies Act 1956 in 2003 to include Part IXA—Producer Companies to enable incorporation of cooperatives as companies.

Indian cooperatives operate in diverse areas although their success is mostly confined to dairying, sugar and handlooms. The failures in cooperatives are mainly attributed to dormant membership, political pressures, lack of active participation of members in management, policy processes, as well as lack of knowledge on operations by members. The cooperative credit institutions have mounting overdue, are over-dependent on government assistance, lack professional management, unable to mobilize internal resources, suffer from bureaucratic control and interference in the management, political interference—all these have reduced their growth. Societal benefits take a back seat mainly because of the dominance of vested interests leading to maldistribution of benefits among members, especially the poor. These factors together have retarded their development, and there is a need to address these issues.

Legal and tax treatment: Government support in terms of tax benefits to an activity is based on its role in the economy (Weddington 2007). In India, there is no threshold limit for taxability of income of a cooperative society. However, in activities, such as supply of milk, cottage industry, supply of oilseed, vegetables and fruits and marketing of agricultural produce to a federal cooperative or a government

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company or to the government some deductions are available.² Further, income by way of interest or dividends is also fully deductible. However, it is seen that none of the State Cooperative Acts specifies appointment of Chief Financial Officer (CFO) with prescribed qualification and the cooperatives do not follow a process for tax management to ensure tax compliance as well as tax reduction. Hence, low governance structure/lack of professionalism is one of the key reasons for misappropriation of funds.

Limited reach to equity capital: Cooperatives in India have not benefited from broad access to the capital markets as they are fragmented and because of their limited size. In addition to that, unprofessional management structure along with complex operating procedures makes it difficult to access public finance.

Volatility in membership: Cooperative members, who are both suppliers and customers, will remain in a cooperative so long it is economically beneficial to them. There is volatility in membership and people keep on changing cooperatives. The change in membership if not compensated by the admission of new members can leave a cooperative economically unviable and structurally unstable. It is also possible that a member of a cooperative is also a member of many similar cooperatives, which is a poor reflection of cooperative discipline. A simultaneous membership of similar cooperatives increases the possibility of higher volatility by inducing opportunism. Thus, volatility of membership is a key rating indicator. The risk due to volatility of membership can be reduced by inducing anchorage elements, for example, increasing bonus to long-term serving members, long-term exclusive marketing agreement and restriction in simultaneous membership.

Organizational Politics: The business strategies of cooperatives often introduce unhealthy politics into the organization, which increases the risk. Since both customers and suppliers are present in the same cooperative, their interests vary. For example, the producer will try to extract a higher price, whereas the buyer will prefer to pay a lower price. If the pricing processes are not sturdy, the powerful of the two, namely the supplier and customer, will prevail and will ruin the viability of the cooperative. Similarly, there can be many divisions in a cooperative, for example, grain farmer and dairy farmer; there can be territorial differences too—for example, producers from various regions. Dominance of any specific group in the board of directors can impede the board oversight. It may also be possible that conflicting interests can divert the focus of the cooperative. Thus, diversity in board members, quality of governance and ability of the board to react to the stakeholder's demand are all important.

Operational complexity: Cooperatives function in diverse markets. It is therefore possible that their competitors in a market can be a big firm with advanced technology and large capital. Cooperatives can also enter into joint ventures with other cooperatives or non-cooperatives either to increase the scale of business or to bring variety in products or to fetch capital or to increase efficiencies in their business. These joint ventures often result in complex operating structure and possess

²For details, see [https://taxguru.in/income-tax/taxation-cooperative-societies-direct-indirect-tax-provisions.html].

difficulties in management, such as channel conflict in markets and financial risks. For example, if a cooperative in a joint venture takes a loan, the cooperative should service the loan rather than assisting other members of the joint venture (Weddington 2007).

Management quality and experience: Cooperatives often face stiff competition from organized players who have the experience of marketing, distribution and other aspects of the business on a large scale. Experienced and professional people are usually not there because of compensation packages as well as unprofessional management. In India, fragmentation of cooperatives is a big challenge as they are relatively small in size with continuous churning of members. As a result, processing efficiency decreases and it is more difficult to implement change or manage member dissent.

11.4 Cooperative Grading in India

Presently cooperative grading is prevalent in the market though not as popular as it should be. It tries to bring in evaluations of cooperatives. For the cooperative sector, grading technology plays a key role in facilitating the data collection and number crunching needed to generate sector grading.

Cooperative grading is being demanded with the rising levels of consumer literacy. Empirical research indicates that farmers rely heavily on friends and family while making decisions. With the advent of the internet and increased social media activity, farmers now are increasingly getting connected to the global and wider network and hence rely on quality grading retrieved from multiple sources.

Multidisciplinary projects' implementation essentially calls for scanning of appropriate skills and expertise. Reaching out to the unreachable is still a challenge. It, therefore, emerges as a necessity to ensure last-mile connectivity by reaching out to the cooperative sector. There is a need to help them to reap the benefits of the economic growth of our country, i.e. for real and genuine financial inclusion to materialize these vulnerable groups by sharing the prosperity and wealth of our economy. Financial inclusion contributes to prosperity if services are shared equitably and justly and builds economic democracy and provides economic justice.

In the present context, cooperative rating is important because it can

- 1. Bring cooperative sector in the main financial framework of the economy.
- 2. Helps Developers in positioning the project in a crowded unorganized market and benchmark them against the competition.
- Helps Investors and Lenders of the project to access an independent opinion about the risks involved in the members' ability to deliver as per the agreed timelines and quality standard.
- Helps Alliance Partners, such as contractors find easy acceptance among various stakeholders.
- 5. Facilitates pricing and credit decisions.

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6. Improved availability of credit at better terms and conditions.

The key factors to focus on are

- 1. Financial and Non-financial analysis;
- 2. People;
- 3. Resources and asset quality;
- 4. Organization structure;
- 5. Value creation:
- 6. Efficiency in operational and financial management;
- 7. Nourishment for growth.

11.5 The Rating Methodology

In this section, the rating methodology for cooperatives is proposed. Moody's report (Weddignton 2007) was the first to identify the rating factors in the context of agricultural cooperatives and develop a measurement scale. The rating methodology has been derived based on four major factors (Weddignton 2007). These are³

- 1. Scale and diversification:
- 2. Franchise strength and growth potential;
- 3. Financial flexibility;
- 4. Financial policy and financial ratios.

Any change in one or more of these factors is likely to influence the overall business and financial risk assessment incorporated into a rating.

11.5.1 Measurement of Key Rating Factors

In order to gauge the performance of each of the four factors, we refer to their measurements which can be referred to as sub-factors or metrics. In total, 18 sub-factors are derived and then we map the range of potential outcomes for each sub-factor to the possible rating outcome. In addition, analytical adjustments are also made. After identifying the measurements for each factor mapping is done on the range of potential outcomes for each sub-factor to a rating category (like AAA, AA, A, etc.) (Weddington 2007). There can be some cases where an extraordinary performance can make one sub-factor score much higher than others making the cooperative an outlier. These are special cases where cases on case basis adjustments are necessary. To determine the final rating a scoring methodology is used. Each of the 18 sub-factors is converted to a numeric value based on a particular scale. The lowest numeric value is assigned to the highest rating AAA, while the highest is

³Noorivandi and Ommani (2014: 172) also use the same factors to develop management information system for agricultural cooperatives in Iran.

Sub-factor rating	AAA (+ to -)	AA (+ to -)	A (+ to -)	BBB (+ to -)	BB (+ to -)	B (+ to -)	С	D
Value	1	3	6	9	12	15	18	20

Table 11.1 Scale of rating

Source Information collected by the author

assigned to the lowest rating scale D. Then a sub-factor weight is derived which is then multiplied with the numeric value to arrive at a weighted score. The addition provides a total score and accordingly, rating is assigned.

Since it's an eight-point scale with three categories in each scale up to B, hence scoring is marked with the numbers in Table 11.1.

The weights are provided based on the sub-factors in Table 11.2. A weighted average provides the final score.

The total score is derived on a weighted average and then the overall rating is assigned based on the range, where the final score falls, illustrated in Table 11.3.

11.5.2 The Key Rating Factors Explained

Scale of operations (measured by total sales): A higher sales volume not only helps cooperatives to leverage costs but also enables them to enjoy more clout with suppliers and customers. Diversification has three main issues: (a) diversification of products and product segments, (b) geographic diversification which always helps to manage risk better and (c) geographic diversification of raw material supplies, which helps in times of crisis as well as bring price advantage. These will help cooperatives to mitigate demand risk and take care of unforeseen circumstances. Diversification in product varieties helps in distributing product revenues. However, expansion into products just for the sake of diversification my not help, especially where cooperatives do not have strength. Hence, care needs to be taken while diversifying.

Franchise strength and growth potential: In the long run, franchise strength leads to greater earnings stability, higher profit margins and better debt-service capacity. Strong market share provides a cooperative better pricing power and more favourable cost and margin conditions. In addition, trends in the market share are important; even a small growth in a matured market indicates relatively higher strength, while the higher growth rate in a growing market may not be all that significant. It is therefore remarked by Weddington (2007, p 10) that "the focus is on organic volume growth rather than on revenue growth, since the latter is likely to reflect the volatility of commodity prices. It is important to note that strong volume growth is not always a positive indicator as it may imply volatility in demand or high price elasticity that could jeopardize profitability of members". Image building or brand building is a continuous process to establish a brand. It is to be seen due to

Table 11.2 Weightages of rating factors

	Rating factor	Sub-factors	Weightage (%)	Cumulative sub-factor weighting (%)
1	Scale and diversification	Total sales	5	25
		Geographic 5 diversification (in sales)		
		Geographic diversification (in raw material)	5	
		Segmental diversification	10	
2	Franchise strength and	Market share	5	20
	growth potential	Organic volume growth	5	
		Qualitative assessment of portfolio	10	
3	Financial flexibility	Willingness to give member payments and impact	5	10
		Liquidity under stress	5	
4	Governance, financial policy and ratios	Financial policy	5	45
		FFO/net debt (3 years average)	5	
		FFO/net debt (3 years worst)	5	
		Debt/EBITDA (3 years average)	5	
		Debt/EBITDA (3 years worst)	5	
		RCF/net debt (3 years average)	5	
		RCF/net debt (3 years worst)	5	
		EBIT/interest (3 years average)	5	
		EBIT/interest (3 years worst)	5	
		Total	100	

Source (1) Prepared by the author

(Weddington 2007)

Note FFO Funds from Operations; RCF Retained Cash Flow; EBIT Earnings before Interest and Tax

⁽²⁾ Sub-factors of the item "Governance, Financial policy and ratios" are from Moody's report

Rating category	Indicated score range
AAA	≤1.50
AA	≥1.50–4.49
A	≥4.50-7.49
BBB	≥7.50–10.49
BB	≥10.50–13.49
В	≥13.50–16.49
С	≥16.50–19.49
D	≥19.50–20

Table 11.3 Rating category and score

Source Prepared by the author

brand building exercise how much of recall is there and whether in times of crisis sales of the product can maintain sustainability.

The cooperatives benefit from a favourable business environment through subsidy, grants provided by the government to protect cooperatives from the competition. This helps in generating higher and more stable earnings and cash flow for the cooperatives. The natural and regulatory barriers are critical components of cooperative's franchise strength (Weddington 2007). Qualitative assessment also plays a significant role in carrying out the rating exercise. These sub-factors in total carry 20% weightage with more weight towards qualitative assessment of portfolio.

Financial Flexibility: The fundamental of creditworthiness is the ability to generate cash and retain the same in sufficient quantities so that debt service obligations are met. However, it is seen that cooperatives do not try to retain cash. They instead sell inputs to members at the lowest price and try to sell as much product as possible to return cash to its members. A suggestion given by Weddington (2007, p 13) is that "a cooperative board can often legally dictate how much it will pay for members' produce, a significant portion of many marketing cooperative's cost of goods sold—and indirectly its cash flow—is theoretically a variable under the cooperative's control. Additionally, because these member payments are generally subordinated to other debt service obligations, a reduction in member payments can materially increase the amount of cash flow available to service debt". Hence, at times of financial stress, cooperatives need to retain cash by reducing member payments. It is also important for cooperatives to pass the price volatility to consumers rather than allowing producers to suffer. Change in input cost also affects the working capital cycle as well as the requirement. Also, information availability to members in most of the cases is an issue. Hence, members do not expect raw material price fluctuation and no hedging measures are also taken. All these together make it difficult for cooperatives to sustain business as well as service debt. Hence, the two most important factors with 10% weightage to understand financial flexibility are

- 1. Willingness and ability to pay back members and its impact on liquidity;
- 2. Ability to manage liquidity under stress.

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Governance Structure, Policy and Financial Ratios: Cooperatives often have weak governance structure and not very well laid out policies. The representation on boards is mostly questioned and financial policy mostly looks at maximization of members' return. But due to unprofessional ways of managing things and unclear policies, most of the time cooperative accounts are not handled properly. Hence, it is important to lay down policies on member income distribution, growth through acquisition or joint venture and financial matter handling at times of crisis. Positive rating factors would be

- a. Financial policy that safeguards interests of debt holders and members;
- b. Conservative leverage policy to yield healthy cash flow to debt ratios;
- c. Stable financial ratios;
- d. Commitment to repay debt after acquisitions/expansion.

The major measurement criteria for financial ratios are

- a. FFO/Net Debt
- b. Debt/EBITDA
- c. RCF/Net Debt
- d. EBIT/Interest.

The range of the ratios needs to be decided while working on a number of cases and most importantly financial policy and governance need to be looked into in detail. Each ratio carries a weight of 5% totalling to 45%.

Other than these major four factors, some more factors also need to be seen. Rating should also be in a position to judge internal factors and to understand the intention of the management. Qualitative factors that need to be considered are overadvancing to members, and policies to repay on time. The repayments are irregular leading to an extended debt cycle and most cooperatives do not have processes laid down to codify the advance practices. Hence, Weddington (2007, p 20) noted that "cooperatives often use bank borrowings to finance timing differences between produce payment advances and the receipt of proceeds from the sale of products".

The weights assigned to various factors have been divided into quantitative and qualitative issues, which have been determined by looking into different cases prevalent across the globe. However, qualitative factors always take more weightage than quantitative factors.

Now, once we know the key rating factors and after developing the scoring methodology, we summarize the rating process and look at the flow diagram. The diagram is given in Fig. 11.1.

An indicative list of cooperative societies that can be covered by the rating process (this list is not exhaustive. It is just an example of the type of societies that can be covered):

- 1. Credit Societies—Agro, Dairy;
- 2. Primary Agricultural Credit Societies (PACS);
- 3. Non-Credit Societies:

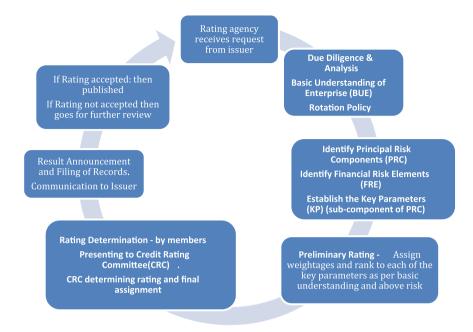


Fig. 11.1 The process of credit rating. Source Prepared by the author

- 4. All Cooperative Societies (National and State, Central and Primary) involved in the marketing (primary) of fruits and vegetables, areca nut, coconut, sugarcane, tobacco, cotton and so on;
- Cooperative Societies (National and State, Central and Primary) involved in the processing of sugar, cotton, oilseeds, paddy, rice, milk, poultry, livestock, fisheries, weavers.

Despite grading being prevalent in India for close to 40 years, and the Urban Cooperative banks accounting for 10% of the banking sectors deposits, grading agencies have ignored Cooperative banks and Agricultural Credit Societies, etc. This severely impacts their ability to access credit and provide services to their members.

- 1. State Cooperative Banks (SCBs);
- 2. Central Cooperative Banks (CCBs);
- 3. Industrial Cooperative Banks (ICBs);
- 4. Grain Banks (GBs);
- 5. Primary Cooperative Banks (PCBs);
- 6. State Cooperative Agriculture and Rural Development Banks (SCARDBs);
- 7. Primary Cooperative Agriculture and Rural Development Banks (PCARDBs).

11.5.3 Benefits of Performance and Credit Rating

The benefits of credit rating to the cooperatives are as follows:

- 1. Independent opinion on capabilities and creditworthiness;
- 2. Availability of credit at attractive interest;
- 3. Prompt sanctions of credit from the banks and financial institutions;
- 4. Subsidized rating fee structure;
- 5. Facilitate vendors/buyers in capability and capacity assessment;
- 6. Ascertain the strengths and weaknesses of existing operations;
- 7. Recognition in local market and in the global trade.

11.6 Discussion and Conclusion

This chapter is an attempt to develop the rating/grading methodology for cooperatives for realizing the benefits of financial inclusion and promotion of discipline in the system. Across the world, there is a growing concern on the accumulation of wealth to a miniscule population and cooperative-based enterprises are being encouraged for the distribution of wealth. The contribution of cooperative enterprise validates the idea of social innovation, i.e. innovation that has societal benefits at its core. However, cooperatives are unable to participate in the market competition due to low access to finance from banks. The cooperatives are unable to access finance, as banks are unable to assess their risk. In this chapter, we highlight the need for rating for cooperatives so that cooperatives are able to obtain credit. The process of rating as explained in the chapter indicates that rating not only assists banks to estimate risk but the members of cooperative get to know the strengths and weaknesses of their organization. Rating makes cooperatives competition ready as the rating process proposed rates both cooperatives and profit-seeking organizations similarly. We have explained that the rating methodology of agencies, for example, NABARD, is not helpful as it attempts to create a separate compartment for cooperatives, which is not pragmatic. The banks that offer credit are common for both cooperatives and the profit-seeking businesses. The rating developed by agencies supporting cooperatives, such as NABARD, creates a distinction that has led to the creation of a separate banking system for the cooperatives. These attempts have created two different types of financial market. However, the market for products is common for both.

The cooperatives operate with the idea of societal benefit but the rules of market-based economy are the same as that of profit motive competitors. The market for many products and services of a cooperative and profit-oriented business is the same and the market is business organization-type neutral. The distinction created by separate rating methodologies for cooperatives is synthetic. Drucker (1987) correctly concurs that social innovation has been taken over by the non-governmental organization. He further adds that social innovation should be a 'managerial task' instead of a 'political' issue. Especially the consumer does not decide while buying a vegetable

is produced by a cooperative or profit-oriented company. The decision will be based on the quality, price and delivery service. Hence, the proposed rating methodology can offer a comparative analysis of the risk of lending for both cooperatives and profit-seeking enterprises producing the same product.

In this chapter, we have proposed rating to bring parity between cooperative and profit-seeking enterprises that will help policymakers to regulate the financial market. While arguing strongly for the rating of cooperatives, we are conscious that there is considerable variation in the nature and size of the cooperatives, from big size AMUL to small size Farmer Producer Organization (FPO). The proposed rating does not distinguish between the two. Moreover, there is a need to conduct an empirical study to check how the proposed rating works.

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Chapter 12 Social Innovations in Organic Foods in Rainfed India: The Case of Dharani FaM Coop Ltd.



C. A. V. Sathish Kumar and C. Shambu Prasad

Abstract Reversing the deleterious effects of natural degradation in drought-prone regions requires collective action at different levels. While lessons on conservation of resources are aplenty there are few cases of collective enterprises that are both ecologically sound and economically viable at the same time. Managing the triple bottom lines often involves significant social innovations. This case on the Dharani Farming and Marketing (FaM) Coop Ltd. in Anantapur district of India demonstrates the potential of collective entrepreneurship for sustainable development while outlining the social innovations that are required by promoting organizations to deal with the whole value chain in agricultural commodities like millets. The case shows that cooperatives need to constantly innovate to create better value for its members across the value chain. The declining and vicious cycle of poor agricultural productivity, lack of social capital and their inability to make a dent in existing marketing chains by poor producers cannot be reversed by the conventional logic of aggregation of produce alone. Cooperatives today need to co-create newer value chains that can ensure better returns for its members. Investing in enhancing the collective experimentation capacity of producers is often a neglected element in creating sustainable futures that are good for members and the planet alike. Cooperatives are better positioned to simultaneously address many of the sustainable development goals and need to be seen as social enterprises that combine the dual logic of purpose and profit.

Keywords Collective experimentation · Social innovation · Organic markets · Participatory guarantee system

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12.1 Social Innovation and Collective Experimentation

Dharani Farming and Marketing (FaM) Coop Ltd. is a mutually aided cooperative owned by 2,106 farmers and promoted by *The Timbaktu Collective*, ¹ a not for profit organization working for the development of rural communities in drought-prone Anantapur district of India where successive droughts have made farming unremunerative and risky. Dharani FaM Coop was established in 2008 using the specific provisions of the mutually aided cooperative law in the state of Andhra Pradesh that enables greater autonomy to producers and promoters of cooperatives. It was created to address several interrelated problems that small and marginal farmers of this rainfed region face—persistent drought, increasing input costs, rapidly declining soil fertility and non-existent or very poor market linkages. While going organic is an option for farmers, the absence of agricultural extension systems that promote organic farming is a hindrance. The Dharani FaM Cooperative thus has to not only be involved in changing production systems towards sustainably under the brand name *Timbaktu Organic*.

With a modest beginning in 2008 with 300 members in six villages, the operations of Dharani FaM Coop (Dharani) has spread over 2068 organic farmers from 58 villages with an annual revenue of Rs. 3.5 crores in 2018. Dharani's product line includes millets (flour, rice, semolina), groundnuts (whole, roasted, cold-pressed oil), pulses, wild honey and several ready-to-eat and ready-to-cook items. Dharani's brand name, 'Timbaktu Organic', is now a leading brand in the organic food market in South India. Several social innovations contributed to this spread and growth of the business of the cooperative while adhering to principles of sustainable agriculture. The path has not been easy, and Dharani faced losses in its initial years given the dispersed nature of production and the considerable effort required in mobilizing farmers towards a new, more sustainable production system.

The case shows the potential of collective entrepreneurship for sustainable development while outlining the social innovations that are required by promoting organizations to deal with the whole value chain in agricultural commodities like millets. The case also shows that cooperatives need to constantly innovate to create better value for its members across the value chain. Mere aggregation of inputs is unlikely to reverse the declining and vicious cycle of poor agricultural productivity, lack of social capital and thereby experimentation and inability to make a dent in existing marketing chains by poor producers. Cooperatives today need to invest in enhancing the collective experimentation capacity of producers for them to create sustainable futures.

There has been a lot of work emanating from Western countries on social innovation recently. Cajaiba-Santana (2014) conceptualizes social innovation as a collective creation of new legitimated social practices aiming at social change. Recent work

¹ Authors acknowledge the support of founders and staff of The Timbaktu collective, and all the member farmers of Dharani FaM Coop in supporting data and insights for the chapter. Usual disclaimers apply.

on transformative social innovation theory or TRANSIT (Avelino et al. 2017) has pointed to the important connections that social innovation has with social movements and scholars using a system innovation lens. The important role of (re)engaging vulnerable communities in solutions has been seen to be important for building resilience and an integral part of social innovation (Westley 2013). Jessop et al. (2013) see the key to the success of social innovation in newer forms of social learning oriented to the production of knowledge as an intellectual commons organized around collective, problem-oriented learning.

Social innovation research in India is recent, even though India has a rich history of social innovations. The institutional environment of social innovations has been considered weak in developing countries even as the situation seems to be changing (Rao-Nicholson et al. 2017). Social innovation has been underplayed or missing in current narratives on innovation policies in India that are often excessively focused on techno-economic innovations. There is a need for social innovation research to draw more from micronarratives on the ground and derive theories from ongoing practice that situates social innovations beyond the site and among networks and social movements (Prasad 2016). There are few studies on how this shift can occur, especially through collective experiments and collective action by marginalized people and this case seeks to throw light on how communities supported by collective enterprises can take a lead in social innovations that go beyond the technical.

This chapter seeks to fill these research gaps on social innovation research in India by using a case study approach that traces the trajectory of a collective enterprise, Dharani, to explore and highlight the under-emphasized link between social innovations and collective experimentation. The important role of local institutions in building collective resilience and aligning the goal of institutions with the needs of the local economy and sustainability is illustrated through the Dharani collective. Data has been collected through annual reports, field visits and reflections of one of the authors on managing the journey of the collective enterprise in its growth phase.

Part 1 of this chapter explains the agro-climatic conditions, agrarian distress in the region of work and the genesis of Dharani. In part 2, we capture the evolution of Dharani as a cooperative and its journey in a nutshell. In part 3, we try to analyse the different social innovations that Dharani brought in at different levels of its operations. Finally, in part 4, we suggest some broad ideas on social innovations and cooperatives in the organic food space based on learnings from the Dharani case.

12.2 Evolution of Dharani

12.2.1 Anantapuram and Agrarian Crisis

Anantapuram district is the largest district in the state of Andhra Pradesh and geographically part of Rayalaseema (the land once ruled by the emperor Krishna Deva

Raya). Anantapuram has a rich heritage to boast about, Penukonda town in Anantapuram District used to be the summer capital of the great Vijayanagara Empire. It was referred to as 'rathanalaseema', which means the land of precious gems. Owing to its distance from the east coast and the Western Ghats, neither the north-east monsoon nor the south-west monsoon brings any rain to the district. Hence, famines have become permanent guests to the district. With the persistent drought conditions, people now call it as 'raallaseema' (the land of stones and boulders). With more than 90% of small and marginal farmers making their living based on agriculture, agricultural distress has the greatest effect on the livelihoods of the people in this region (Sreedhar 2010). Advent of the green revolution during the late 1960s has changed the fate of agriculture in this district. With pouring in subsidies for fertilizers and HYV seeds, farmers went ahead with mono-cropping commercial agriculture by renouncing their traditional crop patterns. Drought-resistant crops like millets and pulses which used to be traditionally grown by the farmers of this region were abandoned in favour of commercial crops (like groundnut) ushered in by the green revolution. However, by the early 1990s, the ill-effects of the green revolution started showing as the soil lost its fertility and yields came down significantly. Besides these factors, scanty rainfall conditions made agriculture a highly risky and non-profitable livelihood option leading to mass-scale migration of farmers to nearby cities and even farmer suicides. It was not just the individuals but entire families as such were migrating to the cities.

Four consecutive drought years (from 2012 to 2016) have made the lives of farmers miserable. As the land is majorly rainfed, large amounts of agricultural lands have been left uncultivated. Even the irrigation facilities available are through borewells, which eventually dry up during drought.² It was in this condition that Dharani FaM Coop managed to emerge as a successful social enterprise by bundling small innovations, the best of which were the change of crop, and convincing farmers to grow less water-intensive and drought-resistant millets. The next best innovation is providing a marketing platform for the millets thus grown. The combination of these two innovations is what enabled Dharani to address the agrarian distress in this region. A small cooperative, with some small innovations, over the years has succeeded in achieving what large government machinery could not do.

12.2.2 The Genesis

The Timbaktu Collective, a voluntary organization in Chennekothapalli of Anantapur District has been working with more than 20,000 families of neighbouring blocks on several issues ranging from rejuvenation and protection of forest lands, women empowerment, child rights and education, organic farming and cattle rearing ever since its establishment in 1990. A couple, Mary Vattamattam and C. K. (Bablu) Ganguly, both of whom don't belong to the region, happened to meet as a part of their

²For a detailed description of agrarian distress in the region, see Sreedhar (2010).

earlier assignments in this region and decided to work together, starting The Timbaktu Collective along with the help of their other friends. After experiments with forest rejuvenation, the Timbaktu Collective started its work with women empowerment through alternative banking by promoting women thrift cooperatives which went on to become the flagship program of the collective. Thumping success in women thrift societies earned the Timbaktu Collective both the credibility among local people and invaluable social capital which according to Bablu is the biggest asset on which every other initiative of the collective is relied and built upon.

Around 2005, studies suggested that most of the loans taken by women in thrift societies were being spent on agriculture and a major part of the spending on agriculture went into purchasing inputs like chemical fertilizers, pesticides and seeds. This increased the cost of agriculture by manifolds. Diminishing returns due to decreased yields owing to infertile soil made agriculture extremely less profitable and prompted farmers into vicious debt cycles.

At the same time, Timbaktu Collective also realized how chemical-based farming is shattering the ecological balance of this region. "We found the missing piece" says Bablu "as we understood how interdependent agriculture and forests are". Then, the collective started experimenting in a natural way of farming with a small group of farmers in a very few acres of land. Slowly, the initiative gathered momentum and several other farmers came forward to take up organic farming.³

With the introduction of organic farming, farmers were spending less money on inputs, soil started healing thereby improving yields. However, the forward linkages were missing. Since all the farmers were small and marginal, lack of marketing avenues made them vulnerable to market exploitation. Approaching the market from a position of advantage seemed to be the only option to help farmers getting fair returns for their produce. This necessitated a legal structure in which all the members can be shareholders. Thus, formed Dharani Farming and marketing mutually aided cooperative in 2008 and is registered under the Andhra Pradesh Mutually Aided Cooperative Societies (APMACS) Act of 1995.

12.3 Dharani FaM Coop—A Farmer-Owned Collective Enterprise

"In the present-day market, farmer doesn't have a say and consequently consumer doesn't have any say. On one hand, consumers are being made to pay high and on the other farmers are hardly getting any benefit out of it. So, we wanted to create a model which ensures that consumers would get the best quality product at a fair price and the maximum out of this price would flow back to the farmer. This will happen only when the farmer owns the value chain", says Bablu explaining the underlying objective of the cooperative.

³Visit www.timbaktu.org to know more about Timbaktu collective's work.

In the initial days, the organic produce was marketed by the Adi Shakthi MATCS (Mutually Aided Thrift Cooperative Society), one of the women thrift cooperatives promoted by the Timbaktu Collective. The activities ranging from procurement to processing to sales were carried on by the venture "Adi Shakthi Dharani", with initial capital support from Adi Shakthi MATCS. This support helped in constructing a processing unit along with the required machinery. As the number of farmers taking up organic farming increased, it was decided that a separate business enterprise, completely owned and managed by the farmer members should be established. Accordingly, as mentioned earlier, in April 2008 Dharani Farming and Marketing Cooperative was registered under APMACS act 1995. This Act provides for the voluntary formation of cooperative societies as accountable, self-reliant business enterprises based on self-help, owned and managed by members for their own economic and social betterment. The APMACS act is seen as a giant leap in the direction of deregulation and decentralization of Cooperatives as it lays major emphasis on self-governance of cooperatives. It is this emphasis on the role of members in the governance and limitations on government interference in cooperatives' functions that distinguishes the APMACS Act from the Andhra Pradesh Cooperative Societies Act 1964. While the latter Act empowers the Government to make rules on any subject in the Act, the former Act states that all the affairs of the cooperative to be regulated as per the Act and Bylaws of the cooperative. Similarly, in the matters of Governance and Management, the Government has a complete say according to the 1964 Act but all the matters are left to the prerogative of the cooperative in APMACS Act. Unlike in the 1964 Act where Government and non-members can also contribute to the Share Capital, APMACS Act restricts the facility of contributing to the Share Capital to members alone and establishes the principle of Democracy in spirit. Similarly, APMACS Act allows cooperatives to raise funds within the limits fixed by their bye-laws. APMACS Act lays the responsibility of Audit with the Board of Directors which helps in bringing in Self-Governance.⁴

Started with a member base of 300 farmers who grow millets, groundnut, pulses and paddy in organic methods, Dharani FaM Coop presently has 2068 small and marginal farmers, who practise organic farming, as members. Table 12.1 presents a timeline of the evolution of the Dharani collective enterprise.

Dharani witnessed a commendable growth on all fronts—member base, revenues, net profits, etc., over the course of 9 years. During the initial 2 years, Dharani witnessed losses but that did not deter Dharani to stop working on its objective, which should be a key learning for new generation cooperatives that are frightened to look at losses. As Table 12.1 suggests, from 2011–12, when proper marketing channels were established and the coop had a considerable member base, there was no looking back. Ever since then, revenues have been growing at a minimum rate of 17%, which is considered a very healthy rate. Even during the worst years, Dharani has achieved one or the other milestone that it can boast about. "It is all because of

⁴Also see Stuart (2007) for the MACS act as an innovation with greater focus on the autonomy of the cooperatives in how they govern themselves; the responsibilities and risks the members take on when they join a cooperative; and the restrictions on the powers of the Registrar and the government.

2006	Dharani was promoted by TC and Adishakthi
2008	Dharani was registered as a MACS under MACS AP Act
2010–11	First annual break-even
2011–12	First cumulative break-even
2012–13	First bonus to member farmers and staff
2013–14	First bonus to daily wage labourers
2014–15	Net profit surpassed 10 lakh rupees mark
2015–16	Revenue surpassed 2 crore rupees mark
2016–17	Net profit surpassed 15 lakh rupees
2017–18	Annual revenue crosses Rs. 3 crore

Table 12.1 Timeline of Dharani's journey

Source Constructed by authors from annual reports of the collective and letters to investors

the cooperative spirit among our member farmers", says Bablu. "When our fellow farmers (those who had not joined the coop) were migrating to cities, we are happily living depending on agriculture, thanks to the Dharani FaM coop", says Sanjeevappa, a farmer from Shyapuram village.

12.4 Social Innovations in Dharani's Model

All the member farmers of Dharani Coop have shifted to organic farming that has led to a significant decline in input costs. This shift has been possible through investments in training local farmers to undertake collective action through farmers groups or *Brindams*. Conventional agricultural extension is weak and unsuitable for the transformation in production systems that Dharani aims to create in the region. The progressive shift to organic farming has helped to rejuvenate the soil which had become completely infertile due to excessive use of fertilizers and mono-cropping.

The social innovations in agricultural extension at Dharani have been complemented by innovations in procurement and marketing. Dharani procures the organic produce of its member farmers at a higher than market price, farmers are assured of a fair market and free from unfair trade practices of existing intermediaries. Innovations in weighing and procurement processes have been followed up by the creation of newer markets for local consumption. Organic produce often involves costly certification for export markets that is beyond the reach of many small and marginal farmers. Dharani Coop instead uses the social innovation of the Participatory Guarantee Scheme (PGS) that assures quality and processes through protocols that are discussed and implemented by communities through a transparent traceability mechanism.

One of the major factors that contributed to Dharani's success is the brand value of *Timbaktu Organic*. All the products made out of farmers' produce are sold in

the brand name *Timbaktu Organic*. Due to a simple value chain, *Timbaktu Organic* products are fairly priced thereby ensuring safe food for its consumers at a reasonable price and fair price for the producers as well.

12.4.1 Organizational Model and Governance

On the overview, Dharani's organizational structure appears to be similar to that of any other cooperative where individual farmers will be members with equal rights. As we look at the grassroots level, it's really innovative yet very simple (Fig. 12.1).

At village level, all the farmers are grouped into sanghas (a farmer group) with each sangha having 12–15 farmers. Each sangha has two leaders and each village can have more than one sangha depending on the number of farmers in that village. Four such villages are clustered into a constituency. All the leaders in a particular constituency elect from amongst themselves one leader as their director in a free and fair election that takes place at the block level. Currently, Dharani coop has members in 60 villages and 15 directors representing these 60 villages on the board. Every sangha meets once in a month and all the issues at the individual level, village level and cooperative level will be discussed here. This innovation of grouping farmers and thereby implementing the 'mutual aiding' in the truest sense helps solving most of the problems at the sangha level itself (Dharani 2016).

Once a month, all the leaders meet to discuss the issues that remain unsolved at the sangha level. And finally, the board meets once in a month to review monthly activities, financial statements, discuss and decide on budget proposals. This bottom-up approach ensures truly participatory governance. In order to ensure gender balance, in a recent innovation, certain constituencies have been reserved for women. This decision resulted in having 50% women as directors on the BoD. "For a normal farmer like me, managing the affairs of a cooperative is near impossible. But the

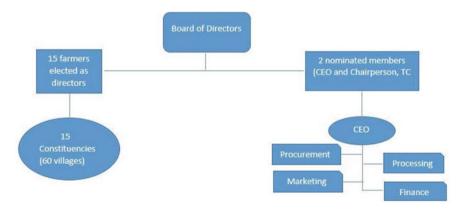


Fig. 12.1 Organizational structure of Dharani FaM Coop

participatory system of governance adopted by Dharani FaM Coop made it possible. I am very glad that I got the great opportunity to serve my fellow farmers by being the President of this coop". says Mr. B. Nagaraju, the President of the Coop. Every year, the cooperative convenes Annual General Body Meeting (AGM) wherein all the member farmers take part to discuss and approve the previous financial year's audited statements.

12.4.2 Production Processes—Proper Guidance Through Extension Services

"In this part of the country agriculture extension services are really weak and farmers mostly rely on their traditional knowledge only. So, we decided not to extend any help in cash or kind to our farmers but provide them the technical assistance through extension services to carry on organic farming in a cost-efficient manner", says Bablu elucidating the extension services that member farmers would get from the cooperative. Timbaktu Collective has been working on Natural Resource Management and Organic practices in Agriculture since its inception. As a part of extension services, Timbaktu Collective organizes Farmer Field Schools (FFS) where every group of farmers would be assisted by a technical expert on various aspects including Preparation of Organic Concoctions, ways to tackle deadly pest attacks without using chemical pesticides, Soil conservation, etc. Besides this, Timbaktu Collective also organizes Exposure visits for farmers to create more awareness about Organic Farming, Timbaktu collective supports this program by paying salaries to a dedicated field team of 25 members. It is these innovative extension services that helped Dharani bring in a change among its farmer members. This team works with the farmers in villages and assists them in organic farming by helping them with Package of Practices (PoP) to be followed during the lifecycle of a crop. Besides this, a wide range of extension programs like training on organic farming, farmer field schools, etc., will be taken forward by the field team. FFS is another socially innovative platform that brings out the advantage of mutual cooperation. Organic farming demands investment in terms of human resources as all the concoctions have to be prepared manually with material available locally such as cow dung, cow urine, leaves of selective trees, etc. Since FFS is conducted at the village level, it has the advantage of farmers coming together and this advantage is tapped by making all of them participate in the preparation of organic concoctions which will be pooled in and used as per the requirement. In this way, farmers experience the benefits of mutual cooperation.

Another innovation that has been brought in by the coop at the field level is 'Crop-Planning' exercise. At the beginning of every cropping season, at the village level, crop planning exercise takes place. As a part of this exercise, all member farmers of a village meet and with the assistance of Timbaktu Collective's field team, come to a decision on which crop to be grown during that particular season. This helps farmers in coming out of mono-cropping patterns and the cooperative in forecasting its cash flows with accurate data in hand.

12.4.3 PGS Certification—A True Social Innovation

As the case with any organic product, consumers will look for a certificate authenticating the *Timbaktu Organic* products. Initially, Dharani FaM Coop depended on the external party certification. But then it was found expensive and not quite efficient. "Why should we rely on some external team, which never practiced agriculture in its lifetime, to come and certify our farmers?" questions Bablu. Instead, Dharani FaM Coop decided to follow the Participatory Guarantee System of certification, where a group of farmers certify their fellow farmer group's produce. Hence, Timbaktu collective, as a facilitating council, became one of the founding members of PGS Organic Council (PGSOC) which has now become a strong advocacy body in the organic realm. PGS certification is cost-efficient, highly reliable as farmers keep on monitoring the fields on a daily basis and it brings into the picture true mutual aiding. Every farmer group, *sangha* is further divided into *brindam* with five farmers as a unit. Every member of *brindam* monitors his peer farmers and in this whole *brindam* certifies its members' produce as organic. "If we don't trust a farmer, I don't think we can trust anybody else", says Bablu.

12.4.4 Pricing, Procurement and Patronage

"No matter how much we help our farmers in reducing their input costs, improvising their land quality, empowering them by involving them in governance... etc.etc. it is the final returns what matters to a farmer.." explains Bablu "... so, we have devised our pricing mechanisms (to the farmers) and procurement systems in such a way that they help farmers getting the best deals and capture the most out of the value chain". Before the crop planning exercise, the board of directors with the help of CEO fix the prices for millets and paddy. As the cooperative is determined to encourage drought-resistant and indigenous crop varieties like millets and paddy, they are offered a price which is 25-50% higher than market price. Irrespective of market prices at the time of procurement, farmers will be paid at the price that has been promised to the farmers during the beginning of the season. Other crops like groundnut and pulses will generally be procured at existing market prices (but not less than a particular price call Minimum Support Price). At the beginning of the Crop Season, based on the data from Crop Planning, the Board decides the prices for each crop for that particular season. This decision is taken based on several inputs including Market demand, expected crop yield, Monsoon forecast, etc. Along with the decided prices, the quality parameters will also be informed to all the farmers through Sangha meetings. As long as the crop meets the pre-determined quality norms, farmers will

⁵Timbaktu Collective *Annual Report 2014–15*: https://www.timbaktu.org/wp-content/uploads/2015/11/AR-2014-15.pdf.

be assured of good price to their crops. This not only encourages farmers to go back to the crops that are indigenous to this region but also guarantees them an assured market. Benefits that farmers get through the procurement systems in place are:

- All their produce will be bought at the fixed prices, as far as the quality parameters are met. Hence, farmers need not take the pains of exploring other market venues.
- Zero transportation and storage cost, as the procurement team goes straight to the farm gate to procure the produce.
- The biggest advantage comes in terms of weighing and measurements. Farmers, when selling their produce to the middlemen or some traders in the village, will get cheated due to corrupt weighing practices. From the cooperative's studies, it became evident that farmers in this region are losing anywhere between 15 and 25% of the original value of produce. Since the coop uses accurate weighing equipment farmers never lose any value and over a course of time, this has become the USP of the coop.
- Timely payments. Farmers will receive their payments within 3–5 days after procurement in whichever mode is convenient for them—cash or online transfer.

Farmers reap the advantage of being cooperative members during bad seasons. Generally, farmers will not have much volume when there is a bad season or a crop failure and subsequently no trader will buy in the first hand or if he/she does, only at less prices. But cooperative irrespective of volumes pays farmers the fair prices. From Fig. 12.2, it is evident that the procurement has gone up significantly even during drought years. In this way, cooperatives have a pivotal role to tackle the agriculture distress.

In order to encourage farmers to sell their produce to the cooperative, besides offering fair prices and assuring timely procurement and payment, farmers are also paid a patronage bonus out of the net profits at the end of the financial year. All farmers who sell produce to the cooperative will be paid patronage proportionate to the contribution. Board fixes the patronage per kilogram of commodity and the same will be distributed during the Annual General Body Meeting. "Joining the Coop has changed our lives in multiple ways" says Narasimhappa "...Not just we receive fair prices and prompt payments but also patronage bonus. I myself earned ₹ 16,086 as a patronage incentive. Which market model incentivizes farmers this way?" Lakshmakka, a woman farmer says "I am extremely happy that with the advent of Dharani FaM Coop, I no longer need to wait for the trader in my village to come and pick my produce. And I am getting almost 35–50% more returns after joining the coop as compared to earlier times. This year I produced and sold little millet to the

⁶Also see Satish and Shambu Prasad (2017) for the benefits that accrue to farmers through the intervention.

https://leisaindia.org/participatory-guarantee-systems-making-organic-certification-more-access ible-for-small-scale-farmers/.

 $https://vikalpsangam.org/static/media/uploads/Vikalp\%20Sangam\%20Case\%20Studies/timbaktu_collective_casestudy_ak.pdf. \\https://www.fao.org/3/a-br441e.pdf.$

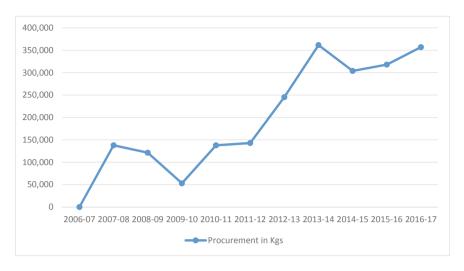


Fig. 12.2 Procurement pattern over years. Source Constructed by authors from annual reports of the collective and letters to investors

coop and also received a good sum as patronage. Now both my sons go to school, thanks to Dharani FaM Coop".

12.4.5 Processing

Processing happens to be the link between farmers and consumers. It is the efficiency of processing that decides the returns that farmers would get out of the value chain. However, Dharani is a social enterprise where social benefits take the driver's seat ahead of bottom lines in the financial statements. Given the hard nature of the commodities that Dharani deals with (particularly Millets), the processing is a really laborious task. Each type of millet goes through six stages of processing before going to the packaging section. And out of these six stages, four stages involve complete manual processing.

Once processed, the millets need to be consumed within 6 months, post which they will get rancid. Hence, the whole processing at Dharani takes place as per the market orders. This certainly is another innovation that helps the coop minimize losses due to spoiling of goods and reduce the storage costs. It also helps the coop in supplying the fresh stock to the consumers. However, in the case of groundnuts, the processing of entire produce happens immediately in order to evade the problems of aflatoxin, a fungal infection. As and where it is possible, Dharani uses only traditional methods of processing so as to ensure that goodness of nature will be served to the consumer.

Though sophisticated machinery is available, it takes away employment. More importantly, the food items that are manually cleaned and hand processed are cleaner



Fig. 12.3 Contribution of Dharani FaM Coop to the local economy. *Source* Constructed by authors from annual reports of the collective and letters to investors

and tastier compared to the machine processed items. Manual processing is the forte of Dharani FaM Coop which today is known for supplying the best quality products to the consumers. Hence the processing methodology adopted by Dharani has both social and economic gains. Dharani helped small and marginal farmers not only to sustain themselves but also become employers by providing jobs to local women. A whopping 15,000 labour days have been created during FY 2016–17 by the processing unit of Dharani.

Dharani is one of the very few cooperatives in India that pay patronage bonus to its part-time employees as well. Every employee is paid ₹ 10 per day as a patronage bonus. This is another fantastic social innovation that helped Dharani gain the loyalty of wage labourers. "It is only because of their hard work that we are able to supply clean and the best quality product to our consumers and thereby able to help farmers get extra premium for their crop. So, I think they deserve patronage as much as our farmers do" says Bablu (Fig. 12.3).

"With this unit being set up in our village, we are getting employment for more than 280 days in a year. We are given fair wages on a weekly basis. In addition to this, we are also getting a bonus at ₹ 10 per day at the end of the year. I am so happy that I am able to contribute to my family's income and thereby become empowered" says Nagamma, a daily worker at Dharani FaM Coop.

12.4.6 Brand Building, Ethical Marketing and Supply Chain

Dharani started selling the produce, it procured from the farmers directly in bulk markets locally and immediately realized that this will not generate any value to the farmers. So, soon it decided to go into the retail market with its own brand. In order to find its feet in the market quickly, Dharani took the help of Timbaktu

collective. By 2008, Timbaktu collective had already become a significant name in the social work sector. Capitalizing on this, Dharani decided to sell its products under the registered brand name *Timbaktu Organic*. The brand was built so carefully that today it stands as a symbol for authenticate, clean and fair priced organic staples. Except for a very brief period during the beginning, Dharani has been focusing on the retail organic staple market. Close proximity to the metropolis of Bengaluru also helped in promoting the brand *Timbaktu Organic* quickly. Today there are more than 350 retail stores spread across south India where *Timbaktu Organic* products are sold.

Dharani has clearly adopted a strategy to bust the misconception that organic products are meant only for the metro population. It innovated its products range in such a way that there are special products for every segment that it caters to. The urban office going population emphasizes more on ready-to-cook instant mixes, ready-to-eat products. So, Dharani started making ready to cook/eat products with millets and promoted them citing that they are easy to cook and good for health. Value-added products like breakfast mixes, millet snacks are made keeping this segment of consumers in mind. To the middle class and semi-urban category of customers, products with traditional value and low cost are prepared. They are promoted as substitutes for high-end products from MNCs. For example, Ragi Malt is promoted as a health drink and perfect substitute to the health drinks like Horlicks, Complan, etc. Given the fact that Ragi malt is a traditional food item and is available at reasonable prices, it has become an instant hit in the market. Similarly, to lure the local market, the native food items are prepared using millets and groundnuts. This helped Dharani to find a significant place in local markets as well.

A dedicated team works on value-added products with a target to launch at least one new product every month. At present, there are more than 70 products that are sold under the brand name *Timbaktu Organic*.

Promotional activities play a key role in taking the brand *Timbaktu Organic* to the new horizons. With support from Timbaktu collective, Dharani takes part in food fairs in cities and conducts food demos in tier-II towns. Through these food demos, Dharani not only promotes its products but also creates awareness among the public about the benefits of consuming millets. This strategy helped Dharani establish a strong consumer base in small towns as well. In order to promote the sales in existing retail outlets, Dharani conducts over-the-counter promotions on selected days wherein specific products will be given away to consumers as free samples thereby promoting the products. *Timbaktu Organic* products gained international attention when Dharani took part in international stalls like Terra Madre, Biofac, etc.

Dharani has a very simple supply chain which enables it to reduce the burden on the end consumer and increase returns for the farmer. Dharani deals with retailers directly. There are no distributors, stockists or super stockists in the supply chain, hence consumers are free from the cascading effects of extra margins. Every month sales personnel from Dharani visit the retailers in major markets, manage the inventory and take orders from them. Orders thus brought are processed, packed and sent through Dharani's own vehicle that distributes the orders to retailers. Through this system, Dharani managed to reduce damage due to transport losses, improve its repayment cycles and manage sales returns easily (Fig. 12.4).



Fig. 12.4 Sales revenues of Dharani FaM Coop across the years. *Source* Constructed by authors from annual reports of the collective and letters to investors

12.4.7 Finance Models and Cash Flows

For a model likeDharani to sustain robust finances is mandatory. It is a known fact that producer collectives will not have the luxury of smooth cash flows at the beginning particularly when asset creation has to take place on a large scale. This is where *Timbaktu Collective* has played an extremely crucial role. Initial seed capital for the establishment has come from the thrift society. But it is in mustering finances for its working capital where Dharani has come up with another innovation. As early as in 2005, Dharani with the help of Timbaktu Collective has called for "Socially responsible investment" from the donors (Bakshi 2005). This call received a thumping response. Within no time, a sum of ₹28 lakhs has been raised through social funding. There were sums as small as ₹5,000 and as huge as ₹5,00,000 have come from donors at varying interests from 2 to 8%. Added to this was the share capital and deposits mustered by the member farmers. With all these funds, Dharani managed to withstand the early business shocks and take the business forward despite initial losses. Three years into the business, the cooperative never needed to look back as it started creating its own reserves from its profits.

However, as the scale of operations increased manifolds, so did the working capital requirement. Though individual donors continued their patronage to the coop, the requirements had shot up. This is the phase where generally institutional creditors like public sector banks and other government funding agencies come into play. Dharani also explored the options of borrowing from banks but not many banks came forward to lend a collateral-free loan citing the legal structure (mutually aided cooperative) as a reason. Other banks that are willing to lend, charged high interest rates that could not be afforded by the coop.

Since the working capital requirement was high and loan was not easily available, Dharani once again relied upon the social capital. This time it was Timbaktu collective's employees who came forward to lend and support the coop with a loan of \mathfrak{T} 64 lakhs which is a whopping amount given the fact all these employees earn salaries less than \mathfrak{T} 20,000 per month.

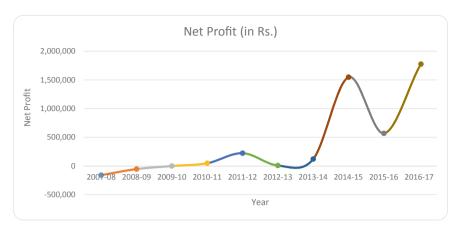


Fig. 12.5 Dharani's net profits across the years. *Source* Constructed by authors from annual reports of the collective and letters to investors

Currently, Rang de, a crowdfunding platform, has been lending Dharani its working capital at a very reasonable interest rate. However, keeping future requirements in mind, Dharani once again explored the ways to tap its social capital. This time, it is the farmers' turn. In order to arrest the outflow of cash in the form of interest, BoDs have decided to start a member's investment model. In this model, from every farmer who sells produce to the coop 5% of the total value of produce will be kept with the cooperative as an investment in the name of the farmer. The minimum lock-in period for this amount is 1 year and the rate of return is similar to that of what is being offered to the social investors. This model has two major advantages—one, ready availability of working capital; two, interest will go back into the local economy. Given the scale of procurement going on, this model is helping the cooperative to hold a good sum of working capital with it in the form of farmers' investment. Dharani has really tightened its credit policy in such a way that today the annual repayment rate (from retailers) has gone up to 90%. This, to a significant extent, has eased the pressure off working capital monthly (Fig. 12.5).

12.5 Social Innovation and Organic Foods: Some Lessons from the Dharani Cooperative

In an era where there has been a lot of focus on social, and often, individual enterprises, Dharani's model is a tested proof that collective entrepreneurship continues to be an effective mechanism to solve small producers' problems in a sustainable manner. The case shows that it is indeed possible for cooperatives to link small farmers with the new and emerging organic food market. This, however, requires several innovations across the whole value chain and not just at the production or marketing end. Social innovations like the Participatory Guarantee Scheme actually create new market spaces by helping small farmers to move away from the expensive organic certification process to a community-based certification. PGS as an innovation works builds on increased consumer awareness on organic foods and enables a different kind of connection between producers and the consumers (Gupta 2016).

The case has two broad lessons for managing cooperatives for organic food markets. First, is in re-establishing the potential for the simultaneity of cooperative forms of organizations in meeting Sustainable Development Goals (SDGs). Cooperatives are themselves social innovations that can create value for primary producers and the planet at the same time. There has been a tendency in the past where the main role of cooperatives has been in providing agricultural inputs, read chemical fertilizers and pesticides, to farmers. In a climate stressed world, this is not sustainable and cooperatives need to demonstrate, like Dharani, that the needs of the environment and farmers need not be contrary. As pointed out by Prasad and Kumari (2016), collectives, like Dharani, are better instruments to realize the SDGs as they help deal with many SDGs simultaneously rather than in a linear fashion.

Second, for collective enterprises to realize their true potential aligned with the SDGs, there is a need for greater investments in multiple directions. Social innovation is not one thing but needs to be drawn and built across the value chain and in some cases creating a new value chain. Dharani FaM coop has been able to do so by building on an earlier cooperative movement of women Self-Help Groups and creating fieldlevel cadres to help shift production systems. Further, there have been significant innovations in the procurement, processing and marketing of the produce that created a new organic foods market space (Kim and Mauborgne 1999). Value is created at the local level through better employment locally but also in setting new systems and fair-trade practices that shift the entire system locally. Organic foods need not follow the big brand retail and there is indeed space for newer brands like *Timbaktu* Organic. The social innovations at all levels help primary producers in maintaining their autonomy even as they negotiate with the market. With falling commodity prices globally many primary producers have seen significant fall in incomes and mere plugging into a global value chain often does not change power relations in an unequal market.

Dharani is an example of how social capital can be leveraged across the value chain. The breakthrough in the journey of Dharani was in convincing farmers to adopt organic farming which became possible only through the social innovation that enabled social learning and collective experimentation through the Farmer Field Schools. Dharani's asset creation happened through another social innovation called ethical or responsible investment. Involving members in procurement, processing and in some cases, marketing has helped Dharani on two fronts—cost controls and building ownership among members. Cooperatives like Dharani have shown that it is indeed possible to reverse this trend of natural degradation and migration through a series of social innovations that can enhance rural livelihoods and boost the regional economy.

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Chapter 13 Social Innovative Enterprises: Ubiquitous Cooperatives in the State of Tamil Nadu, India



C. Pitchai and S. V. Akilandeeswari

Abstract Literature shows that social innovation initiatives primarily begin in reaction to inequalities and social exclusion. Two different types of cooperatives were selected with an objective to study the innovative practices adopted by the cooperatives to infuse the entrepreneurial skills among the members so as to uplift them socially and economically. Data from one hundred members were collected and were tabulated and interpreted. The innovative entrepreneurial activities initiated by these cooperatives in the form of skill development have really helped the members to adopt a modern and appropriate method for improving activities carried out over a period of time.

Keywords Social innovation · Cooperatives · Entrepreneurial skills · Livelihood · Sustainable development

13.1 Introduction

"Socially innovative initiatives are developed in reaction to increasing inequalities as well as to processes of social exclusion, mobilizing different resources" (Konstantos, Siatitsa and Vaiou 2013 cited in Lessa et al. 2016: 169). Regarding the criteria for success, the performance of business innovations is measured through the participation in the market and by profit rates, whereas in social innovation is assessed by the intensity of social improvements and progress (Lessa et al. 2016). The ILO recognizes that "cooperatives in their various forms promote the fullest participation in the economic and social development of all" (ILO 2002: 2). While reviewing the literature, it was found that there is no proper documentation of social innovative enterprises in the field of cooperatives in India. Based on the experience, exposure and the

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media news, it was decided to take different cooperative institutions that transformed the livelihood of members through innovative entrepreneurial activity. In this regard, two different types of cooperatives that have developed the entrepreneurial skills among the members for uplifting them socially and economically were identified and analysed.

What were the practices of the cooperatives earlier? What is the rationale behind thinking on a need for change? What are the innovative practices introduced? What are the hurdles faced by the cooperatives? How these initiatives were taken by the members? How the social innovations helped the stakeholders? How the cooperatives emerged as successful enterprises? The study attempts to answer these questions with the following objectives and the same is analysed in this chapter.

13.1.1 Objectives of the Study

- To study the historical background of the cooperatives and their functioning.
- To study the innovative practices adopted by the cooperatives to infuse the
 entrepreneurial skills among the members so as to uplift them socially and
 economically.
- To analyse the efforts taken by the cooperatives to impart entrepreneurial qualities to become a successful enterprise in the competitive environment surmounting all the odds.
- To explore the extent of adoption of entrepreneurial skills by the members in their profession.

13.1.2 Methodology

Two different types of cooperatives, viz. industrial and agricultural marketing were purposively selected from Tamil Nadu, India. The cooperative enterprises that have transformed the society in which it is located, viz. members, community, consumers and other stakeholders, through an innovative business activity, has been chosen as the sample for study. A sample of 50 members from each cooperative was selected by adopting a random sampling technique. A structured interview schedule was used to collect data from the members of the cooperatives and focus group discussions were also held with the members and also officials. The data collected from primary and secondary sources were tabulated and simple percentages were used and interpreted. The cooperatives adopted social innovations to serve the members better are discussed in the next section.

13.2 Industrial Cooperative (INDCO) Tea Factories in Nilgiris District

13.2.1 Profile

Tea is the most popular beverage in the world-popular among rich and poor alike, apart from water. One reason for its continuing popularity is that no harmful properties have been associated with tea over the period since the time of its discovery. Tea is a pleasant and stimulating beverage, possessing nutritional and pharmacological effects, which are beneficial to health.

The production rapidly grew in the country. Darjeeling, Assam, Nilgiris—three distinctly different tea is grown in these regions of the country. Darjeeling tea, the Champagne of teas is grown only in the Darjeeling hills of West Bengal in North-East India. It is acknowledged as the superlative standard for flavour. Assam tea offers rich, full-bodied, bright liquor. The climatic conditions and landscapes of the Blue Mountains or Nilgiris favour fine flavour and brisk liquor. The combination of fragrance and briskness makes Nilgiris tea a truly unique, found nowhere in the world. The total production during 2016 was 1209 Million Kgs in the area of 564 thousand hectares and in which the South India's production was 230 M.Kgs from 107 thousand hectares.

India's average productivity is 1,787 kg per hectare, while in the southern states, it is more than 2,854 kg per hectare. The area under cultivation was 4, 25,966 hectares in the year 1994, which increased to 4, 34,376 at present. Assam produced more than 50 per cent of the total tea produced in India and 22 per cent of the tea produced globally. Tea production is divided in the ratio of 3:1 between Assam and Bengal and the southern states. Normally, in the total production, 20–25 per cent is exported (Tea Board India 2016). Cooperative too has a place in the tea sector. In the country's total tea production, cooperatives' contribution is nearly 2 per cent.

Cooperatives play a vital role particularly for small and marginal tea growers. There are 29 cooperative tea factories in India spread over four states of country, with a total production of around 15 million kgs. Nilgiris District of Tamil Nadu state alone has 15 cooperative tea factories, even though Tripura has 9 cooperatives, Himachal Pradesh has 4 cooperatives and Kottayam District of Kerala state with very meagre production. Further, it is evident that the Nilgiris District of Tamil Nadu has more number of cooperative tea factories and accounts for 90 per cent of the tea production of the cooperative tea factories. With this background, an attempt has been made to study the functioning of the cooperative tea factories in Nilgiris District of Tamil Nadu. The purpose of the study is to find out the innovative practice that helped society to uplift the members socially and economically.

13.2.2 Formation of INDCO Tea Factories

Historically, tea plantations were developed by the British in the nineteenth century, since then, it is mostly in the form of tea estates, the normal size of which in South India is 300–500 hectares. Since the 1930s, there has been a steady increase in the area under tea cultivation in the small grower sector, which is typical to Nilgiris District. Today, there are around 63,000 small growers in South India, cultivating an area of approximately 30,000 hectares, and it is estimated that around 75 Million Kgs of tea per annum is contributed by this sector.

Initially, these small growers had to supply their green leaves to private tea factories only. These small tea growers faced several problems such as low rates for their leaves, heavy rejection of leaves, manipulations in the quantity of leaf supplied, etc. This scenario prompted the Tamil Nadu state government to form tea factories under the cooperative sector. With the establishment of the first Industrial Cooperative Tea Factory at Kundah in 1962, these small growers were able to realize a better price for their green leaf.

The Industrial Cooperative Tea Factories are procuring green tea leaf from the Small Tea Grower Members and paying green leaf rate by converting the green leaves into made tea through the modern tea machinery by adopting the latest technology and selling the made teas in Tea Auction Centres. There were 15 INDCO Tea Factories during 2017, under regular production covering about 38,000 acres of smallholdings and 25,000 small tea growers, i.e. 39.68 per cent out of 63,000 small tea growers of Nilgiris District. The total production of tea, both Orthodox and CTC, of these factories, is around 17 Million Kgs per annum commanding 13 per cent of the total production of Nilgiris. The details on the installed capacity of all the 15 INDCO Factories, number of member growers enrolled, their holdings, working result, etc., are furnished in Table 13.1.

The total installed capacity of the cooperative tea factories is 273.40 lakh kilograms, tea leaves collected from an area of 38,296 acres and 25,250 members. The factories provide direct employment to 1,130 and indirectly to 22,000. Table 13.1 reveals that except three INDCOs other cooperative tea factories have accumulated loss. The cumulative loss up to 31 March 2017 by INDCO was Rs.3, 169.77 lakhs. One of the main reasons for the loss of the tea factories is that the tea is not fetching a good price in the market and continuously for few years the price of the tea is very low both in the local and international market. There is a general complaint against the members of the tea factories is that they don't provide the tea leaves as per the specification, i.e. two leaves and one bud, so the quality gets deteriorated. The officials could not refuse to take such leaves, as there will be pressure from the politicians and fear that these members may go to private bought leaf factories. Another major problem for the loss is due to old and obsolete machines used in the tea factories that escalate the cost of production. It was felt that the number of employees is more than the requirement and that leads to more establishment cost. As an exception, the manjoor and salisbury tea factories were modernized and the quality of the tea leaves grown in the areas are comparatively good. These are the factories contributed

Table 13.1 INDCO tea factories installed capacity. members. land holdings (As on 31.03.2017)

Lable	table 15:1 INDCO tea facolies instance capacity, inclinets, fain nothings (As on 51.05.2017)	IIICS IIIStalled	capacity, inclined	b, Iailu iloiuiigs (A	(1102.50.15 110 &				
Sl. No	Name of INDCO tea factory	Year of starting operation	Installed capacity (In lakhs kgs)	No. of members	Acreage covered	Cumulative loss/profit as on 31.03.2016	rofit as	Cumulative loss/profit as on 30.06.2017	rofit as
	Kundah	1962	28.10	2,015	2,827	(-)	55.72	(-)	33.26
2	Karumbalam	1966	10.00	957	1,875	(<u> </u>	191.04	<u> </u>	163.64
8	Mercunad	1967	15.60	1,880	2,717	(-)	371.46	<u>(-)</u>	299.48
4	Mahalinga	1967	14.05	2,771	3,627	(-)	50.06	(-)	48.96
5	Manjoor	1967	28.10	1,699	2,311	(+)	24.64	(+)	26.83
9	Ithalar	1967	28.10	2,536	2,868	(-)	304.91	<u>(-)</u>	257.28
7	Pandalur	1974	20.10	1,587	2,919	(+)	4.25	(+)	3.13
∞	Kaikatty	1976	12.50	1,856	3,486	(-)	8.29	(+)	4.90
6	Kattabettu	1976	15.60	1,230	2,267	(-)	191.66	(-)	187.20
10	Salisbury	1983	28.10	1,583	3,574	(+)	15.21	(+)	12.52
11	Frontier	1986	20.10	2,183	2,995	(-)	249.74	(-)	271.00
12	Kinnakorai	1989	12.50	954	1,302	(-)	383.14	(-)	257.81
13	Bikkatty	1991	15.60	1,430	1,560	(-)	147.12	(-)	159.40
14	Ebbanad	1997	10.90	696	1,685	(-)	924.50	(-)	931.06
15	Bitherkad	1998	14.05	1,600	2,283	(-)	511.46	(-)	560.68
	TOTAL		273.40	25,250	38,296				

Source INDCOSERVE Annual Report 2016-17

Sl. No	Details	2011–12	2012–13	2013–14	2014–15	2015–16	2016–17
1	Number of members	19,586	22,525	24,474	24,852	25,103	25,250
2	Acreage (Acres)	32,376	33,706	36,049	37,050	36,298	38,296
3	Quantity of green leaf purchased (in lakh kgs)	627.55	613.99	661.61	610.81	581.12	520.36
4	Quantity of made tea produced (in lakh kgs.)	165.90	164.96	179.15	160.01	150.95	135.74
5	Rate paid for green leaf (Rs. per kg)	8.97	15.15	13.72	7.56	8.94	14.29
6	Tea sales (in lakh kgs)	164.76	165.83	162.73	175.88	160.39	140.99
7	Value of tea sales (Rs. in lakhs)	9510	14,055	13,334	9,823	10,184	12,505
8	Sale Average (Rs./Kg)	57.72	84.76	81.94	55.85	61.94	86.19

Table 13.2 Growth of the INDCO tea factories

Source INDCOSERVE Annual Report 2016–17

to the loss of the INDCO tea factories in Nilgiris District. The management has to modernize the factories at one hand to reduce cost and creating awareness among the members to supply tea leaves as per the specification to improve the quality of the made tea.

It is evident from Table 13.2 that the membership and the acreage under tea cultivation are increasing over a period. The green leaves purchased, made tea produced and the sale of tea except in the year 2015–16 shows an increasing trend. The rate paid to green leaf by the INDCO varied during in the last few years and it ranged from Rs. 8.97 per kg in 2011–12 to Rs. 14.29 per kg during 2016–17. Particularly after 2013–14, the membership and tea grown area has increased. But, the quantity of tea leaves purchased and the quantity of tea sales have come down in the next 2 years. A general observation was due to monsoon failure that led to power production. In few cases, the members have sold tea leaves to private tea factories so as to get a more price as there is a demand for tea leaves since the production is low. The value realization of the made is low over a period is due to the price fluctuation and low price in the market.

13.2.3 Performance, Objectives, Functions and Management of INDCOSERVE

After the formation of first INDCO Tea Factory at Yedakkad village in the year 1962, the small tea growers realized the benefit of the factory and they demanded

the formation of more number of INDCO Tea Factories. Subsequently, a number of INDCO were established in various places of Nilgiris District and it was felt necessary to promote an Apex Organization to coordinate the activities of all the INDCO Tea Factories. Accordingly, the Tamil Nadu Small Tea Growers Industrial Cooperative Tea Factories Federation Limited, "THE INDCOSERVE", was established in the year 1965.

The objectives of INDCOSERVE specified in its by-law are

- To promote the economic interest of the Small Tea Growers/Members of INDCO Tea Factories in Nilgiris District.
- To coordinate and facilitate the purchase of machinery, tools, manure, consumables, etc., required by the INDCO Tea Factories.
- To render services to the member factories in the area of Legal, Technical, Financial, Social, Manufacturing, Transport, Marketing, Warehousing, Sales, etc.
- To market branded and un-branded teas, pocketed and straight teas, green tea, instant tea in India and Abroad.
- To help the growers to get a reasonable price for their produce.

The INDCOSERVE provides various services to the INDCO Tea Factories such as warehousing facilities at Coonoor, Coimbatore and Cochin, supply of fertilizers, supply of jute bags for packing of teas, machinery spares and other inputs to the small tea grower/members through the INDCO Tea Factories besides helping to market the teas of the factories to their best advantage. INDCOSERVE also provides financial support to the member INDCO Tea Factories, in case of necessity.

The by-laws of INDCOSERVE provide for management with an elected Board. The Chairman and Vice-Chairman of this Board are to be elected from among the elected Chairmen of 15 INDCO Tea Factories. The elected Board has assumed charges from 11 June 2013. The Managing Director in the cadre of Indian Administrative Service is administering the affairs of the INDCOSERVE. One General Manager in the cadre of the Deputy Director of Industrial Cooperatives and five managers in the cadre of Industrial Cooperative Officer drawn from the Industries and Commerce Department are assisting the Managing Director.

13.2.4 The Main Areas of Business

The main areas of business are supply of tea to the Defence Department, sale of "Ooty Tea" to the State Civil Supplies Corporation and Cooperative Stores under Public Distribution System and supply of tea to recognized export houses. The performance of INDCOSERVE for the past 5 years is furnished ensuing paragraphs.

The members of the INDCOSERVE increased from 16 to 17 as the government become a member by providing share capital. The share capital increased from Rs. 324.50 lakhs in the year 2013–14 to Rs. 324.55 lakhs in the year 2016–17.

Table 13.3 reveals that the total turnover of INDCOSERVE, it increased from Rs. 4094 lakhs to Rs. 4097.87 lakhs that includes sales through the public distribution

 Table 13.3
 Sales turnover and working results

		(Rs. in lakhs)				
Sl. No	Details	2012–13	2013–14	2014–15	2015–16	2016–17
1	OOTY TEA sales through public distribution system	3966.9	5078.52	4294.4	4540.25	3886.77
2	Sale of packing materials to INDCO tea factories			110	158.64	102.45
3	Warehouse Income	127.53	158.56	153.41	137.58	108.65
4	Total	4094.43	5237.08	4557.85	4836.47	4097.87
5	Profit for the year	184.89	557.19	1048.04	970.96	987.12
	Less:					
	Rebate paid to INDCO tea factories	120	495		846.62	
	(a) For 5th cut CTC			29.24		
	(b) For ENCON Motors			5.05		
	2. Contribution to price stabilization fund			736.5	_	
	3. Provision for providing lath workshop at two places of INDCO tea factories			40		
	4. Provision for additional lath, new lath, digital scales, impact pulveriser, maintenance works at ICTFs			150		
6	Net profit	64.89	62.19	87.25	124.33	249.01

Source Annual Reports of the INDCO and INDCOSERVE

system (PDS) and other input to INDCOs. Whereas the net profit of the federation decreased due to the price fluctuation in the world market, the federation provided direct and indirect employment to 23 and 113 persons, respectively.

13.2.5 New Product Launch—Ooty Tea

The Government of Tamil Nadu launched the sale of "OOTY TEA" to the general public through the Public Distribution System on 28 August 2001. It is an innovative plan to increase the sale of tea in one hand and on the other hand to provide tea

at a nominal rate to the people. The INDCOSERVE is supplying about 250 M.Ts. of blended teas, per month, under the brand name of "OOTY TEA" through Tamil Nadu Civil Supplies Corporation and District Cooperative Wholesale Stores of Cooperative Department. Under this scheme, INDCOSERVE is purchasing teas from various Estate Factories, which includes INDCO Tea Factories also through Tea Auction Centres at Coonoor and Coimbatore. The teas thus purchased and blended by INDCOSERVE are subjected to repeated tests to maintain quality and conformity with the Prevention of Food and Adulteration Act, so that the public are provided with good quality of tea at a reasonable rate. Moreover, OOTY TEA also provides the required cups and good flavour. The quality of OOTY TEA is on par with other well-known branded teas, by breaking the myth that only low quality of the product would be available at a low price.

It is to highlight that, after having resorted to the purchase of Teas by INDCOSERVE for blending in their Ooty Tea production, the sale average of some of the teas of factories in Nilgiris District has gone up considerably. The market intervention by INDCOSERVE is helping all the tea factories in Nilgiris to realize better sale average and consequently the Small Tea Growers are getting a better rate for their green tea leaves. From and out of the profit earned by Ooty Tea, INDCOSERVE has so far paid a sum of Rs. 3610.46 lakhs as rebate to the Small Tea Growers of the Industrial Cooperative Tea Factories. The selling price of OOTY TEA by INDCOSERVE is at Rs. 130 per kg (including VAT) and maximum retail price of OOTY TEA by Tamil Nadu Civil Supplies Corporation Ltd and Cooperative Stores is at Rs. 150 per kg (including VAT). The tea is being sold @ Rs. 15 per pouch of 100 g, through the Fair Price shops all over Tamil Nadu.

13.2.6 Achievements

As a landmark achievement, INDCOSERVE has got the prestigious ISO 9001:2008 Certification from "DET NORSKE VERITAS (DNV)", Norway for its Quality Management System covering Tea Blending, Pocketing and Marketing of teas and Warehousing facilities. Ooty tea is now a Registered Trademark and INDCOSERVE is also accredited with ISO: 9001-2008.

The role of INDCOSERVE and INDCO Tea Factories in improving the economic conditions of small tea growers has since been recognized by one and all. The small tea growers today have dignity and identity of their own and Kudos to the Cooperative effort and are looking forward to a bright future confidently.

13.2.6.1 A New Initiative: TEASERVE—The World's first Electronic Tea Auction Centre

In acceding to the representation made by the Small Tea Growers of Nilgiris District, the state government has accorded permission for setting up of an Electronic Tea Auction Centre in 2002. Accordingly, the new Tea Auction Centre under Cooperative sector in the name of "TEA MANUFACTURERS' SERVICE INDUSTRIAL COOPERATIVE SOCIETY LIMITED, shortly called as "TEASERVE" was Registered on 28 August 2002 and started on 13 September 2002 at Coonoor in Nilgiris District. The TEASERVE commenced its Electronic Auction proceedings with effect from 1 October 2003.

13.2.6.2 TEASERVE—A Cooperative Federation of Small Tea Growers

As the entire Auction proceedings of the TEASERVE are computerized, the exploitation of middleman is avoided and the registered buyers alone could participate in the electronic auction proceedings.

13.2.7 Sustenance and Social Innovation of the Cooperative Tea Factories

The tea industry as a whole is under the pressure of fluctuating price trend. The private players are facing problem in getting a good return for the made tea. Cooperative tea factories are not an exception and reeling under the same problem for a long. The cooperatives with a commitment and vision protected the small tea grower members. Now, starting of a new cooperative tea factory to serve the members even under the crisis is an example. The cooperatives adopt different methods to educate the members in better cultivation practices, growing the tea plants and plucking of quality tea leaves for supplying to the cooperatives. The awareness programmes made a lot of changes in the minds of the tea grower members. Further, the cooperatives from its part, striving to compete with supplying quality made teas to fetch a better price. One of the reasons to start TEASERVE is to bring the merchants to cooperative premises and sell the products. Another step is that the INDCOSERVE lobby to get the government order to sell the tea pockets regularly through the Public Distribution System. In addition to that, it gets financial assistance from the government for infrastructure creation, subsidy, etc. The cooperative under the present circumstances may not face the survival problem, but sustenance depends on the strategy and members participation.

Hence, the activity of developing a new product to pay a better price to tea grower members, selling quality tea at a reasonable price to public, through Teaserve, protecting the tea factories both cooperatives and private from the unscrupulous intermediaries, the tea cooperative factories are considered as social innovative enterprises.

13.3 Erode Agricultural Producers Cooperative Marketing Society Limited (EAPCMS), Tamil Nadu

The Erode Agricultural Producers Cooperative Marketing Society Ltd. registered and commenced its business from 29 June 1960 onwards. It was with 58 members and a share capital of Rs. 14, 385, the society started its humble beginning. As on 31 March 2016, the society is functioning with 23,449 members from all over the state and a share capital of Rs. 20.64 lakhs. The society is running with a net profit from its inception and distributing 14 per cent dividend to its members since 1990.

One of the agricultural produce, turmeric (Haldi) is a very important spice in India from ancient times. India produces nearly 80 per cent of the world's turmeric and consumes. With its inherent qualities, Indian turmeric is considered the best in the world. The important turmeric growing states in India are Andhra Pradesh, Tamil Nadu, Orissa, Maharashtra, Assam, Kerala, Karnataka and West Bengal, in which Andhra Pradesh occupies 40 per cent of total turmeric area followed by Orissa and Tamil Nadu occupying 17 per cent and 13 per cent of total turmeric area, respectively. In terms of production, Andhra Pradesh accounts for 60 per cent of total turmeric production in India followed by Tamil Nadu (13 per cent) and Orissa (12 per cent). In 2015–16, turmeric was cultivated over 6,293 hectares in Erode district. Erode is one of the districts, where turmeric is cultivated traditionally and an average, 5.12 tons of turmeric is cultivated from one hectare and the market has arrival of about 20 lakh bags (65 kg bag) per year.

With regard to management and administration is concerned, the society is having an elected board of directors (BoD) since 2013 (11 June 2013) after a long period and the government has been appointed a Managing Director (MD) to take care of the day-to-day operations. Eight employees are working in different cadres to support the BoD and the MD in the society.

13.3.1 Business Functioning of EAPCMS

The area of operation is restricted to Erode Taluk, whereas, agriculturists from all over the state of Tamil Nadu are admitted as associate members (B class members) for the marketing of Turmeric, as Erode is the main market centre for turmeric in the state.

In Tamil Nadu, Erode District is the main market centre for turmeric since it is grown more in the district and nearby districts. The society arranged to market the agricultural producers of its members, especially turmeric on agency basis. Apart from Erode Agricultural Producers Cooperative Marketing Society, 300 private mandies are operating in and around Erode.

It is evident from Table 13.4 that the membership of the society is increasing. It may be attributed as the society is doing a transparent business that has gained the confidence and faith of the members. The society has 24,705 regular members and

Table 1.	5.4 Business functioning of the EA	PUMS				
Sl. No	Particulars	2011–12	2012–13	2013–14	2014–15	2015–16
1	Members (in Nos): 'A' Class 'B' Class	19,844 14,182	24,709 18,344	24,727 20,605	23,449 22,731	24,705 24,529
2	Paid-up share capital (Rs. in lakhs)	20.38	19.35	19.69	19.67	20.64
3	Turmeric total sales in Erode (in Bags-65 kgs)	572,375	487,733	347,230	443,380	482,820
4	Turmeric sales by EAPCMS (in Bags-65 kgs)	216,546	181,293	113,980	177,105	216,183
5	EAPCMS share in the total turmeric sales (in percentage)	38	37	33	40	45
6	Produce pledge loan by EAPCMS (Rs. in lakhs)	168	160	173	167	326.65
7	Linking of Credit With Marketing (Farmers PACCS loan repaid by EAPCMS) (Rs. in lakhs)	40.52	47.15	49.46	58.92	75.00
8	Profit (Rs. in lakhs)	55.45	45.94	45.49	41.88	186.54
9	Establishment expenses (Rs. in lakhs)	60.79	58.00	61.10	77.76	85.47
10	Establishment expenses to Total sales in percentage	0.70	0.91	1.16	0.83	0.63
11	Best working CMS in the State	_	Awarded	Awarded	Awarded	Awarded

Table 13.4 Business functioning of the EAPCMS

Source EAPCMS Annual Report 2015-16

24,529 associate members. Further, the society fulfils other needs like input distribution, pledge loan, immediate payment, shed to store members produce, restrooms and providing tea during their transaction, etc. There was a change in the management of the society that led to the reduction in the turmeric auction activity during the year 2013–14 and slowly it started increasing thereafter. The turmeric production was high during 2015–16 and the society handled 216,183 bags out of the total 482,820 bags sold in Erode market. As the turmeric production was high, farmers felt that the price was not adequate and by storing, it may fetch a better price in the ensuing years and that is the reason for the increase in the produce pledge loan (Table 13.5).

Out of the total sales, the share of the society is 45 per cent during 2015–16, the society daily conducts E-Tenders in its premises. The highest rate offered by the trader in the tender is confirmed in consultation with the farmers. A nominal service charge of 1.5 per cent is collected and the sale amount is disbursed on the spot itself. Low service charge, compared to other mandies, i.e., 2–5 per cent, further, transparent business activities, no hidden cost are the main reasons for members' loyalty. Also, the sample turmeric taken for display in the auction is returned to members, which is a rare phenomenon among the mandies.

Year	Value (Rs. in Lakhs)	Quantity (in M.T)
2011–2012	8654.00	16,241.00
2012–2013	6368.53	14,097.00
2013–2014	5262.04	9175.00
2014–2015	9400.29	14,429.00
2015–2016	13,395.19	17,483.00
2016–2017	9626.78	11,932.00
	2011–2012 2012–2013 2013–2014 2014–2015 2015–2016	(Rs. in Lakhs) 2011–2012 8654.00 2012–2013 6368.53 2013–2014 5262.04 2014–2015 9400.29 2015–2016 13,395.19

Table 13.5 Marketing activities undertaken during 2011–12 to 2016–17

Source EAPCMS Annual Report 2016-17

In the year 2015–16, the society ventured into value addition that is the reason for the increase in profit. As the society has to engage more people for value addition, the establishment cost too increased in the same year compared to previous years.

13.3.2 Produce Pledge Loan

The society provides free godown facilities for storing turmeric for 3 months and does fumigation and insurance at free of cost to the members. There are instances where turmeric is stored for more than 10 years since the charges are very low and also with an expectation of price increase in future. The society provides 60 per cent of the current value of the turmeric stored in the godown as produce pledge loan subject to a maximum of Rs. 3 lakhs with 9 per cent interest for its members. This facilitates the farmers to store their produce temporarily and sell when the market rate increases.

Table 13.6 reveals that the produce pledge loan has increased over a period as it is convenient and advantageous for the farmers. But, in the year 2014–15, it decreased to Rs. 167.31 lakh from the previous year of Rs. 172.79 as the farmers fetched good price for turmeric in the market, they did not store much and obtain pledge loan.

1able 13.0 11000	ice pleage toail issued during a	2012-13 to 2010-17
Sl.No	Year	Pledge loan issue (Rs. in lakh)
1	2012–2013	160.80
2	2013–2014	172.79
3	2014–2015	167.31
4	2015–2016	262.70
5	2016–2017	326.65

Table 13.6 Produce pledge loan issued during 2012–13 to 2016–17

Source EAPCMS Annual Report 2016–17

Sl.No	Year	Quantity (in M.T)	Value (in Lakhs)
1	2012–13	102.000	47.15
2	2013–14	89.000	49.46
3	2014–15	89.000	58.92
4	2015–16	80.000	63.18
5	2016–17	96.000	75.00

Table 13.7 Linking of credit with marketing during 2012–13 to 2016–17

Source EAPCMS Annual Report 2016-17

13.3.3 Linking of Credit with Marketing

The farmer members have borrowed crop loans from Primary Agricultural Cooperative Credit Societies (PACCS) in the district and same has been repaid by the EAPCMS after the farmers' produce are sold. It has benefitted the PACCS by prompt repayment and fetching better price by the farmers through EAPCMS. Table 13.7 reveals that the quantity of turmeric sold and the value realized has increased during the study period.

13.3.4 Working Results

The society is continuously earning profit since its inception and it was as high as Rs. 187 lakhs during 2015–16 (Table 13.4). It is all due to the increase in turmeric auction over a period and value addition. The society has been extending remarkable service to the members and further, it declares a maximum dividend of 14 per cent every year since 1990.

13.3.4.1 Innovative Marketing of EAPCMS: E-Tender

The EAPCMS has replaced the traditional manual tenders with an app developed to simplify the auction process from the receipt of the produce, weighing, auctioning, storage and payment. The 'Mobile App Tender System' was introduced from February 2016 and felt much useful to farmers, society, merchants and the bank. This is an innovative business enterprise model developed by the society to its benefit to help all the stakeholders.

13.3.4.2 Business Diversification: Value Addition to the Agricultural Produces

The society, besides conducting sales through secret tender, purchases turmeric for 'Stabilization of the Price of Turmeric' in the market. The society has installed a turmeric powder plant in its premises at a cost of Rs. 10 lakhs with the assistance of NCDC in the year 1986. This has a crushing capacity of 1300 M.T. per annum. The turmeric powder manufactured in this unit with "AGMARK GRADATION" is being exported to foreign countries by NAFED, Chennai from 2001. After 2009–10, there was a slack in the production of turmeric powder. Once again with the support of the employees, members and officers of the cooperative department, ventured in producing turmeric powder and related powders. The officials involved actively and developed different tastes of masala by conducting research on taste tests through samples and consulted experts in the field. Based on the test results, final products were developed and commercial production of Chilli Powder, Sambar Mix Powder, Rasam Mix Powder, Coriander Powder and Kumkum Powder (thilak) started from February 2016 onwards. The products are sold in the brand name of "MANGALAM TURMERIC POWDER" packed in 1, 500, 100, 50 and 20 g packets at a reasonable price to the consumers. The product is having a very good reputation in the market and sale has increased and the sale details are furnished in Tables 13.8 and 13.9.

The 'Mangalam' products were marketed through consumer cooperative whole-sale stores, PDS shops and a counter in the society premises. The Kumkum (thilak) is having a good demand as it is pure and supplied to all major temples in the State. Overall, the prices of all the Mangalam products are competitive and cheaper. The sale has crossed Rs. 5 crores in a very short time since the product is genuine and

Table 13.8 Sale of mangalam turmeric powder during 2012–13 to 2016–17

Sl. No	Year	Quantity (in tonnes)	Value (Rs. In lakhs)
1	2012–2013	9.600	7.80
2	2013–2014	11.345	9.49
3	2014–2015	24.800	22.41
4	2015–2016	274.340	328.56
5	2016–2017	243.098	323.82

Source EAPCMS Annual Report 2016-17

 Table 13.9
 Sale of mangalamkumkum and masala powder for 2 years

Sl. No	Year	Quantity (in tonnes)	Value (Rs. In lakhs)
1	2015–2016	12.158	28.04
2	2016–2017	84.441	184.69

Source EAPCMS Annual Report 2016–17

quality, competitively cheaper that gained the consumer's confidence. The following table gives a clear picture of the prices of various popular brands in Tamil Nadu during December 2016.

Table 13.10 shows very clearly the price difference of the Mangalam product and other popular brands in the state of Tamil Nadu. The Mangalam brand is having an edge over other brands in the quality and price front. Ironically, there is no advertisement in the print and electronic media, as done by the popular brands repeatedly, so as to retain the brand name in the minds of the people, resulting in an enquiry and purchase from the retailers. There is no strong network of the distribution channel, even though the consumer cooperative stores prevail in the nook and corner of the state. The society could not give trade discounts, rewards and gifts to entice the distributors as done by the above popular brands. In spite of all the odds, the society is excelling as a social innovative enterprise and satisfies all the stakeholders.

13.3.5 Social Innovation of the Cooperative

The society has shown remarkable growth over the past 3 years. The reasons may be attributed to the dedicated service of employees, the board of directors and the officer. Another success is the diversification of the business by transforming the traditional work of mere 'Auction of Turmeric' to 'Value Addition' to the produces. The business diversification decision was timely and carried out with the wholehearted support of the members, employees. The society may be permitted to go for aggressive marketing by extending the area, adding new marketing channels, wide publicity, etc. The value addition to the agricultural produce is leading the society in a growth path. A holistic development could be witnessed as the members, society, employees and the general public benefitted out of this social innovative activity like value addition, E-Tender process and TEASERVE.

13.4 Members' Opinion and Conclusions

A survey of 50 members from each cooperative was conducted to elicit the opinion on the benefits of social innovation. The survey results show that tea cooperatives groomed the members on better tea plantation method, application of fertilizers, pruning, skilled way of plucking tea leaves, packing, etc. The tea cooperatives, in turn, have provided good tea nursery, trained them on skill improvement, optimized the tea production cost and carried out the tea auction through its own TEASERVE auction centre. Further, blended teas were also produced and marketed innovatively. Now the tea cooperatives are propagating organic tea growing among small tea growers.

The cooperative agricultural marketing society provided skill development on methods of turmeric growing for high yielding, more importantly on the processing

Table 13.10 Comparison of turmeric and masala powders prices of popular brands in Tamil Nadu

		(in Rupees).											
SI. No	Sl. No Products	Mangalam Brand				Sakthi Brand				Achi Brand			
	(Powders)	MRP		Sales		MRP		Sales		MRP		Sales	
		50	100	50	100	50	100	50	100	50	100	50	100
		gm	gm	gm	gm	gm	gm	gm	gm	gm	gm	gm	gm
1	Turmeric	12.00	20.00	6.75	13.50	16.00	32.00	9.50	19.00	16.00	32.00	10.00	19.00
2	Coriander	15.00	30.00	7.50	15.00	19.00	38.00	10.50	20.50	20.00	40.00	11.00	22.00
8	Chillies	14.00	28.00	10.50	21.00	21.00	42.00	12.50	25.00	21.00	42.00	13.00	25.00
4	Sambar	16.00	32.00	12.00	24.00	25.00	50.00	14.50	29.00	25.00	50.00	15.00	30.00
5	Rasam	20.00	40.00	16.75	35.50	32.00	64.00	20.50	41.00	32.00	64.00	21.00	41.00

Source Compilation from the products of different Companies

of turmeric after harvesting for better quality and long shelf life. The society, in turn, has started producing innovative quality turmeric value-based products and were tested and launched in a highly competitive market. The core strength of the product is it's pure, cheaper than rival products, quality without hazardous materials, different varieties made available with various quantities. This process helped the farmer members to sell their produce easily and in a transparent manner. The society will procure more produce through the E-Tender when the price goes down or if it finds that there is a syndicate among the merchants to reduce price. This helped to stabilize the price and pay a remunerative price to the farmers. By venturing into value addition, the society made more surplus and it paved the way for paying dividend to the farmer members regularly.

All these innovative practices of the cooperatives on better farming and manufacturing skills resulted in getting more income regularly to the members that made lots of change in their social status and more importantly the strategy for the cooperatives for its survival and sustenance.

In both the cooperatives, it was found that, since incomes of members increased, problems of food insecurity, ill health, poor sanitation and poor education could be solved to a larger extent. The entrepreneurial activities initiated by these cooperatives in the form of skill development have helped the members to adopt modern and appropriate methods for improving activities carried out over a period of time. Either knowingly or unknowingly, the members learned these skills and adopted in their respective fields. The effort helped the members to develop economically, socially and technically. It was observed that the lifestyle, bringing up of children, awareness on health importance of the members is different from that of non-members. All these could be attributed to the innovative entrepreneurial activity taken-up by the cooperatives for the upliftment of members and sustainability, in the long run, to compete with the market players. Such types of social innovative cooperatives are the need of the hour and replicated.

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Chapter 14 The Commitment of Cooperative Workers to the Movement: The Case of Japanese Consumers Co-op



Misa Aoki, Taiki Kagami, and Takashi Sugimoto

Abstract Japanese consumers' cooperative movement is famous for its "Han" system. The essence of that unique business model is the collaboration between cooperative members and workers. Japanese Co-op workers are not defined as mere employees but "partners" or "linkers" of the member-oriented movement. Both members and workers have been cooperatively engaged in business and social activities. Whereas previous researches on the consumer co-op movements in Europe are mainly focused on the consumer members, we will stress the active role of the cooperative workers in the movement from Japanese experience. Japanese Co-op workers fill the key role for the business and social activities of consumers' cooperatives. The members enhance the motivation of the workers in cooperative societies. Conversely, the workers increase the commitment of members to the cooperative business. Workers' active contribution to the cooperative movement is another source of the vital co-op as well as the members' participatory democracy in Japan. It shows that member-owned business leads to social innovation beyond their personal interests with the collaboration with the workers on the cooperative idea.

Keywords Cooperative workers · Commitment · Consumer members · Interaction · Collaboration

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14.1 Introduction

International Co-operative Alliance (ICA) was founded in 1895 to promote the benefit and the status of cooperative workers. Its original main aim was not to advance the benefit of cooperative consumer members but to secure the rights of labouring people in and out of the cooperative movement. The founding members of ICA sought to spread the profit-sharing system among workers in societies and the co-partnership in business management. They tried to create "decent work" environment in the cooperative enterprises.

The character of this international association dramatically changed in the early twentieth century. After long and heated controversy among famous cooperators, ICA became a member-oriented organisation with co-ops as members from all over the world. Since then, the cooperative workers have been defined and treated as the subordinates of co-op members. In other words, cooperative societies have been described as the organisation of members, by members, and for members. Cooperative Principles, formulated in 1966 and 1995 by ICA, also ignore the cooperative workers. Therefore, the status of the workers in the movement is not clear for us.

Besides, social innovation has been brought to public attention. Murray et al. (2010) defined that "social innovations as new ideas (products, services and models) that simultaneously meet social needs and create new social relationships or collaborations" (p. 3), Mulgan et al. (2007) cited consumer cooperatives as a good example of social innovation. However, as we said earlier, the status of the workers in the cooperative movement is not clear. Hence, to consider the possibility of social innovation, we must look more carefully into the role of workers in the cooperative movement.

In this chapter, we will describe the engagement of cooperative workers in Japanese consumer cooperatives and show their potential to advance the cooperative business and movement. The first case is on a Japanese Co-op original brand juice developed by cooperation of the members and workers. The second example is the members' chatting parties of a Japanese Co-op. Both cases will show that the workers should be an essential component of the member-owned business.

14.2 Commitment of Cooperative Workers to the Merchandise Development

Historically, Private Brands (PB), such as "Saving" by the Daiei Supermarket Group, have not gained a foothold in the Japanese market. The reason was that Japanese consumers had low trust in retail companies and they strongly preferred National brands (NB). Many large retail companies tried to promote PB goods, but their efforts went in vain. At long last, two Japanese retail giants, "Seven & i Holdings" (Seven-Eleven Group) and "AEON Group" have succeeded in spreading their own private brands in the Japanese market in recent years.

However, as early as in the 1960s, Japanese Consumers Cooperatives Union (JCCU) launched their private brand "CO-OP". JCCU built up and kept a reputation as a high-quality brand in Japanese market since then. "CO-OP" brand products have been greatly welcomed by consumer members. Moreover, "CO-OP" became a role model for other private brands by Japanese companies. For example, "MUJI", a famous Japanese company brand currently expanding overseas, followed "CO-OP" as a model. "CO-OP" is a very exceptional one among Japanese private brands.

14.3 Why Were Japanese Consumer Cooperatives Able to Popularise Their Own Private Brands?

One of the reasons is the commitment of cooperative members to their co-ops. Wakabayashi states that "Merchandise not only is central to Japanese Consumers Co-operative operation but is also one of the most important focal points in member activities. Member's merchandise-related activities begin with the use of a particular product and extend to acquiring product knowledge, popularizing, improving and developing products, and exchanging visits with producers. Japanese Consumer Cooperatives are actively engaged in efforts to popularise CO-OP brand products, especially to familiarise members with new products through workshop, and to improve the products by heeding the comments of coop members and merchandise monitors" (Wakabayashi et al. 1993: 118).

Such involvement of co-op members in the product development has created their high loyalty to "CO-OP" brand and contributed to the establishment of a private brand that other retailers couldn't realise.

Furthermore, we point out the involvement of co-op workers in merchandise development. This fact has not attracted much attention so far. Co-op workers, as retail experts, decided product specs based on the needs of co-op members, built relationships of trust with manufacturers, and created high-quality products evaluated by members. Without their commitment, "CO-OP" wouldn't have gained great popularity. We will show the role of co-op workers in merchandise development from the case of development process of "CO-OP Mix Carrot".

14.3.1 What is "CO-OP Mix Carrot"?

At the beginning, we will show the history of Japanese "CO-OP" brand products before CO-OP Mix Carrot.

It was in the late 1950s when JCCU commenced the development of "CO-OP" brand products. Many of Japanese Consumer Cooperatives founded after World War II aimed initially at "Stable Food Supply" to consumer members. However, as the food situation stabilised, their goal changed into "Safety and Security of Food". The

reasons were that pollution and destruction of the environment had become a serious social problem, consumer movement opposing food additives had spread and price of many foods had remained high due to management by manufacturers. "CO-OP" brand products development aimed at solving these problems. It was a very advanced effort.

The first achievement of this initiative is "CO-OP Butter" released in 1960. CO-OP Butter was a product made without using antioxidant and synthetic pigment. Excessive food additive was a serious problem at the time. In 1961, "CO-OP Tinned Mandarin Orange" appeared as the second "CO-OP" brand product. Subsequently, "CO-OP" brand products proactively expanded to a category other than foodstuffs, such as "CO-OP Soft (1961)" which is clothing detergent, and "CO-OP Seftar (1964)" which is an alcoholic detergent with high biodegradability. In addition, "CO-OP K Soft" of kitchen detergent was developed in 1967. In the 1970s, "Rainbow Banquet (1970)" of Japanese sake, "CO-OP Colour 20 Sunseven (1971)" of 20-inch colour television, "CO-OP Muenseki Ham and Sausage (1972)" without colouring agent and "CO-OP Unbleached Salted Herring Roe (1973)" were developed. Furthermore, CO-OP Mix Carrot, which is the biggest hit product in all "CO-OP" brand products, was developed and supplied in 1981 (Table 14.1).

CO-OP Mix Carrot is a pioneer of healthy vegetable drinks in Japanese market. This product is carrot juice mixed with vegetables and fruits juice (for instance, apple, orange, grape, banana, and pine). "Safety and Security of Food" which is the philosophy of Japanese "CO-OP" brand products has been reflected in CO-OP Mix Carrot, from the time at launch. It has made from raw materials of reliable origin. For example, carrot, 50% of the raw material of this drink, is domestic. Other fruits such as apples and oranges are also domestically produced. The ratio of domestic raw materials reaches 89%. Domestic production ratios in raw materials have been consistently maintained since the launch of CO-OP Mix Carrot.

Table 14.1 History of renovating "CO-OP Mix Carrot"

Year	Key events	Remarks column
1981	Launch of "CO-OP Mix Carrot (160 ml)"	
1987	Launch of "CO-OP Mix Carrot (1 1)"	
1989	Launch of "CO-OP Mix Carrot (200 ml)"	
1994	Launch of "CO-OP Mix Carrot (125 ml)"	
1996	Launch of "CO-OP Mix Carrot (930 ml)"	Cumulative shipments of 970 million cans
2003	The 1st renewal of CO-OP Mix Carrot	
2010	The 2nd renewal of CO-OP Mix Carrot	
2014	The 3rd renewal of CO-OP Mix Carrot	Cumulative shipment of 2.6 billion cans
2018	The 4th renewal of CO-OP Mix Carrot	

Sources Kagami (2008) and Co-op Mix Carotte (n. d.). Retrieved on November 8, 2019, from https://hitotokototo.coopdeli.jp/contents_74/



Fig. 14.1 Partial line up of "CO-OP Mix Carrot". Partial line up of "CO-OP Mix Carrot". *Photos* Courtesy of Japanese Consumers' Cooperative Union

In addition, it has carried out a variety of quality inspection to ensure safety. Specifically, concerning domestically produced fruits juice, residual agricultural chemicals inspection by fruits juice makers is conducted, and for imported fruits juice, similar tests by raw material fruits juice supply makers (trading company) are conducted once each year.

The sales of CO-OP Mix Carrot have been reached to a cumulative total of 2.7 billion cans to date. Thirty years have passed since its release. Even now, CO-OP Mix Carrot remains hugely popular among the co-op members. They are always displayed in cooperative stores, and sales promotion campaigns are regularly done.

14.3.2 Role of Cooperative Workers in Product Development

The spread of CO-OP Mix Carrot created big opportunities for expansion of "CO-OP" brand products among Japanese consumers. In the development of these products, the role of a co-op worker was very important. We will investigate the role of co-op workers in the product development process.

JCCU started the development of CO-OP Mix Carrot in order to correspond to the members' voice. In the 1970s, Japan had shifted to a mature market, ¹ thus consumers began to interest in a more healthy life. For example, mothers wanted their children to eat healthy vegetables such as carrot. But carrot had a strange taste for small children and they generally disliked it.

Though major food industries were providing vegetable drinks to adults around that time, there was no idea of vegetable drink for children. In other words, co-op workers found potential needs even though major manufacturers didn't take notice of that.

¹In the 1970s, Japan's income levels rose and Japanese people began to enjoy an affluent life. It also aroused the interest in more healthy life of Japanese people.

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Why could co-op workers find such needs? One reason is that co-op members and workers built intimate relationships through joint purchasing "Han" system. It is a characteristic of Japanese Consumer Cooperatives. Another reason is that a co-op worker himself had the personal desire as a consumer. "I want my child to eat healthy carrots!".

In addition, co-op workers attempted surveys in order to support such a finding. At the inception of the product development, co-op workers canvassed a questionnaire in order to verify whether co-op members will accept the concept. They asked their consumer members: "Do you want your child to eat carrot?" Of about 1,000 respondents, over 700 agreed with the concept. Co-op workers deepened self-confidence by this result and began developing products of the new concept that did not exist at the time.

At the same time, co-op workers developed the need to "eat carrots" into the deeper concept. It is "to help children to favour carrot". They set a defined purpose not only to make children eat carrot but also to turn children's taste to loving carrot by the product. Therefore, the co-op workers encountered a number of hardships in order to achieve two contradictory concepts; to remove the negative element among children of carrot flavour and to create a new favourite taste of carrot for children.

After more than 50 prototypes were tested in just over a year, eventually, this problem was solved by the idea of mixing carrot with fruit juice and banana puree as the main ingredient.

CO-OP Mix Carrot is a prominent example of the joint product of co-op members' aspiration and workers' professionalism. In order to realise this collaboration, co-op workers encouraged co-op members to participate in the product development process. Thanks to the active request from co-op workers, tasting by target children has been repeated over and over. The last tasting just before the release of Mix Carrot was done by 90,000 households. Although it seemed difficult for many families to cooperate with the survey, co-op workers were persistent in their efforts with members and realised this through a large-scale survey.

CO-OP Mix Carrot went on sale in the end of 1981. It was initially planned to achieve 300,000 cases a year in the third year, but in fact, it was sold at a more rapid rate than what was the initial aim. In the tenth year, it exceeded three million cases a year, ten times the initial target. At that time, there were no other beverages mixed with vegetable and fruit juice. For a long time, CO-OP Mix Carrot had enjoyed a dominant share in the market and emerged as a pioneer in this category of beverages.

The above leads us to the conclusion that the role played by Japanese Co-op workers is not to merely reflect the needs of co-op members but to correspond and expand members' needs as a professional expert. A collaborative partnership with consumer members and co-op workers are established within the consumer cooperative movement in Japan.

14.3.3 Role of co-op Workers: Building Trust Relationship with Manufacturers

Another important role of co-op workers was to establish a strong relationship of trust with the manufacturers developing co-op products. In fact, CO-OP Mix Carrot is the product developed jointly by JCCU and Gold-Pak Company as the manufacturer.

In the latter half of the 1970s, when the development of CO-OP Mix Carrot began, due to the progress of economic growth in Japan, co-op members gained a better standard of living. As living standards improved, and consumers' interest in health increased, the importance of properly consuming vegetables for their health became widely known among society. The market of vegetable juice by which consumers can easily take vegetables was gradually expanding. Though JCCU sold 100% tomato juice, etc., these products were for adults. The annual sale volume of tomato juice had capped at about 500,000 cases. JCCU felt the necessity of expanding the line-up of products as members' awareness of health increased.

At around the same time, Gold-Pak also keenly felt the need to expand their lineup of vegetable juices. Although Gold-Pak had advanced skills to the production of vegetable juice, they had narrow product line-up.

That is, "CO-OP Mix Carrot" was the fruit of latent demand in the vegetable drink market, expansion of the products line-up to meet the needs of co-op members, and utilisation of product technology. The reason for the start of development, however, was a simple desire to change children's taste to vegetables such as carrot. It was common to the managers, workers and customer members of JCCU and GOLD-Pak.

JCCU and Gold-Pak faced a number of hardships during the development process. For example, as stated above, the two concepts of Mix Carrot seemed to incur a contradiction. Gold-Pak had been producing vegetable juice by removing a distinctive flavour of vegetables in order that even those who dislike eating vegetables can drink it at ease. On the other side, JCCU wanted to keep the vegetable flavour in Mix Carrot in order that children become accustomed to the taste of healthy vegetables. Although it took a great deal of time to solve the problem, JCCU and Gold-Pak tried to develop new healthy vegetable drink by making many samples and repeatedly tasting a lot of co-op members' children. The development was proceeding with difficulties. Though the opinions of both companies were sometimes divided, staff of the product development trusted in each other. They made persistent efforts to persuade the opposites. At last, JCCU and Gold-Pak succeeded in giving birth to the unique and high-quality product responding to the potential needs of co-op members.

Since Japanese consumers liked the national brand, famous manufacturers didn't try to make a private brand. Many retailers were required to ask second-tier companies to produce private brand products. The quality of their private brand products was therefore not so good.

However, JCCU could ask Gold-Pak with superior technology to produce Mix Carrot. Gold-Pak had its own advanced skills; nevertheless, they cooperated with JCCU. It was because of the reason that co-op workers and Gold-Pak's staff had established a committed relationship. The co-op workers were honest with Gold-Pak's

personnel. They created close and meaningful interaction. The cooperative movement succeeded in establishing cooperative relationships with superior producers through the engagement of the co-op workers.

14.4 How to Enhance the co-op Workers' Motivations?

As looking at the practical example of developing co-op's unique products, co-op members' spontaneous behaviour is important for developing the organisation. However, not all members are active or know how to utilise the organisations' resource. Therefore, in order to activate the members, the support from co-op workers is essential. Generally, workers tend to be motivated by labour conditions such as wage increase or promotion. Though these conditions are important factors, co-op workers could also be motivated in the environment of interaction with co-op members. We will show how to motivate the co-op workers, focusing on "chatting party" held by F co-op in Fukuoka prefecture of Japan.

14.4.1 "Chatting Party" and "Han" System

"Chatting party" is a home party which co-op members and their friends have with co-op's food or snacks distributed from their co-op for free. As Fig. 14.2 shows, a co-op member can plan to hold a chatting party and invite his/her friends who are either co-op members or non-co-op members. At the party, participants talk freely about their daily lives, troubles on their kids or co-op products and services and so on. The only obligation is that the main co-op member was required to write a report on what the participants talked about at the party and to return the report to the co-op workers. The number of co-ops which introduce "chatting party" is increasing though the detail system is a little different from co-op to co-op (Kagami 2014).

The reason why this "chatting part" was started is that it was gradually becoming difficult to maintain the "Han" system which was co-op's main and very unique distribution system (Sugimoto 2011). It was because the number of women working outside increased and it became hard for them to join and take time to participate in 'Han". In the "Han" system, co-op workers distribute ordered co-op products to each "Han" and co-op members belonging to a "Han" share the products as each member ordered. While distributing and sharing co-op products, co-op worker and members have time to interact with each other, with talking about various topics such as family, daily life, co-op's products or services. In this way, through information exchange under "Han" activity, a co-op worker gets to know co-op members' needs and ideas which will be hints for co-op's future products and services.

However, the number of this "Han" system has been decreasing due to the lack of co-op members' time and increased demand for ensuring privacy in the late 1990s. As a result, co-op workers have had less interaction with co-op members, which might

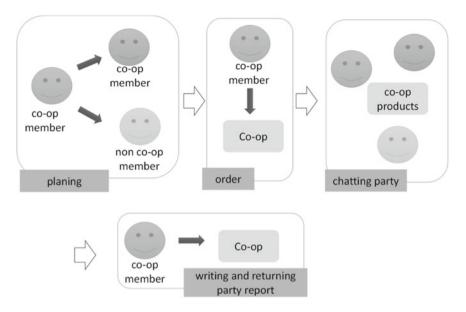


Fig. 14.2 Flow of holding "chatting party"

make the workers forget their role as "linker" between co-op and the members. "Chatting party" has the potential of "Han" system's function even though it is indirect interaction between co-op workers and members through party report. We will show how the reports from "chatting party" influence co-op workers motivations.

14.4.2 "Chatting Party" at F-coop

F co-op is one of the major consumers' cooperatives of Japan, located in Fukuoka prefecture in Kyushu area. F co-op started "chatting party" in 2006, named as "F-friends". The purpose of introducing the party is to make co-op members take part in co-op's activity more easily under lifestyle change led by socio-economical change. In 2014, the number of parties held by F co-op members was 6,690 and the rate of returning party report was 86%. Even though the high return rate of party report, F co-op workers did not focus on the contents of report submitted by co-op members until 2015.

However, chief director of co-op members' activities noticed that there are many useful ideas and valuable information from each party report and tried to have trained using these party reports for co-op workers. The first training was held on February 3, 2016, with 50 participants consisting of branch managers, directors and workers in related sections. Table 14.2 shows the programme for this training.

Programme of the training	Duration in minutes
Lecture on socio-economic change and role of chatting party	60
Present situation of chatting party of F co-op	30
Workshop using party report submitted in 2014 (all submitted reports were considered)	30
Workshop using party report submitted in 2015 (about 20 original reports were considered)	30
Presentation from each group	30

Table 14.2 Programme of training using party reports

Source Data collected by authors

First, lecture on the function of "chatting party" was given by a researcher in order to enable co-op workers to understand what they are conducting is meaningful under a socio-economic change in Japan. Then, practically, participants read many reports by co-op members in each group which consisted of six to seven members. Finally, one of each group members gave a presentation on what they found and discussed based on the reports.

14.4.3 Interaction Between co-op Workers and Members Through Party Report

How are the co-op workers participating in the training feel by reading party reports? Table 14.3 shows their free writings about the reports after the training. The number of respondents was 29 participants out of 45. The feelings participants wrote are categorised into three groups.

In the first group (Table 14.3), there are feelings of the participants that they noticed different aspects of co-op members' lifestyle. They answered, "There are many opinions not only on co-op's activities but also social issues", or "I noticed changes of co-op members' lifestyle by reading unexpected opinions". The workers realised that co-op members lead various lives and have many opinions on co-op products, services and social issues. This shows that they had few chances to notice co-op members' lifestyle and opinions until they read the party reports. Nowadays in co-ops in Japan, workers tend to focus only on the business, which gives little time to the workers to think about the co-op members' life or needs.

The second group (Table 14.3) includes feelings of co-op workers that they found useful ideas for product and service development. Some of them pointed out there are various opinions on the reports submitted by the co-op members, such as "usually, co-op workers receive particular members' opinions, but we can get various opinions from many co-op members", "The reports include co-op members' honest opinions about our products and services", "All opinions, including both good and

Table 14.3 Feelings of co-op workers after reading the Chatting Party reports

	Category	Feelings after reading party report	
1	Noticing a variety of co-op members' lifestyle	There are many opinions not only on co-op's activities but also social issues	
		I noticed changes in co-op members' lifestyle by reading unexpected opinions	
2	Finding useful ideas for product and service development	Usually, co-op workers receive particular members' opinions, but we can get various opinions from many co-op members	
		The reports include co-op members' honest opinions about our products and services	
		In the reports, co-op members talk about their lives, co-op products or co-op workers delivery style	
		All opinions, including both good and bad reputation, are expressed in these reports	
		The reports tell us what co-op members would like to talk with their friends or co-op members	
		There are many important and careful opinions in the reports	
Realising co-op members' hopes and gratitude to co-op and co-op workers		Usually, co-op workers receive requests and complaints from members; but, through the Chatting Party reports, we can feel how thankful members are and helpful to the members	
		Usually, co-op workers receive requests and complaints from members, but we can get information about co-op products, services and members' lifestyle	
		The reports tell us people taking part in parties were really enjoying: So I'm happy to know of this	
		Reports written in hand seem to convey the members' hopes on and feelings towards the co-op	
		The words of gratitude to co-op workers in reports cheer us up	

Source Prepared by authors

bad reputation, are told in these reports". Another said, "The reports tell us what coop members would like to talk freely with their friends or co-op members", which means that this co-op worker first could imagine that co-op members enjoyed the co-op's services and products the workers engaged in. M. Aoki et al.

In the third group (Table 14.3), the feelings on realising co-op members' hopes and gratitude to co-op and co-op workers are included. Some workers were very glad to read the reports because thanks were given and gratitude was expressed by members in the Chatting Party reports. This was described by the comments such as "Usually, co-op workers receive requests and complaints from members, but we can feel thanks from members through party report and helpful to the members", "the words of gratitude to co-op workers in reports cheer us up". In addition, as the comment "Reports written in hand seem to convey the members' hope and feelings to co-op" shows, co-op workers could feel co-op members' warm behaviour to the co-op.

In this way, reading Chatting Party reports makes co-op workers notice their members' lifestyle, opinions, claims or ideas for co-op products, services and the society. Further, the co-op workers feel their members' gratitude and warm attitude towards workers. This could encourage co-op workers to support the members more, which will be able to create a virtuous circle between the workers and members.

14.5 Conclusion

As we showed above, Japanese Co-op workers fill the key role for the business and social activities of consumers' cooperatives. The members enhance the motivation of the workers in cooperative societies. The workers, on the other hand, increase the commitment of members to the cooperative business.

Workers' active contribution to the cooperative movement is another source of the vital co-op as well as the members' participatory democracy in Japan. Cooperatives all over the world should seek and develop their effective way to establish workers' and members' participatory governance in their context. Such a relationship between cooperative members and workers will lead to social innovation and several benefits to the community. We do hope that the Japanese experience shared in this chapter will contribute towards that.

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Chapter 15 Worker Cooperatives: A Social Innovation to the Issue of Contractualization in the Philippines



Leo G. Parma, Maria Antonette D. Pasquin, and Bienvenido P. Nito

Abstract The theoretical underpinnings of the worker cooperative model indicate its strong links with the notion of social innovation. Specifically, worker cooperatives are a social innovation in so far as it responds to a social need that has not been effectively addressed either by the market or by the government. This chapter provides the evidence to this linkage by exploring how the worker co-operative model is a viable solution to the highly contested issue of contractualization in the Philippines. By employing the methodological approach of case study and collecting data through focused group discussions and interviews with the stakeholders of four worker cooperatives in the country, the chapter shows that despite several challenges in the organization of worker cooperatives, stakeholders within a contractual arrangement are much better off through a worker cooperative arrangement. Nonetheless, inconsistencies within the Philippine legal framework and the overlapping functions among regulatory agencies inhibit worker cooperatives' capacity to be a viable solution to contractualization. The chapter, therefore, recommends that government agencies to revisit the international framework on cooperatives to be enlightened and be able to set a standard notion of worker cooperatives vis-à-vis other types of cooperatives and consequently facilitate necessary regulations or ways of cooperative development.

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15.1 Introduction

While considered as an 'old' issue in the Philippines, many debates have spurred once again regarding contractualization¹ ever since incumbent President, Rodrigo Duterte, vowed to implement such endo policy in his term. The issue was all the more heightened when it turned out that the endo policy² in which the labour groups expected to be passed came in the form of Department Order 174³ by the Department of Labour and Employment (DOLE). While most related literature depicts a constant push and pull between the two extreme and contrasting paradigms of contractualization—the capitalist and socialist perspectives and so presents a gridlock, other scholars have focused more on studying alternative mechanisms that address the concerns of workers especially those in contractual employment. One of which includes the promotion of cooperatives—specifically worker cooperatives.

Albeit internationally recognized for so many years due to its growing scholarly discussions and development of theoretical models, the concept of worker cooperatives has not yet fully seeped into the work culture of Filipinos precisely because of their relatively young institutionalization in the Philippine legal framework. Hence, the worker cooperative movement in the country has been usually met with challenges especially with the heated issue of contractual employment. Given the domestic and global realities faced by the Philippine labour market, research on the worker cooperatives as a possible solution to the plight of precarious Filipino workers in the country becomes all the more relevant.

This chapter fits itself in the research gap of examining the extent to which the worker cooperative model adopted in the Philippines is an example of social innovation in the area of labour and employment. Specifically, through the cases of four worker cooperatives, the chapter explores how worker cooperatives address the concerns of the stakeholders in the issue of contractualization particularly in aspects

¹Contractualization, contractual labour, contingent employment, temporary employment, short-term employment will be used interchangeably in this chapter and would mean the type of non-permanent employment arrangement entered by an employer and employee either directly or through a third-party agency.

²In this chapter, an endo policy would mean the policy alternative proposed and passed by the Department of Labour and Employment as of 2017; it has a different usage with the term endo, which would mean in this chapter the illegitimate contractual practice (e.g. 5-5-5 employment scheme, labour-only contracting without sufficient benefits, etc.).

³This policy response issued last March 16, 2017 does not prohibit contractualization per se as what the endo policy initially aims, rather, only reinforces the regulation of contractualization allowed by existing labour laws. That is why its issuance was immediately met with contentions and protests from various labour groups. With such restlessness from the labour sector, the issue continues to escalate in the Philippines.

of sustainable livelihood, productivity, income equity, participation, identity, and inclusiveness.

This chapter is divided into three sections. First, a background on the history and theoretical underpinnings of the worker cooperatives is presented. The second section is the meat of the chapter that is the analysis. This section is further divided into two parts: the contextualization of the worker cooperative movement in the Philippines as it relates to the issue of contractualization and the stakeholders' analysis using a case study approach. Finally, a set of recommendations for further development of the worker co-op movement is provided at the end.

15.2 Theoretical Underpinnings of Worker Cooperatives

The cooperative movement is mostly cited in related literature as a response to the widespread capitalism that emerged mostly in the early 2000s. With the growing unemployment, income inequality, and economic unrest during those times especially with the 2008 Global Financial Crisis, many scholars began to think in terms of alternative mechanisms—one of which is the promotion of cooperatives, to resolve these socioeconomic issues. The promise of co-operativism is clearly defined in the International Co-operative Alliance's (ICA) seven-pronged principles of cooperatives as adopted from the British Society of Equitable Pioneers (Dickstein 1991; Iuviene et al. 2010). This includes Voluntary and Open Membership, Democratic Member Control, Members' Economic Participation, Autonomy and Independence, Education, Training and Information, Cooperation among-operatives, and Concern for Community (ILO 2007). Eventually, growing public policy interest particularly focused on the role of worker cooperatives since its basic cooperative model has been claimed through studies to deliver the best solution to such problems.

A worker cooperative is defined as a type of cooperative that aims 'to create jobs for members' (ILO 2007). While embodying the same cooperative identity, worker cooperatives are often distinguished as one which 'attained the highest level of development and importance at present in the world, and is structured based on the universal cooperative principles, values and operational methods stipulated in the Statement on the Co-operative Identity (Manchester 1995 as cited in CICOPA 2005: 1)'. In the same document of CICOPA (2005), the basic characteristics of worker cooperatives have also been laid out for its promotion:

- They [worker cooperatives] have the objective of creating and maintaining sustainable
 jobs and generating wealth, in order to improve the quality of life of the workermembers, dignify human work, allow workers' democratic self-management, and
 promote community and local development.
- 2. The free and voluntary membership of their members, in order to contribute with their personal work and economic resources, is conditioned by the existence of workplaces.
- 3. As a general rule, work shall be carried out by the members. This implies that the majority of the workers in a given worker cooperative enterprise are members and vice versa.

4. The worker-members' relation with their cooperative shall be considered as different to that of conventional wage-based labour and to that of autonomous individual work.

- 5. Their internal regulation is formally defined by regimes that are democratically agreed upon and accepted by the worker-members.
- 6. They shall be autonomous and independent, before the State and third parties, in their labour relations and management, and in the usage and management of the means of production (CICOPA 2005: 2–3).

Generally, a larger body of studies still confirms the advantages of worker cooperatives compared with the opposite. Most of these studies point out that the worker cooperatives' distinct governance feature is a driver of a host of benefits not only to worker-owners but also to the firms and community. Specifically, the democratic nature of being a cooperative largely sets apart a worker cooperative from a conventional firm. Given this, theoretical foundations of worker cooperatives have been mostly attributed to democratic theories. For example, Robert Dahl's political insights into 'workplace democracy' through cooperatives' sharing of property ownership and redistribution of wealth—the critical elements for political access, power, and equality (Dickstein 1991). Meanwhile, the more social perspective is introduced with William Thompson's idea of a cooperative community wherein democracy is manifested internally insofar as the members relate with one another or externally when the cooperative interacts with the rest of the community or becomes a catalyst of democracy (Kaswan 2014).

Various market and non-market theories also reveal how the worker cooperative model results in an increased productivity, quality jobs, job security, and job creation—all of which are noted to be problematic aspects in a traditional employer-employee labour structure in a capitalist firm (Dickstein 1991). The results of these theoretical studies are likewise complemented with empirical ones, such as that of Craig and Pencavel (1995), in showing how worker cooperatives are indeed more advantageous. Precisely because the enterprise is owned by the members who are at the same time the workers, worker-owners are all the more incentivized to deliver the best service they could offer to their clients. Political Economist James Meade expounds this idea by claiming that since both responsibilities and rewards are shared in a worker cooperative, worker-owners could enlarge their total net earnings. Moreover, contrary to the usual assumption that greater returns only take place the fewer the members are, Meade also argues that other factors such as group loyalty still enable the sustainability and improvement of such enterprise (Meade 1980 as cited in Lehmer, 2003).

While it is true that exclusive property rights are absent in such a model unlike in a conventional firm, these are anyway translated to broader participation through democratic rights, surplus profit sharing, investment decision-making opportunities (Lehmer 2003). Hence, from this perspective, the worker cooperative model reconciles what is initially thought to be the incompatible aims of the capitalist and socialist paradigms. In fact, for Ellerman (1992), the existence of worker cooperatives is the end of long-standing Capitalism-Socialism debate as this model provides a different approach to labour, contracts, and property. This is because for him, essentially,

the approach must not be the abolishment of private property, rather the 'employment contract' or master–servant relationship in the traditional employment contract. He, along with other scholars generally makes use of the concept of 'economic democracy' as the backbone for this whole idea of worker cooperatives.

As what could initially be drawn out from the vast related literature on cooperatives, it seems suggestive that the classic idea of cooperation yielding the optimal results is manifested in this worker cooperative model. More importantly, the integration of both the social and economic functions of a firm is intertwined in one single concept of this worker cooperative. Examples of such a type of cooperative like Mondragon cooperativism suggest that the model could be a solution to the issues of the traditional employer–employee labour relationship (Schweickart 2012). In a study conducted by Wilson (2010), cooperatives are presented to be pivotal in the areas of control, benefits, decent wages, support and flexibility, and social capital and empowerment of workers.

Given the aforementioned related literature, this chapter, through a case study of different worker cooperatives, extends the existing discussion on worker cooperatives by seeking to find out whether theoretical claims on them especially in employment and productivity, broader participation and economic benefits, etc., offer viable solutions to the problems of substandard working conditions, the poor exercise of democratic rights in the workplace and economic benefits—problems that have been the offshoot of exploitative forms of contractualization in the Philippines. In doing so, the chapter highlights how, to an extent, worker cooperatives is a social innovation, specifically by being a response to the problems surrounding informal and precarious work in the Philippines.

Through the succeeding analysis, the context wherein worker cooperatives emerged is first briefly provided to understand the social need that is being addressed by such type of cooperative because neither the government nor the markets were able to provide an effective solution. This is followed by the presentation of the birth pains and present challenges of the worker cooperative movement in the Philippines. This section points out that precisely because of the innovative concept of a worker cooperative, the movement has been facing various barriers towards its development in the country—mostly legal in nature. Towards the end of this analysis, the different benefits that worker cooperatives can provide for its stakeholders when the concept was finally tested out and realized as in the four worker cooperatives were then laid out. Such effects to these stakeholders, especially the worker-members, ultimately provide for the strong pieces of evidence of how worker cooperatives in the Philippines indeed fit in the notion of social innovation.

⁴It must be underscored that the concept, 'social innovation' adopted in this chapter is that which generally refer to the 'innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly developed and diffused through organisations whose primary purposes are social' (Mulgan 2006: 146). In this sense, worker co-operatives, by its nature or origins alone satisfy this notion of a social innovation. Hence, the chapter's main purpose is only to provide for the empirical evidences of such a theoretical claim.

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15.3 Analysis

15.3.1 Contextualization of Worker Cooperatives and Contractualization in the Philippines

15.3.1.1 The Prevalence of Contractualization in the Philippines

According to Macaraya (1999), the main difference of the regular employees with those under contractual labour is their security of tenure. In the same study, Macaraya (1999) illustrated the new employment relations in the Philippines, wherein there is a diminishing degree of regular employment and expanding bulk of those engaged in contractual labour. The author further notes how this is quite alarming considering that 'compared to the regular workforce and those in a triangular or trilateral arrangement, these [casual workers, home-workers, the commission- paid and contractual workers] are the most legally inadequately protected employees' (Macaraya 1999:6). As noted by the Philippine Statistics Authority (PSA), there has been indeed an increase in the number of contractual employees in the country. As seen in Table 15.1, there has been a total 16.3% increase in these contractual workers between 2012 and 2014 (Philippine Statistics Authority 2016).

While Table 15.1 also shows a greater increase among regular employees with 21.2% change from 2012 to 2014, this still does not mean an increasing trend. If one is to look at another data provided by Paqueo and Orbeta Jr. (2016) for distribution of nature of employment in the Philippines, one could still see the trend of a rising share of temporary workers as compared with regular employees who then opens possible opportunities for different practices of contractualization—even the illegitimate ones to continually be practised in society (Table 15.2).

There are various ways on how contractualization is practised in the country. On the one hand, there is that which is permissible by the law (as stipulated among the types of employment) and there are those malpractices by the employers who try to circumvent the law. One of these malpractices is the '5-5-5' hiring, which has already

Table 13.1 Total employment in establishments with 20 of more workers by type of work						
2014	2012	2012–2014				
4,471,785	3,769,259	18.6				
35,080	30,487	15.1				
232,547	208,099	11.7				
330,404	288,286	14.6				
3,873,754	3,242,387	19.5				
2,538,081	2,093,822	21.2				
1,335,673	1,148,565	16.3				
	2014 4,471,785 35,080 232,547 330,404 3,873,754 2,538,081	2014 2012 4,471,785 3,769,259 35,080 30,487 232,547 208,099 330,404 288,286 3,873,754 3,242,387 2,538,081 2,093,822				

Table 15.1 Total employment in establishments with 20 or more workers by type of work

Source Philippine Statistics Authority 2016. 2014 survey of employment: statistics on non-regular workers

Nature of job	2000	2005	2010	2014
Temporary	18.4	20.8	21.9	24.0
Regular	74.5	74.8	74.2	69.6
Others	7.1	4.4	3.9	6.4

 Table 15.2 Distribution of nature of employment

Source Philippine Statistics Authority 2016. 2014 survey of employment: statistics on non-regular workers

seeped through the vernacular of Filipinos. It happens when 'workers can only work for 5 months at a time, renewable for another two 5-month contracts, after which they can work as open contract workers (Malalis and Lagsa 2014 as cited in Cristobal and Resurreccion 2014: 344)'. The cap given by the employers to its workers is at 5 months precisely because under the Labour Code, after 6 months of probationary period (temporary employment), an employee shall already be considered a regular employee and entitled to the rights and benefits accorded to such workers (see labour code article 287). Aside from this, companies could also practice 5-5-5 hiring through agency-hiring. In the same way, when a worker's 5-month contract lapses, he signs a new contract with the other agency with the same set of working conditions (Olea and Ellao 2014 as cited by Cristobal and Resurreccion 2014). In these instances, it seems pretty clear how employees are truly undermined in contractualization. The only ways Filipino workers could, therefore, cope up with this problem are quit employment and seek other jobs, which is truly challenging in the case of the Philippines; join a union and 'acquire collective voice,' and finally, suffer in silence rather than suffer the possibility of unemployment (Cristobal and Resurreccion 2014). In these unfortunate cases, a Filipino worker suffers in the areas pointed out by Wilson (2010), such as control over employment, job security, benefits, decent wages, and support and flexibility.

Given all these things, it comes as no surprise that many labour groups especially during the 2016 elections have long been expressing their fight against all forms of contractualization. Not only are the workers undermined in the sense that they are less or inadequately protected by the law, but also because contractual employment—legitimate or not still reduces the formation of unions, and thereby limiting again the bargaining power of the workers as compared with the business operators. In other words, labour unions would become more and more irrelevant if contractual setups continue to grow in the country, thereby truly making contractualization as a public policy problem in this sense.

At the same time, one could not deny that the government has always recognized contractualization as a public problem. As it claims to have done and continuously does, the government has not failed to create several Bills to address the issue. Some Bills filed since the 13th Congress has ranged from an 'improved regulation to the abolition of contractualization as an employment regime. However, to date, these amendments to the Labour Code have not been adopted by Congress' (Cristobal and

Resurreccion 2014: 345). While these department orders are used by the government as a policy instrument to immediately address such complicated issues, this kind of band-aid solution still poses additional problems since these issuances are often subject to changes from one administration to the next that eventually becomes unsustainable. At the same time, for labour groups such as the Kilusan Mayo Uno (KMU), these department orders do not anyway strike down contractualization but only reiterates the need for regulation (Morales 2017). That is why the unrest or dissatisfaction of these labour groups against such policy responses on the issue persists—further asserting the need on how to resolve the problem of contractualization now. The fact that the problems arising from contractualization persist until now in the Philippines is a manifestation of how government and to an extent, the market, were not able to guarantee an effective solution. This only further asserts the claim that such a social problem could require a form of social innovation, supported by both public and private sectors, for it to be truly addressed.

15.3.1.2 Worker Cooperatives and the Issue of Contractualization

While worker cooperatives have been in existence for about two decades starting from Kaakbay Entre-Workers Cooperative in 1996 and Asiapro in 1999, the sector was just recently given formal recognition by virtue of Republic Act (RA) No. 9520, otherwise known as the Philippine Cooperative Code of 2008 (Parma et al. n.d.). In Article 23 (t) of this legislation, a worker cooperative is defined as 'one organized by workers, including the self-employed, who are at the same time the members and owners of the enterprise. Its principal purpose is to provide employment and business opportunities to its members and manage it in accordance with co-operative principles (Art. 23. t., RA 9520)'. This is a more detailed definition of what has been generally laid out in the 'Handbook on Co-operatives for use by Workers' Organizations' of ILO (2007).

In the recent data released by the Co-operative Development Authority on labour services and worker cooperatives statistics during the sectoral Congress at the Skylight Convention in Puerto Princesa City, Palawan during May 21–22, 2015, the agency showed that as of that year, 200,167 workers were already members of such cooperatives—63.08% of whom are males and 36.92% are females. With 118,791 employees, the sector's gross revenue reached to P5.3 billion and assets of P5.46 billion. Moreover, NCR (35.1%) continues to be the seat of activities for these labour services and worker cooperatives while region 4 (19.3%) and region 11 (15.1%) follow respectively (CDA 2014). Nevertheless, according to Alejandro Lukban, Founder and Chairman of the Global Pro worker co-operative, about 100,000 workers are just part of the worker co-operative movement in the country. Hence, while there is an emerging trend towards worker cooperatives, there is still much to do in this sector to be able to make a dent in Philippine society (Lukban 2017).

Understanding and acceptance of the concept of worker cooperatives in the Philippines have already been plagued with many challenges and even resistance—mostly

legal in nature. Contentions continue to arise concerning the nature of worker cooperatives in the Philippines especially with the current issue of 'endo' or end-of-contract practice. What was thought to be a state recognition of worker cooperatives through R.A 9520 did not immediately translate into government acceptance (Parma et al. n.d.). This is mainly because the worker co-operative model, with its unique characteristics, involves a different labour structure as compared with the traditional employer-employee relationship, which is still the one widely understood and practised nowadays in the country. Most government agencies like Department of Labour and Employment (DOLE), Bureau of Internal Revenue (BIR), Social Security System (SSS) and to a certain extent the CDA could not, and would not reconcile, the idea of worker ownership wherein the workers own the enterprise and therefore considered 'self-employed' (Parma et al. n.d.). This is even though Philippines is a signatory to several international agreements such as the ILO Recommendation 193/2002 on the promotion of cooperatives, wherein it states worker cooperatives as 'a major mechanism for job creation and income generation and, as a consequence, for the struggle against poverty' (ILO 2007: 115); and the CICOPA 'World Declaration on Worker Co-operatives' which provides among others that 'members of a co-operative have a different working relationship with the co-operative than either workers in a conventionally managed business or the self-employed contractor (CICOPA 2005 as cited in Parma et al. 2016: 3)'. The worker co-operative movement in the country is also often misunderstood to be procontractualization or in the business of contractualization, which labour groups frown upon. However, a closer look into the context of the worker co-operative movement in the country reveals layers and layers of issues associated with such misconceptions.

At present, two types of cooperatives are recognized to be involved in this issue primarily because of their respective engagement in job-contracting—the labour service and worker cooperatives. While the labour service type of co-operative is neither initially found in the Co-operative Code of 2008 nor any other international co-operative framework, it gained an identity in the Revised Implementing Rules and Regulations of CDA promulgated on March 18, 2015, and differentiated in Sect. 15.4, Rule VIII of the document from worker cooperatives based on two factors as shown in Chart 15.1.

Furthermore, as argued by Nito (2017), if the notion of a labour service cooperative is the same as a Service co-operative, its legitimacy could still be questioned since the international co-operative framework defines a service co-operative to be more like consumer cooperatives, which provides goods or services such medical, insurance, transport, etc., primarily to its members. In ILO's Handbook for Co-operatives, a service co-operative is under the classification of cooperatives offering service to members and not to external entities like how labour is in service to client-partners in the case of labour service cooperatives. 'Financial co-operatives, consumer co-operatives, housing co-operatives, producer co-operatives, and marketing co-operatives are a few examples of service co-operatives (ILO 2007: 23)'. Meanwhile, it is only the concept of worker cooperatives that has an international legal framework as either producer or labour worker cooperatives (ILO 2007). However, in the case of the Philippine legal framework, the labour service coop is

Particulars	Labour Service Co-operative	Workers Co-operative		
Nature of activities	Engaged in contracting and sub-contracting arrangements as defined by law	May engage in labour and production, including contracting and subcontracting arrangements in support of its main activity as defined by law		
Existence of an employer employee relationship	Existence of an employer employee relationship is at all times observed in contracting and subcontracting arrangements during the deployment of the member. Trilateral relationship exists between and among the principal, contractor, and the member employees	Self-employed individual is allowed by the co-operative regarding its enterprise.		
Source: This chart was first published in Parma et al. (2020).				

Chart 15.1 Differences between labour service cooperative and worker cooperatives

differentiated from a worker coop when in fact the former is under the latter and so must in no way be of the same traditional employer–employee labour structure since all members are owners. That is why confusions arise not only to the side of other government agencies but also to the business partners and the workers themselves in terms of adherence to law and regulations (Nito 2017).

While these cooperatives are already emphasized in the chapter as distinct from one another, most labour groups and, to a certain extent, certain government agencies still perceive them as the same. Even those who are radically against any form of contractualization, view both of these entities as exploitative of labour through their business of contractualization. However, in defence of those in the Union of Worker Cooperatives, also known as 'Co-op Works!' the nature of worker cooperatives, as composed of self-employed individuals, is one which is faithful to the co-operative principles primarily of member ownership. 'We are not in the business of contractualization. In fact, we act as a springboard towards decent work or provide an alternative or support for those contractual employees who, in the meantime could not find regular employment (Parma, Interview on the Genuine Worker Co-op model, 2017: Unpublished).'

Moreover, the group adds that for a 'co-operative' to declare itself to have the same traditional labour structure of employer—employee relationship among its member-owners undermines the 'democracy' which is supposed to exist in a co-operative since tagging members as either employers or employees would essentially have different responsibilities, benefits, etc., as compared with a genuinely member-owner. For instance, ideally, the government could not issue the same minimum capitalization for both cooperatives and other purely business enterprises like in this case, a manpower agency, to provide as a back-up in case the client-partner could not pay the employees precisely because that would be redundant and illogical for owners to pool their own money and use the same money to pay themselves (Parma, Interview on the Genuine Worker Co-op model, 2017). Sticking to this employer—employee relationship may end up breed for another hierarchical labour structure, which is different

from the worker co-operative model (Union of Worker Co-operatives 2017). In this case, worker cooperatives would only defeat its purpose of addressing the employer–employee issues presented in Ellerman (1992). In fact, from the interviews of key informants representing the worker cooperatives in this study, such a political environment in the Philippines is also identified as the main external challenge for the development of worker cooperatives in the country.

15.3.1.3 Challenges

Based on the interviews conducted with four key informants who are also part of the management staff of these worker cooperatives, information regarding the worker cooperatives' other activities towards the community and the challenges within and outside the co-operative were captured. Most of the data gathered from the interviews with key informants point out that the most challenging problem which worker cooperatives in the Philippines face nowadays is none other than the overlapping regulations and policies over the issue of contractualization. As mentioned by the key informants, the worker cooperatives are often lumped together with those manpower agencies and even some cooperatives that are skirting the law or compromising the rights of their workers just to earn more profit. Precisely because there are still a lot of misunderstandings about the nature of worker cooperatives on the part of the government, most of the policies especially in the department orders they issue tend to contract the capacity of worker cooperatives to expand its operations in various industries and at the same time provide more benefits to their worker-members. As shared by a key informant from worker co-operative A of this study, their own cooperative had to let go of almost three-fourth of their worker-members operating in various parts of the country in 2016 just to avoid any further complications with the heated issue of contractualization. A particular issue mentioned was the oftencontradictory decisions of regional directors of the DOLE with national policies. This is especially after the release of Department Order 174 of the DOLE, which imposed more regulations on various organizations (manpower agencies and cooperatives alike) and private companies engaged in contractual employment. Aside from these, the worker cooperatives also encounter internal challenges that contribute to the further delimiting of the capacities of worker cooperatives. One often-cited problem is the lack of managerial experts who could also improve the operations in worker cooperatives especially those operating across the country.

Amidst all these concerns, what is so far clear is that the Philippine legal framework still allows for the existence of such cooperatives engaged in various enterprises—be it in providing services or labour (contracting or sub-contracting) to some operations of the principal company insofar as they adhere to the law (Articles 106-109 of the Labour Code, other amendments and existing circular orders from the Department of Labour and Employment (DOLE)—the most recent of which is the Department Order 174).

15.3.2 Stakeholders' Analysis

The common narrative among the respondents in the case study of four worker cooperatives in the Philippines highlights the impact of worker co-operative membership to three focal areas of participation, decent wages, benefits, and job security. The four worker cooperatives in this study all operate nationwide and have been established or in existence for at least 10 years. Except for Worker Co-operative A which also produces its own products specifically fibreglass boats, all worker cooperatives focus on providing labour services to companies in various industries (mostly in the processing and service industries) through contractual employment given the market demand for such labour service. A total of 80 survey respondents from four worker cooperatives were involved in the study (20 participants for each co-operative).

15.3.3 Benefits

Responses from the survey show that the benefits of belonging in worker cooperatives are the most often cited factors that induce the worker-members to stay in worker co-operative setup rather than in other contractual arrangements. When asked to compare their overall socioeconomic conditions before and now being in a worker co-operative, almost 99% have affirmed that they prefer to be in the worker co-operative due to the benefits they receive. As the survey results affirm, the respondents come from different work experiences before joining the co-operative. Roughly 41.79% of those who answered the survey mentioned that they previously worked under a manpower agency, 28.36% were unemployed, and 25.73% were directly hired by a company for a contractual job. The remaining less than 5% accounted for either students or regular employees. Hence, such a background of the respondents provides enough ground for them to be able to assess and compare their conditions in various contractual arrangements (Table 15.3).

The benefits covered in the survey questionnaire used in this study include those declared as mandatory by the law (SSS, PhilHealth (medical assistance), Pag-ibig (HDMF), 13th month pay) and those considered as co-operative benefits (Shared capital or dividends, patronage funds, Skills training, Hospitalization insurance, Provident funds or Loans). Based on the total survey responses, all respondents affirmed that they receive the mandatory benefits stipulated by the Labour Code. Meanwhile, an average of 48.97% of respondents from the four worker co-operatives noted that they received all the other additional benefits of being in a worker co-operative. This implies that at the very least, the worker co-operative membership, to a certain extent, still provides an additional income for the worker-members. Among these non-contributory or co-operative benefits, the interest on share capital or dividend has been identified as one which is received by most respondents. This is followed by the hospitalization insurance (64%), patronage or productivity funds (53%), provident funds (29%), and skill training (26%). When the key informants

Table 15.3 Benefits of worker co-operative members

Benefits	Worker Coop A (%)	Worker Coop B (%)	Worker Coop C (%)	Worker Coop D (%)	Total average (%)
Mandatory benefits (fro	m labour code))			
Social security system (SSS)	100	100	100	100	100
PhilHealth	100	100	100	100	100
Pag-ibig/home development mutual fund (HDMF)	100	100	100	100	100
13th month pay	100	100	100	100	100
Total average (%)	100	100	100	100	
Co-operative benefits		,	,	,	
Interest on share capital/dividends	50	67	71	100	72
Patronage/productivity funds	5.0	74	50	85	53
Skill training	10	15	50	30	26
Hospitalization insurance	45	74	43	95	64
Provident funds/loans	50	33	7.0	25	29
Total average (%)	32	53	44	67	

Note * Values rounded up to the nearest tens place

Source This table was first published in Parma et al. (2020)

were interviewed regarding the skills training provided in their respective cooperatives, they affirmed that this aspect is not consistently practiced in all the areas of operation of worker cooperatives that they belong due to financial and managerial constraints. However, once the resources are available, they would take advantage of holding such education and training programs which, at the very least, include values formation, leadership and skills training seminars, and co-operative work-value orientations. In fact, among those who answered the question on the type and frequency of the skills training provided, most respondents, especially from worker co-operative C and D, noted, as examples, leadership seminars usually for 4–5 times a year, customer care services training for 2–3 times a year, basic manufacturing training, accounting workshops for non-Accountants, Red Cross: first aid training, and use of spreadsheet (excel) training.

15.3.3.1 Human and Economic Security

Job security is an important aspect which most, if not contractual workers and all the more who were subjected to precarious work in their previous work always aspire

for. The questionnaire was structured in such a way that the worker-members of each co-operative would be able to quantify to what extent are they better off in their socioeconomic conditions now as compared with before they joined the co-operative. Based on the information presented in Table 15.4, it can be stated that an overwhelming majority of the respondents agreed to the statements provided in

 Table 15.4
 Perception of worker co-operative members on their Socioeconomic conditions

Socioeconomic conditions	Worker Coop A	Worker Coop B	Worker Coop C	Worker Coop D	Total average/indicator		
Human conditions							
Medical benefits	4.15	4.26	3.21	4.50	4.03 (agree)		
Skill development	3.95	4.19	3.79	4.65	4.15 (agree)		
The sense of worker co-operative ownership	4.15	4.19	3.50	4.70	4.14 (agree)		
Total average/worker co-operative	4.08 (agree)	4.21 (agree)	3.50 (neutral)	4.62 (strongly agree)			
Economic condit	ions						
Salary	3.30	3.63	3.21	3.85	3.50 (neutral)		
Other sources of income	3.25	3.63	3.79	4.00	3.67 (agree)		
Job security	3.85	4.11	3.50	4.35	3.95 (agree)		
Total average/worker co-operative	3.47 (neutral)	3.79 (agree)	3.50 (neutral)	4.07 (agree)			
Social conditions	7						
Voting rights	3.70	3.93	3.64	4.55	3.96 (agree)		
Expression of ideas/opinions	3.85	3.93	3.93	4.35	4.01 (agree)		
Transparency of worker co-operative documents	3.65	3.70	3.07	4.30	3.68 (agree)		
Opportunities to represent worker co-operative outside	3.60	3.78	3.50	3.75	3.66 (agree)		
Support from colleagues	4.10	4.19	4.21	4.60	4.23 (agree)		

(continued)

Socioeconomic conditions	Worker Coop A	Worker Coop B	Worker Coop C	Worker Coop D	Total average/indicator
Job ladder	3.50	3.78	3.79	3.60	3.67 (agree)
Total average/worker co-operative	3.73 (agree)	3.89 (agree)	3.69 (agree)	4.19 (agree)	

Table 15.4 (continued)

Source: This table was first published in Parma et al. (2020). The study made use of the Likert scale, a 5- or 7-point ordinal scale used by respondents to rate the degree to which they agree or disagree with a statement. In this study, the 5-point ordinal scale was used. The values gathered from the survey were summed up, rounded up to the nearest hundredths place, and assigned the following assessment: strongly disagree = 1, disagree = 2, neutral = 3, agree = 4, strongly agree = 5. Given that the statements provided in the survey attest to the presence of specific benefits received by workers, to agree or strongly agree implies these worker members receive such benefits

the questionnaire. These statements include affirmations of the satisfaction in their current socioeconomic conditions through the worker cooperatives. This then implies that the respondents are secured in terms of their socioeconomic conditions and that they are no longer put in an unsecured state of not knowing whether in the next coming days they would still have a job. As mentioned by one of the key informants (a general manager of one of the worker cooperatives in this study), the main advantage of a worker co-operative is the security of the job—meaning a continuous source of income for many of these workers. That is why many responses to the openended questions posed in the questionnaire⁵ affirmed that worker-members are better off in the worker co-operative setup because there is more stability in terms of work and additional income from the co-operative benefits. Examples of these actual responses (reasons why they are better off in the worker co-operative set-up) include the following:

Dahil ang aking noon sa Pinlan agency ay hindi sapat (P275/daily). Dito sa cooperatiba ay hindi lang malaki ang sweldo kundi kompleto pa sila sa benefits at taon-taon kami may dividendo, 5 day's incentives at 13th-month pay at higit sa lahat walang endo. Basta maganda ang performance ng bawat miyembro.

[In the previous Pinlanman power agency I worked for, the salary was not enough (P275/daily). Here in the co-operative, the compensation is not only higher but is also complete with benefits, annual dividends, 5 day's incentive leaves, and 13th-month pay. Most importantly, there is no "endo" (short-term employment/contractualization) for as long as you perform well](Worker-member from Worker Coop A).

Dahil mas okay po yung mga benefits and salary kesa sa dating employer ko at parang pamilya ang turinan naming dito sa cooperative. Marami po akong natutunan sa mga ibang skills.

⁵The open-ended question was phrased as: "In your perspective, do you think you are better off in a worker cooperative set-up rather than employed from a manpower agency or directly-hired contractual employment? Why or why not?".

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[...the benefits and salaries are better in the worker co-operative than the case with my previous employer. Moreover, we treat each other here as a family. I also get to learn different skills in my current work] (Worker member from Worker Coop C).

Noong sa manpower agency poako 6-months contract, walang sure kung pagkatapos nun kung may trabahoka. Ngayong sa coop po, ako sure ako may trabaho para suportahan pamilya ko.

[Back then when I was still under a manpower agency, I always get contracted for 6 months so there was no assurance if after the contract period I would still have a job. But now that I am in the co-operative, I am assured of continuous work to support my family] (Worker member from Worker Coop C).

Naibibigay sa amin ang mga benepisyo na nararapat para sa amin. Tama ang pasahod para sa mga tao. Higit sa lahat bukas para salahat ng miyembro na tumulong, madaling lapitan at nakakaunawa.

[The benefits and salary which are rightfully ours are given to us. More importantly, the co-operative is always open to help all the members – the management is easy to go to and truly understanding] (Worker member from Worker Coop D).

...dahil nagpoprovide talaga sila ng tamang benepisyo sa lahat at nagcoconduct din sila ng mga training para maiangat pa ang aking skills at maging motivated sa lahat ng aking ginagawa.

[...right benefits are provided to everyone and training is conducted to improve the skills of member workers and motivate them in everything they do] (Worker member from Worker Coop D).

Yes, aside from being assured of having a job without any short-term contract, I have other benefits which other contractual agencies can't provide, such as health care benefits, retirement benefits, and others.

At the same time, as observed from Table 15.4, the only statement which they perceived to be 'neutral'—meaning they neither agree nor disagree relates to their current salary in the worker co-operative. This means that by far, most, if not all, respondents though they receive the minimum wages mandated by law could not necessarily sustain their respective families with such salary. Such information may be quite vague and misleading. Hence, additional information with regards to the background of these respondents and answers to the qualitative questions in the survey could provide more insights into this. Based on the survey, 56% of the respondents have, on average, 2-3 children to support. That is why a minimum wage with added-value benefits from the co-operative may indeed not always be enough to meet the daily needs of the family. However, a closer look again into the qualitative answers of the respondents would show that most of the respondents are already quite satisfied with this income given their previous socioeconomic conditions. At the very least, they would cite that belonging in a worker co-operative allows them the security to be able to meet the daily subsistence for their families. Some respondents mentioned the extent of help that worker cooperatives provided them in times of their dire need. Given that at least there are some respondents (29%) and key informants who affirmed the existence of provident funds or loans in the co-operative is also proof of this feedback. Some respondents and key informants were also able to note that the payment scheme for the loan which a member takes from the co-operative is always dependent on the objective capacity to pay of the member and actual amount loaned out to him or her. Such flexibility allows for an immediate response to the needs of the worker-members.

15.3.4 Social Capital and Empowerment Through Participation

The endowment of voting rights is one of the fundamental and unique characteristics of a co-operative. This is an important indicator to be able to assess the extent of participation that each co-operative member contributes and so also reflect their respective sense of ownership. In the Philippines, the co-operative framework allows for varying degrees of participation among its members—regular or associate members. Being new members in the co-operative, associate members are not yet given such rights or even the privileges of representing the co-operative in its external engagements. However, once the 2-year period is complete, they can opt to become regular members with higher shared capital cap and voting rights. Respondents in this study are not necessarily classified according to such types of membership. That is why, it is understandable that indicators such as voting rights and representation outside the co-operative, which could have been affected due to this classification have resulted in nearly Neutral value (equal to or less than 3.5).

Nonetheless, participation inside and outside of the co-operative could still be manifested in various ways. According to the interviews with key informants, the co-operative along with both its regular and associate members is also active in terms of community development projects. Oftentimes, for at least once or twice a year, the worker cooperatives included in the study would hold various community projects like clean-up drives or donations of needed materials in their nearest barangay. For instance, Worker Co-operative A, being a producer of fibreglass boats also donates some to their local community given that it would greatly help the barangay especially with its limited disaster-risk reduction and management tools like boats in times of flood. In such concrete ways, one could get a sense of how worker cooperatives could not only take advantage of their respective social capital but also affect their local communities in various positive ways.

Such activities will induce the camaraderie and support system of the workermembers in the co-operative. As noted by some respondents and affirmed by key informants, the member-workers enjoy the 'family spirit' which is present in the worker co-operative. As what could be read in some narratives of the respondents, this even contributes to their willingness to stay in a worker co-operative setup. The

⁶A barangay is defined as a unit of administration in Philippine society consisting of from 50 to 100 families under a headman (Merriam Webster Dictionary, Retrieved from https://www.merriam-webster.com/dictionary/barangay).

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results also affirm previous studies that cite social capital as the very foundation of cooperatives (see Holmgren 2011).

15.4 Conclusion and Recommendations

Despite the various internal and external challenges encountered by worker cooperatives, the model continues to empirically show, as in the four cases of the worker cooperatives in this study, how it can address precarious work which could accompany contractual employment, especially if not regulated well. The worker co-operative model may not necessarily be a panacea for all socioeconomic problems in society. However, at the very least, worker cooperatives especially in areas of human and economic security, social capital, and empowerment through co-operative participation, provide the necessary conditions for Filipino workers to struggle against unemployment and poverty, thereby, fitting itself in the notion of social innovation. Worker cooperatives precisely do so by being a safety net amidst the backdrop of excess labour supply in the country and low job opportunities which put many in the labour force in a vulnerable state. Worker cooperatives do not operate on the often-conceived notion of contractualization or temporary employment. They secure worker-members of continuous work that may not necessarily mean the same type of work in the same client-company. Rather, a permanent assurance such as those given to regular employees that they would have a stable source of income from the employment contracted by worker cooperatives with client-companies per project basis.

The findings likewise point out the need for those involved in the tripartite governance—private sector, government, and civil society to openly have a dialogue on the potentials of such a model. Moreover, worker cooperatives need to be supporting and be further studied in the country to confirm its effects to both labour and business before forwarding restrictive policies that rather than strengthening worker cooperatives, actually only burden them. This becomes necessary as any social innovation such as worker cooperatives also needs an enabling environment—with appropriate rules and regulations to truly thrive and fulfil the purposes it was intended, that is ultimately to address a pressing social need.

While the Philippines has not yet reached that point of being able to gain enough capital that could induce low unemployment rate in the country, worker cooperatives, which enable those unemployed, suffered from or still vulnerable to precarious work gain a notch higher in terms of socioeconomic conditions, must indeed be empowered. Besides, this study is only one among the many related literatures citing the worker co-operative model's contribution to the world of work today.

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Chapter 16 Creating Space for Women Leadership and Participation Through Innovative Strategies: A Case of Tribal women's Dairy Cooperatives in Gujarat



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Abstract The role of collective enterprises in fostering social innovations that enhance society's capacity to act and reconfigure social goals has been insufficiently studied in the Indian context. The idea of social innovation consists of an in-depth analysis of social relations and practices at micro and macro levels of the institutions that can lead to positive political empowerment. Vasudhara milk cooperative is an excellent example of social innovation for mainstreaming gender in dairy cooperatives in South Gujarat. The collective action practices of the cooperatives have not only economically empowered tribal women but also created opportunities and space for their sustainable social and psychological development. Historically, dairy cooperatives had a poor representation of women in leadership roles. In the case of Gujarat, the numbers of women leaders at the higher positions of 20 milk cooperative unions are very limited. Vasudhara dairy cooperative, on the other hand, is a unique example of the successful cooperative having women in leadership roles. The milk cooperative has the highest number of women milk cooperatives in Gujarat state with 1238 and 8 women board of directors including the vice-chairman. This case study follows a qualitative research approach for data collection through in-depth interviews and focus group discussions. The theoretical perspectives are based on the theory of gender planning and development. The chapter aims to highlight the innovative women-sensitive strategies of the dairy cooperative to bring socioeconomic and political empowerment of tribal women.

Keywords Dairy cooperatives • Tribal women empowerment • Social innovation • Social movement • Vasudhara cooperative

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16.1 Introduction

India being one of the highest milk producing countries in the world owes to Operation Flood I, II and III for development of dairy cooperatives (Birthal and Joshi 2009). Dairy cooperatives in Gujarat following the famous three-tier Amul model have been a successful example of cooperatives in India (Prasad and Satsangi 2013). The dairy cooperatives in the state have been able to contribute to preserving rural economy to some extent and perform as a source of income generation (Christie 2020). The state has also witnessed different models of collective action and the presence of rich social capital due to the village dairy cooperative societies (Singh and Christie 2019). Although women have been the backbone of much of the dairy activity, the instances of women in leadership positions in dairy cooperatives have been a few and far in between (Shah et al. 2015). Developing gender-sensitive practices to enhance women's participation in the cooperative especially at the management level is challenging and requires innovations in the implementation system (Espinosa 2013).

Social innovations consisting of new practices of institutions at the micro and macro levels emerge to transform social relations and lead to positive political empowerment (MacCallum 2009). Recent work on social innovation sees it as a collaborative concept (Ziegler 2017) with the potential to transform societal relations (Avelino et al. 2019). Social innovation is a window for alternative ways of organising and innovating (Tracey and Stott 2017) and are innovations that are both good for society and enhance society's capacity to act (Murray et al. 2010). Social innovations, according to Cajaiba-Santana (2014: 44), 'are new social practices created from collective, intentional, and goal-oriented actions aimed at promoting social change through the reconfiguration of how social goals are accomplished'. Social innovation research in India is recent, even though India has a rich history of social innovations. The excessive focus on techno-economic innovations in Indian policy has underemphasized the role of social innovations in bringing about transformative change (Prasad 2016).

This chapter takes the case of a dairy cooperative to demonstrate how social innovation works at the margins and how collective enterprises can, through collective, intentional and goal-oriented actions, transform local economies, and reconfigure gender relations. Specifically, the role of the management in tweaking the famous Amul model in designing policies that enable greater participation and leadership of women in dairy enterprises is explored.

It requires the formulation of new policies, strategies, and collaboration between professional managers of the unions and milk producer farmers (Espinosa 2013). Women also require great support and space in their family to come out of their houses and participate in cooperative interventions. The institution of cooperative has to consciously develop an in-built gender-sensitive system and policies. Vasudhara milk cooperative is an excellent example of social innovation for gender mainstreaming in cooperatives that can be replicated in other milk cooperatives of the country. The cooperative made efforts not only for economic empowerment of women but

also creating opportunities and space for the sustainable social and psychological development of tribal women. The milk cooperative union has the highest number of women milk cooperatives in Gujarat state with 1238 and having 8 women board of directors including the vice-chairman. The strategic, innovative, and collaborative efforts to empower tribal women and enhancing their economic, political, and social status has brought a social change in the predominantly tribal region of south Gujarat (Prasad and Kumari 2016).

The successful village milk cooperative societies in the Gujarat state were the roots of the white revolution in India (Ebrahim 2000). The milk unions during that time, prioritized farmers' benefits and the Gujarat state federation has put great efforts in building strong structure and network of the milk cooperatives in Gujarat. However, the aspect of women's leadership and participation in dairy cooperatives somehow remained as the biggest flaw of the dairy cooperatives in Gujarat (Prasad and Kumari 2016). Historically, dairy cooperatives had a poor representation of women in leadership roles. In the case of Gujarat, the numbers of women leaders at the higher positions of 20 milk cooperative unions are limited (Fig. 16.1). Though women are heavily involved in major activities related to dairying business, their level of participation in cooperatives is limited (Basu 2009). The board of management of most of the cooperative milk unions has very few women board directors (Fig. 16.1). This situation indicates that though women are mainly involved in day to day dairying activities, they are neither motivated nor given enough space to come up and participate in the decision-making process. Women's leadership and participation require strong and effective policies and changes at the level of institutional governance. According to the study report by the UN Economic and Social Council 2017, the participation of women is underrepresented in leadership and management-level positions in the

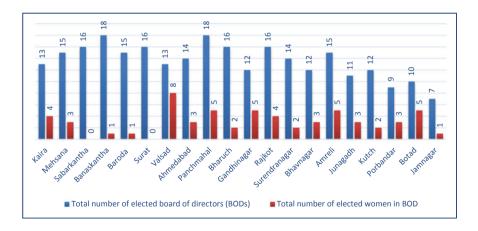


Fig. 16.1 Total number of women in the management board of the milk unions in Gujarat. *Source* Through VKCoE, IRMA—GCMMF milk cooperative data in Gujarat 2017–18

public and private sectors. Only less than one-third of senior and middle management positions are held by women. While 39% of countries worldwide have used some form of quota system to increase women's representation in politics, as of 2017, women make only 23.4% of all national parliaments. In terms of gaining equal participation of women by 2030, the nations will have to effectively develop strategies at all fronts (UN Economic and Social Council 2017). In India, many states like Bihar, Madhya Pradesh, Chhattisgarh, Rajasthan, and Uttarakhand have welcomed the law of reserving women seats to 50% in the Panchayati Raj (Tiwari 2009).

The objectives of the study are to find the way the gaps have been addressed by the cooperative institution to gain gender equity, the way women are practising political power and to study the socioeconomic development of the region through generating political power among women. The study followed the case study research method and collected information through the qualitative methods to understand the innovative strategies and governance of the cooperative to enhance women's participation. There were 23 in-depth interviews and one focus group discussion was conducted including women milk producer members, women and men board members, managers, community development officers, and the managing director of the milk union. The study highlights a need for sensitivity and space required for women's participation in cooperatives. It argues that women's participation requires constant, conscious, effective, and collaborative efforts that automatically foster women's leadership.

The chapter is divided into six parts. The first part is an introductory part with a general overview of the role of women in dairy cooperatives. The second part traces the history of Vasudhara milk union and the way the organization has reinvented its vision by collaborative leadership towards women's participation. The third part focuses on the different innovative policies of the milk union. Part four highlights the innovative strategic ways the dairy has introduced to the system. The fifth part presents the findings and the last section concludes.

16.2 The History Behind the Women's Cooperative Movement

The case of Vasudhara dairy is also known as the 'second white revolution' (Shah et al. 2015). The success story of this milk cooperative cannot be just restricted to the establishment of successful dairying in a tribal region. This case has significant learning on tribal development, grassroots women's leadership, the need for conscious collaboration between professionals and grassroots leaders to create space for gender mainstreaming. At present, Vasudhara milk cooperative has 78,303 women milk producer members, mostly indigenous community women from Valsad, Navsari, Dang, and Dhule districts. The total business of the dairy is Rs. 1677.17 crore. The milk union sets an example for other cooperatives to improve the socioeconomic condition of women and their families through women's participation.

Valsad region is known as the tribal belt in South Gujarat with over 50% of population being tribal, while it is 100% in Dang district. The tribes include Kokna, Dhodia, Bhil, Gamit, Warli, Kotwalia, Kolcha, and Kathodi and they coexist with Patels, Desais, Bohra Muslims, Rajputs, and Koli Patels (Prasad and Kumari 2016). The largely hilly terrain limits the scope of agriculture. Valsad region experienced repeated droughts in the early 1970s that forced tribal communities to migrate to other towns in search of employment. In the year 1966, Valsad region was given its own separate identity as a district that covered Navsari and Dang region too. The separate district sparked the idea of having its dairy cooperative. In 1973, leaders of the cooperative sector passed a resolution to organize village-level milk collection societies across Valsad district under the leadership of Shri. Moghabhai Desai, a veteran cooperative leader and chairman of the Valsad District Cooperative Bank.

In the year 1973–74, a survey conducted by the National Dairy Development Board (NDDB) concluded that the geographical area and socioeconomic condition of people are not favourable for dairy business in the Valsad region. NDDB had listed three reasons in its report for not approving funds for dairying business in the Valsad region; weak animals with less milk production capacity, the poor economic condition of people, and unfavourable geographical conditions of the region for dairying business. Despite this, the dairy was started in 1981 with a 30,000-L capacity plant; however, the first collection during the inauguration was only 3,000 L. This situation made the local leaders nervous. They started evaluating NDDB's report and concentrated on the three major factors that were mentioned to inhibit dairying business in the region. Dr Narendra Vashi and Shri. Moghabhai Desai's leader-manager story is known for their collaboration towards the development of the women's cooperatives in south Gujarat. They decided to continue their plan of development of the dairy cooperative in Valsad region. The dairy initiated Artificial Insemination (AI) services and crossbreed programme in geographically and economically developed tribal regions of Valsad like Navsari, Amalsad, and Gandevi talukas for sustainable development of livestock. The dairy slowly moved towards the interior tribal region and convinced tribal farmers for dairying and other environmentally sustainable interventions like AI, animal feed, and Gobar gas plants.

16.2.1 Developing Women Dairy Cooperatives

In the beginning, the dairy cooperative initiated a project with farmer milk producers to install Gobar gas plants in their houses. However, the bank denied providing any kind of loan to those men farmers. The reason given was that those farmers had already taken loans and did not pay it back to the bank. At the same time, few women from the same village requested the dairy cooperative to provide loans to start the Gobar gas plant. The women wanted to do something on their own. After giving a thought Vasudhara milk cooperative with AGRO Company developed schemes and provided loans to those women. However, within a few months, the loan was paid back by women. The dairy staff started an investigation and they found that women sold

cow dung and woods they saved for fire and paid the loans. This incident generated great interest among the other women to work on their own. Later, the women came forward again and requested the milk union to provide loans to buy cows.

With such positive response, Vasudhara milk union initiated the 'Swavlambi Gramin Yojana' scheme (independent women's scheme) with Bank of Baroda. The first loan given was Rs. 10,000. The amount with the bank loan increased gradually from Rs. 10,000 to Rs. 30,000. The number of cows and women milk producers started increasing with time. In the initial period, two important lessons were learnt by the diary. First, that buffalos were not suitable for Valsad's geographical and climatic conditions. Second, indigenous community women were more capable, dedicated and honest in managing village dairy cooperative societies. Switching to cows helped in reducing the lean-flush period fluctuations in the supply of milk. However, Vasudhara could not restart with buying new livestock, as the banks would refuse to lend money to the men from the villages as there were overdues on their name on account of non-repayment of loans taken to buy buffaloes as well as other loans.

The dairy cooperative understood that practically it was much easier to work with women from the tribal community to successfully empower the region quickly. The tribal women were hard-working and passionate about their work. So the dairy cooperative changed its strategy and decided to work with women as it would be easy to get a loan in the name of women (as they were not defaulters in the financial system). The moment women started earning money, they also started saving money and utilizing the money for their animals, building a house, children education, and so on. The socioeconomic condition of women started to change. According to the present managing director, the milk union observed that as women started earning, they received freedom, support, and respect within their families. Women started setting examples and thereby encouraging more women. Vasudhara thus started working with women and training them in different aspects of profitable dairy management. The women were trained on various aspects of animal husbandry like the scientific rising of heifers, maintenance of crossbreeds, optimal feeding practices, vaccination, building cow sheds, artificial insemination, hygiene and sanitation, and other issues related to animal husbandry. Alongside animal husbandry, Vasudhara also trained women on aspects of dairy management like bookkeeping, auditing, milk collection, etc.

The Vasudhara milk union staff and the Indigenous community women had fruitful collaboration. The milk collection grew from 11,000 L per day in 1985 to 90,000 L per day in 1990. Looking at Vasudhara's success, NDDB offered to finance a dairy plant with daily capacity of 100,000 L under Operation Flood III. Vasudhara started opening Dairy Cooperative Societies (DCSs) in tribal areas. Learning from their experience, Vasudhara gave preference for opening women's DCSs. Out of the total 1526 functional DCSs, 1238 are women DCSs. Women received special offers to buy cattle and other equipment on loan. The loan was given to any woman who had a guarantor from the village. Vasudhara helped the women with documentation and the application procedures for the loans. It also helped women to form self-help

groups (SHGs) to save money. At present, there are 4,325 SHGs with Rs. 89.32 crore savings (Annual report Vasudhara milk union 2018).

16.3 Innovative Efforts to Bring Gender Equity

The theory of gender planning and development deals with the empowerment of women by themselves and achieve equality and equity (Moser 2012). It deals with the policy and practices that mainstream gender. The theory criticizes the development policies in today's time and claims that it is based on wrong assumptions and is discriminative. The feminist theories emphasize the gender roles and requirements that can provide power to women on resources and decision-making process. The theory of gender planning gives importance to working women and women's right to be part of the legal system. It gives the right to women to be known as a breadwinner and not as 'dependent' in cases of working women (Moser 2012). Vasudhara milk cooperative has been successful in promoting such factors and system that has increased women participation. The details of these factors are discussed in the ensuing paragraphs.

16.3.1 Generating Sensitivity and Conscious Efforts Towards Women Participation

According to the vice-chairperson of Vasudhara milk cooperative and one of the active women board member, mainstreaming women in Vasudhara's system was not easy. Villages in South Gujarat are far from each other and require a lot of travelling. The illiteracy rate among the tribal community at that time was very high; it was quite a task to convince the tribal women to be part of dairy cooperatives. During the initial period, women struggled a lot to build their village milk society buildings. There was huge resistance from village panchayat and other political leaders. This means that women were allowed to be the members and earn money through livestock business but as soon as they thought something bigger like buying land and taking a loan of Rs. 8–10 lakh to build milk society house in their villages, it was perceived as a threat. The village men were not ready to share political power with women. In most of the cases, women were stopped to access electricity connection and water supply while building the society house and women had to find other sources to continue their work. In a few cases, women even had to face verbal abuse from local leaders for investing in village milk societies. Women had to go through considerable pressure and trauma while developing their milk collection centres in their villages. In such situations, the women milk producers could stand fearlessly and go ahead with their objectives because they had strong support from the leaders and staff of Vasudhara milk union.

16.3.2 Gender-Sensitive Policies

Vasudhara milk union collaborated with Bank of Baroda, Gujarat Agro, Vasmol to initiate interventions in support of women's cooperatives. The three main policies developed by Vasudhara milk union in favour of women were a big step towards women's participation.

NDDB's Mahila Vikas Programme (NDDB's Women Development Programme)

In 1984, when the women milk societies were formed, the milk union in collaboration with NDDB initiated a special programme to encourage and make women aware of dairying business. According to the community development officers of the milk union, the programme was a success and very helpful in spreading awareness and increasing the number of women milk cooperative society in the Valsad region.

Swavlambi Gramin Nari Yojana (Independent Rural Women Scheme)

It was not easy to initiate women's cooperatives as women did not legally own property on their names to provide as a guarantee for bank loans. After 2 years of hard work, Vasudhara contacted the regional office of Bank of Baroda in Mumbai and developed a scheme by becoming a guarantor. It was indeed a huge step towards gender mainstreaming. The scheme enabled women to take loans for buying cows, biogas plants, cattle feed, water hand pump, chap cutter, etc. The milk union received a great positive response from women cooperative members. The first loan of Rs. 84,000 was given to one milk society for a biogas plant, which was paid back within 6 months by women members. After that, women started taking loans for different purposes and paying back with their income. So far most of the women have been paying the instalments regularly and there are very rare cases where the milk union had to pay the loan and recover the money legally.

Self Help Groups (SHGs)

In 1994, the milk cooperative union decided to form self-help groups of women milk producers so that women can save their income. In the year 2019, there are 4,325 SHGs with Rs. 89.32 crore savings. This was another achievement for Vasudhara milk union. Under this scheme, women can take loans for different purposes like education of their children, family functions, social ceremonies, and so on. Till today, the union forms 30–40 new SHGs every month so that women can save their earnings and avail credit. The scheme has contributed largely to changing the socioeconomic condition of women and making women more economically independent.

Vachharadi Uchher Yojana (Calves Growing Scheme)

Buying a healthy cow requires a decent amount of Rs. 30,000–40,000. Many women could not afford it and therefore Vasudhara introduced a new scheme called 'Vachharadi Uchher Yojana' (calves growing scheme). Under this scheme, women were given calves from the milk union to raise them and generate income.

16.4 Innovative Strategies

As soon as the dairy cooperative understood the practicality and feasibility of working with women, it started exploring different ways that women can be supported financially. The milk union collaborated with government banks and other companies and initiated new schemes in support of women, which created a huge impact. The union never forced or pressurized any women milk producer for not paying back the loan. Instead of that, the milk union created optional schemes like 'Vachharadi Uchher Yojana' from where women can generate their income and pay back their loans. As Vasudhara milk union is conscious of the grassroots realities and situation of the member households, it is able to take care of basic needs of the households and accordingly support them to improve their standard of living and gain sustainable development. For example, it provided guidance and supported them in developing rainwater harvesting, biogas plants, and building toilets with linkages to the biogas plant. At present, there are 35,000 biogas plants in the district. The interventions of Vasudhara were not limited only to the grassroots level. Vasudhara milk union strongly supported women's cooperative leaders to participate in cooperative elections. During the cooperative elections of 1994–1995, the first women vice-chairman was elected securing 154 votes out of 194 votes. At present, Vasudhara milk union has eight women milk producer members in the board of directors out of 14 members.

16.5 Findings

The in-depth interviews with women board members and milk producer members captured detailed information on women's experiences and ability to claim their effective participation in dairy cooperatives. The analysis reveals that a majority of women have pointed out their experiences on the following aspects. Leadership development was experienced by most of the women where they have developed the ability to lead their business and family life on their own. Almost all the women said that after becoming members they take their decisions on their own and even their opinions are valued in their family. They have developed in terms of decisionmaking. Most of the women have witnessed the decentralization of power in their houses as they have gained economic empowerment (Box 16.1). They have become more aware and understood the value of self-dignity. All the women said that they live a more dignified life now than earlier. Women have witnessed social recognition. They participate in different community interventions and discuss their ideas with community leaders. The women said that they are receiving more respect from the community people. Women also accept that they have come up because of the solidarity they have developed for each other and they also understand the value of **unity** and collective efforts. The women have gained the confidence to speak up and fight for their empowerment. Most of the women feel that their ability to

take risks has increased as they have gained economic empowerment. The **socioeconomic empowerment** of women played a huge role in providing women their rights, respect, dignity in families and society. Women became independent and gained the power to participate in the decision-making process. As women started generating income, they started investing their income on their children and families (Box 16.2). The family members started seeking their opinions before making any decisions. This way women gained more respect. Women also received more **knowledge and confidence** by interacting with other women in groups and learning from each other. The training programmes also built their capacities and **developed life skills** like communication skills, networking skills, resource management skills, coping skills, etc. The managing director Dr Narendra Vashi strongly believes that 'apart from the fact that women are hardworking and sensitive, they are inherently innovative'. He considers it as one of the reasons behind the success of women cooperatives.

Box 16.1 The experience of Sudhaben Patel, Vice Chairperson, Vasudhara Milk Union.

Through leadership and participation in Vasudhara milk cooperative, women have been able to gain respect in their villages and local leaders. I share equal power and space with other board of directors and communicate my opinions with confidence.

Box 16.2 The experience of Kalavatiben Patel, Board member.

My participation in Vasundhara milk cooperative has empowered me in such a way that I could provide good upbringing and support the education of my son to become a doctor. He has started his clinic in our village and he has been serving since last five years.

16.6 Conclusion and Discussion

Women have always struggled in receiving recognition when it comes to the ownership of land, credit, and other benefits (Rogers 1980). The theory of gender planning and development aims to provide inputs in achieving both practical and strategic gender requirements. The theory is critical and finds conflict in the present planning system and therefore demands to transform the processes for gender equality. It proposes institutionalized gender training that can lead to the change (Moser 2012). Vasudhara dairy cooperative is an example of social innovation for gender mainstreaming through strategic and collaborative policies and practices. Through its constant efforts, it is the only milk cooperative in the Gujarat state to be able to achieve the highest number of women in the board of directors (Fig. 16.1).

Social innovation refers to new ideas formulated to meet social goals and services and activities that are motivated to attend social needs. Special efforts are made through organizations (Mulgan et al. 2007). Though there is always a risk and unpredictability in bringing institutional change, it helps an institution grow if the process is monitored effectively. Change can be initiated by an individual, social movement, and any other organization. In most of the cases, social change is initiated by heroic leaders who have a charismatic personality (Reicher et al. 2005). These leaders transform the world by inspiring people with their innovative ideas and passion to achieve the vision. Many times it is brought by social movements. These movements have their roots in ideas. The number of campaigns, forums, and movements is increasing, which encourages and empowers people to fight for their problems rather than waiting for the state or leaders.

This case study examined the planning and strategies of Vasudhara milk cooperative that enabled greater women's participation and leadership in cooperatives. It can be identified as a social movement by local leaders and women milk producers of Valsad region. The chapter highlights the factors that can foster space for women's participation in cooperatives through conscious and effective collaborative leadership. There are many factors behind the lack of participation of women in cooperatives, for example, like increased labour work (including household chores), underestimating women's potential, the domination of others, social pressure and ill-treatment (Shah 1998). Real empowerment has to be materialized and a value-based approach has to be followed. After that only we will be able to produce effective women leaders at a larger level (Walby 2005).

Vasudhara milk cooperative has innovated new interventions that favoured women and formed such policies that ensure greater women's participation. Gender mainstreaming has been the main agenda of this cooperative that has achieved sustainable development of the region. Vasudhara milk cooperative is an excellent model and can be replicated in other milk cooperatives of the country. The efforts made by the dairy cooperative not only brought economic empowerment of women but also created opportunities and space for the real sustainable social and psychological development of tribal women and their families.

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Chapter 17 **Democratizing Capital: Building Union Coop Partnerships Through Economically Targeted Investing** and Crowdfunding Innovations



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Minsun Ji and Tony Robinson

Abstract In many nations, workers possess a promising tool to catalyze social innovation by advancing cooperative business models and mutualistic business practices. This tool is the power of worker's capital itself, pooled in massive pension funds, deployed in targeted private equity funds, and distributed in the pocketbooks and individual investments of workers themselves. The challenge is how to coordinate and deploy the potential power of this "workers' capital" in a way that can humanize the broader economic system. This chapter explores how recent policy innovations in equity crowdfunding laws across the world, together with technological innovations (e.g., the expansion of social media and the rise of internet investment portals), have opened new paths for social innovation through a democratized deployment of investment capital by worker cooperative advocates. If strategically pursued, equity crowdfunding offers a pragmatic tool to democratize capital in labor-friendly ways. Through equity crowdfunding, large numbers of average investors can pursue socially conscious goals by coming together to support cooperative enterprises, built around socially innovative goals of democratic worker control, concern for the community, mutualism and equity among members. Labor unions can play an important role in strategically pursuing these socially innovative possibilities by promoting crowdfunding opportunities to their members.

Keywords Crowdfunding · Worker cooperatives · Labor unions · Economic democracy · Securities

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17.1 Workers' Capital: Promising Tool of Social Innovation

In today's era of increasingly mobile capital and corporate centralization, workers face profound challenges: uprooted communities, stagnant and declining wages, economic informalization, and increasingly precarious employment (Arnold & Bongiovi, 2013; Standing, 2011). But organized labor has a portentous tool at its disposal in facing these adverse conditions: the power of worker's capital itself, pooled in massive worker's pension funds, deployed in targeted private equity funds, and distributed widely in the pocketbooks and individual investments of workers themselves (Marens, 2004; Rifkin & Barber, 1978). The potential power of this workers' capital to catalyze social innovation by advancing cooperative business models and more communitarian/mutualistic business practices is significant, and this potential has become even more real due to recent technological and policy innovations that have opened crowdfunding paths for a democratized deployment of investment capital.

The scale of global "workers' capital" is immense. The total assets of the world's 300 largest workers' pension funds alone were \$18.1 trillion in 2017—accounting for approximately 1/3 of the total investment capital in the world (Baker, 2018). OECD statistics show that in 2018 US pension assets were equal to 78.9% of the entire national GDP (https://stats.oecd.org; see also Sielman, 2019). In addition, workers invest in individual IRAs (Individual Retirement Account), hold stock in ESOPS (Employees State Ownership Plan) invest in targeted private equity funds, and increasingly provide direct support to small- and medium-sized businesses seeking small-donor support through such new innovations as crowdfunding.

All told, "workers own much of the world"—at least indirectly—through their own investments (Quarter, Carmichael, & Ryan, 2008, xiv). The challenge is how to coordinate and deploy the potential power of this "workers' capital" in a way that can humanize the broader economic system—how to help workers find their voice by developing a self-conscious, pro-labor "workers' view of capital," and a set of investment tools to best express that view (Hebb & Beeferman, 2008; Quarter et al., 2008; Rifkin & Barber, 1978).

In terms of organizing the voice of labor in the cause of democratizing capital, labor unions and worker cooperatives have long been key institutions of labor empowerment. However, ever since workers' pensions and other investment funds grew to significant scale in the twentieth century, there has been little active role for these institutions to play in managing workers' capital. Instead, the massive pools of worker capital in pension funds—"deferred wages that belong to them" (McGill, 1984)—have been mostly controlled by a small number of professional financial managers, who have traditionally focused on investments calculated to generate maximum rates of return, with little consideration of the kind of companies invested in, or of the social consequences of that investment. As an organized force, labor has been denied a strong role in deciding how to allocate workers' substantial investment capital (Block, 2014; Malleson, 2014). The result has been predictable. "The financial professionals hired to manage multi-employer pensions frequently invested and

voted against union interests" (Marens, 2004: 112). In Canada, for example, 10 well-heeled money managers control the investments of 44% of all union pension assets (Quarter et al., 2008). Such managers pursue maximal rates of return before all else, are external to the labor movement, and typically do not bring a view of labor-friendly investing in their management philosophy.

However, recent decades have seen a challenge to this traditional investment model through a surge of interest in what has been called "socially responsible investing," "impact investing," "relational investing," "targeted investing," or "double/triple bottom-line investing" (Feola, Parente, Onofrio, & Pellegrino, 2017; Hebb & Beeferman, 2008; Quarter et al., 2008). As part of that growth of socially responsible money management, the recent introduction of equity crowdfunding offers an innovative tool in efforts to democratize capital in ways friendly to workers. Equity crowdfunding—the mobilization of small scale investments from a crowd of individuals, typically through internet appeals—has recently been legalized in advanced economies across the world and thousands of small businesses are now using crowdfunding portals to raise billions in equity investments (Kang, Wang, & Zheng, 2016; Pekmezovik & Walker, 2016).

This chapter explores how recent policy innovations in securities law in nations across the world, together with technological innovations (e.g., the expansion of social media and the rise of investment portals on the internet), have opened new paths for social innovation by worker cooperative activists and advocates through an equity crowdfunding revolution. If strategically pursued, equity crowdfunding offers a pragmatic tool to democratize capital in labor-friendly ways. Through equity crowdfunding, large numbers of average investors can pursue socially conscious goals by coming together to support cooperative enterprises, typically built around socially innovative goals of democratic worker control, concern for the community, mutualism and equity among members (Esim & Katamjamaki, 2016).

Equity crowdfunding is a transformational alternative to traditional business funding practices, which rely on a highly centralized banking system or a tiny number of venture capitalists and angel investors (Pekmezovik & Walker, 2016). By challenging the dominance of centralized business finance and uniting crowds of small investors around socially responsible business practices, equity crowdfunding is socially innovative by offering what Zapf (1989, cited in Schreuer 2010) calls "new ways of satisfying societal needs," or Schreuer (2010, 102) calls "a favorable new form of setting up social and economic relations."

Though the potential for significant social innovation through crowdfunding is real, this result will only be achieved by creative use of the new equity crowdfunding tool by advocates on the ground. To more fully realize the potentials of equity crowdfunding, cooperative activists and other labor leaders will need to adopt a strategic "process of spreading social innovations not only by adaptation but exaptation" (Gallego-Bono & Chaves-Avila, 2019, 1). Changes in securities law in the USA and across the globe were neither directly aimed at expanding the cooperative sector nor at offering labor/union activists a new tool for challenging traditional business relationships, but there are intriguing examples of just those results emerging

through specific crowdfunding efforts. Pathways to new business models, organizational forms, and social relationships have been opened up, and if activists creatively adopt the social innovations possible along these pathways, we may find that a flowering of cooperative clusters "paves the way for the subsequent leap via exaptation of these innovations in the whole of the territory" (Gallego-Bono, & Chaves-Avila, 2019, 1).

To examine these possibilities, this chapter explores the social innovations possible through equity crowdfunding and forecasts how specific exaptations of global changes in securities law open new possibilities for social innovation partnerships between worker cooperatives and labor unions. Using the case of the USA, this chapter shows how labor unions can now utilize equity crowdfunding to help workers deploy their capital for worker-friendly social impact in the broader economy, such as through economically targeted investment in socially responsible companies, including worker cooperatives.

Our research design can best be described as policy analysis forecasting. Such forecasting provides a "prospective vision of policy outcomes" (Dunn, 2016, 117), thereby contributing to stakeholders' ability to understand and shape the future consequences of current policy. We aim to provide a theoretically and evidence-informed vision of policy outcomes that could plausibly emerge based on the insights and creative actions taken by cooperative practitioners and advocates, in response to changes in investment securities law. Dunn (2016) calls this approach a form of "conjectural" policy forecasting that identifies potential future social states that could emerge in response to policy changes, if that normative future is actively pursued by relevant stakeholders. In this conjectural policy forecasting tradition, the goal of this chapter is to inform cooperative practitioners and advocates on the ground "so that the best possible course of action might be chosen among the possibilities which the future offers" (Taviss 1969, cited in Dunn 2016, 118).

17.2 Constraints on Workers' Capital: Historic Policy Obstacles to Social Impact Investing in the USA

Considering the massive accumulation of capital in workers' pension funds, Drucker (1976) coined the term "pension fund socialism" and documented that over 50% of all investment capital in the USA was on pace to being "owned" by workers through pension funds and private stock investments. However, there was little potential that such broad-based worker ownership of capital would result in fundamental restructuring of the capitalist system in more worker-friendly ways (such as higher wages or more businesses with a "social purpose"), largely because public policy had long required workers' pension funds to be invested with a sole focus on maximizing returns for individual workers. Security regulations disallowed targeted investments to advance social causes or pro-union workplaces.

In the USA, for example, the Taft-Hartley Act of 1947 required worker pension funds to be governed with a minimum of half the pension board seats controlled by employers, and in accordance with strict rules that the funds were to be used only for investing to benefit individual workers, and not for corollary union-defined social causes. As a result, after the Taft-Hartley Act, most unions chose to play little to no part in investment decisions of pension funds, as company executives controlled the funds, professional fiduciaries managed the portfolios, and the general assessment was that funds must be invested only with attention to generating robust rates of return and without focus on such social causes as supporting union jobs, high wages, or community economic stability (Fogdall, 2001; McCarthy, 2014).

This interpretation was more clearly codified into law in the USA with passage of the 1974 Employee Retirement Income Security Act (ERISA), which was understood as mandating that fund managers focus only on a "profit-driven investment strategy" before all else, as a means to maximize worker's retirement income (Quarter et al., 2008, 5; see also Marens, 2004). It was perceived that fiduciary obligations under ERISA required a unitary focus on maximizing fund returns and prohibited pension fund managers from broader considerations of social, environmental, ethical or worker empowerment goals, in deciding where to deploy workers' retirement capital. In this way, although Taft-Hartley and ERISA allowed labor unions to share trusteeship on pension plan boards, unions were not allowed to push these boards to invest in socially responsible companies or to consider "extra-financial factors, such as the environment, corporate ethics, or social impact" (Weststar & Verma, 2007: 388; see also Adler & Young, 2010; Hebb & Beeferman, 2008; Marens, 2004; Yaron, 2008).

Such constraints on the deployment of "workers' capital" led Leo Gerard (previous president of the United Steelworkers of America) to argue in 2001 that labor's investment capital had "not altered financial market operations in any significant way...All too often, investments made with our savings yield short-term gains at the expense of working people" (Fung, Hebb, & Rogers, 2001). Amalgamated Clothing and Textile Workers Union Secretary-Treasurer, Jacob Sheinkman, drew the same conclusion.

The massive sums accumulated in pension fund assets are often used against the direct economic interests of the workers in whose name the funds were created. The banks and insurance companies in charge of such funds, under agreements with sponsoring companies or labor unions, have used them in ways that foster and even hasten the flight of jobs and capital to the largely unorganized areas of the sunbelt or overseas. The money managers would say they are seeking a better business climate, but almost invariably the pension fund assets—in effect, billions of dollars of deferred wages of American workers—end up subsidizing a climate hostile to workers (cited in McCarthy, 2014, 471).

17.3 Putting Workers' Capital to Work: The Rise of Socially Responsible Investing

In recent decades, the historic policy obstacles to labor's financial activism in the USA have eroded. As a response to growing frustration with traditional pension fund management practices, the AFL-CIO executive council in 1991 announced new

pension investment principles that challenged the uniform focus on maximal rates of return without consideration of corollary social impact. Fund managers should take into account a "balancing of interests" the AFL-CIO declared, and when choosing companies to invest in, managers should balance considerations of short-term financial benefits to worker-investors with considerations of the "long-term interests" of plan participants in such things as "continuous employment," "improvement in wages and benefits," and "promotion of local economic development" (Loxley, 2008).

As part of that movement toward more socially responsible investing, the Department of Labour issued a 1994 interpretive bulletin regarding ERISA, which declared that it was legally permissible for fund investors to consider corollary social benefits and long-term effects on worker conditions and community health, in addition to their fiduciary duty to pursue a reasonable rate of return. This bulletin critiqued the "misperception [that] exists within the investment community that investment in ETIs [economically targeted investments] are incompatible with ERISA's fiduciary obligations" (Manley, Hebb, & Jackson, 2008: 8). As long as fund managers provided full disclosure of goals and pursued a "reasonable" rate of return, the bulletin declared it permissible for pension fund investors to pursue economically targeted investments designed to generate new jobs and to provide salutary "local economic ripple effects," such as "affordable housing, urban revitalization, support of small and medium sized enterprises, renewable energy, and clean technology" (ibid: 8).

A growth in "socially responsible investing" followed these early 1990s announcements. Socially responsible investing was defended as a moral cause—supporting sustainable, healthy, and equitable local communities—but also was increasingly seen as an economically viable strategy to pursue strong rates of return. Though some studies found economically targeted investing to result in less well-performing funds (Manley et al., 2008), many other studies found that socially responsible firms often performed as well as, or even better than, firms with a record of socially irresponsible behavior (i.e., paying low wages, providing no health care, hiring contingent work forces, or pursuing outsourcing) (Comeault & Wheeler, 2008; Yaron, 2008). As a result of both ERISA's regulatory revisions and the growing understanding of the possibility of robust returns, capital invested in designated "social impact" funds experienced a 14-fold increase between 1995 and 2005 (growing from \$12 billion to \$179 billion), amounting to 10% of all US investment dollars by 2005 (Quarter et al., 2008).

One strategy of socially responsible investing is economically targeted investments (ETIs) in companies or funds with a labor-friendly social purpose (such as developing regional green energy sources, or supporting high-wage jobs) (Bruyn, 1987). There is an increasing number of labor-sponsored ETI funds, targeting investments in specific asset categories: e.g., real estate, green energy, the agricultural sector, or labor-friendly businesses. Examples include the AFL-CIO's Housing Investment Trust, the Builders' Fixed Income Fund, the Roofers' Loan Fund, the CIGNA America Fund, the Multi-Employer Property Trust, the Boiler workers' Go-Generation, and Infrastructure Fund and the United Food and Commercial Workers' Shopping Center Loan Fund (Calabrese, 1999; Croft, 2009; Croft & Butte, n.d.; Loxley, 2008)

In the world of economically targeted, union-friendly investing, it is Canadian labor that has led the way. Almost 40 years ago, the Canadian Labor Congress endorsed the view that organized labor should achieve greater control of the investment of their pension funds through direct private equity investing (Quarter et al., 2008). In accordance with that view, in 1983, the Canadian Labor Congress began to establish private equity "Labor Solidarity Investment Funds" (LSIF) with a goal "first, to empower local residents and workers in their ownership and decision-making of companies in their jurisdiction, and, second, to foster economic growth in the community" (Cumming & MacIntosh, 2007, 452). All of these LSIFs pursue social impact goals, such as sustaining small businesses, supporting high-wage union jobs, and prioritizing worker-education programs. Only individual investors can invest in these funds, and only in small amounts (typically under \$1000, Canadian), but the Canadian national government is supportive of the funds and offers tax credits to offset individual investment costs, which has helped the funds to grow dramatically. One of the most important Canadian LSIF is the Quebec Solidarity Fund (QSF). The QSF was the first labor sponsored fund in Canada, and includes both a core fund, and specialized sectoral and regional funds. These OSF funds soon became the largest source of all venture capital in the nation (providing 1/3 of all Canadian venture capital), supporting about \$4 billion in investment by about 330,000 Quebecers into thousands of small businesses and supporting tens of thousands of well-paying jobs (Lincoln, 2000).

There has been growing labor experimentation with direct private equity investment in the USA as well. For example, California's goliath CALPERS fund signaled its growing interest in the field with a 2000 release of a private equity ETI fund disclosure, presenting targeted private equity investment as a strategy to build up the state economy while helping socially conscious employers (Manley et al., 2008). Pursuing this goal (in partnership with ten different private equity firms who offered an initial \$725 million investment, to match CALPERS \$475 million investment), CALPERS has used its private equity fund to support businesses like the Evergreen Lodge (a San Francisco lodging business to help at-risk youth), the Beacon Fire and Safety Company (a firm committed to hiring low-income workers and helping them develop workplace participation skills), and Picadelly Cafeterias (owned and managed mostly by minorities)—and earned a healthy return rate of 16.3% in the first 4 years after investment (Manley et al., 2008).

Similarly, the Union Labor Life Insurance Company (ULLICO) has established a private equity fund dedicated to "creating and preserving union jobs" (Calabrese, 1999). The fund is open only to institutional investors and operates in accordance with the belief that "direct investing in entrepreneurial young companies, and in middle-market companies needing expansion capital can yield both premium financial returns and "social" leverage—that is, the ability to demand special covenants, requiring union neutrality and card check recognition, union-build construction, environmental responsibility, and other corollary benefits" (Fung et al., 126). Another notable US fund is the Invest Northwest fund, created by the Northwest Area Foundation in 2004 to foster "quality jobs that provide higher wages and greater levels

of benefits than most private sector companies across the eight-state region" (Pacific Community Ventures, 2017, 4).

Worker cooperatives are well suited to the worker-empowerment criteria of these labor-solidarity investment funds, providing unions a unique investment opportunity to support labor-friendly work environments, even while delivering returns to investors. In fact, while unions have found their strength eroding in the new global order of flexible, decentralized production chains and capital mobility, small and decentralized worker cooperatives have grown rapidly, as their organizational model matches the decentralized and fluid dynamics of today's global world. In some countries, like Spain and Italy, worker cooperatives have grown to constitute a sizable share of the national economy. In the USA as well, the trend of economic informalization has been coupled with expanding worker cooperatives, especially within the service sector, and with an especially notable growth of immigrant worker cooperatives (Ji & Robinson, 2012). Some studies have found that worker coops proved more resilient than mainstream businesses after the 2008 economic crisis, creating more postrecession jobs in many countries than has the traditional business sector (CICOPA, 2012).

Though worker cooperatives are growing, they constitute a very small sector in the overall economy and face a profound "capital gap" challenge in accessing adequate investment capital to support potential growth. Even as worker cooperatives blossom, with a model of decentralized, small-scale employee ownership that responds well to the growth of the precariat in the informal global economy, these worker—cooperatives still lack mass numbers, organizational power, and—most importantly—adequate access to capital resources (Bauer-Leeb & Lundquist, 2012; California Financial Opportunity Roundtable, 2012; Lansley, 2015; Lehner, 2013; Pekmezovik & Walker, 2016; Schwienbacher & Larralde, 2010).

One problem is that most worker cooperatives are not listed on public stock exchanges. Therefore, they are beyond the reach of the bulk of national investment capital. In addition, worker cooperatives face difficulties in attracting private equity investments because the typical "social purpose" goals of worker cooperatives are often seen by investors as undermining financial returns. Furthermore, the unfamiliar corporate governance and legal structures of worker cooperatives can dissuade traditional investors (Artz & Kim, 2011). These obstacles explain why a 2003 bank of England study found that "social entrepreneurs indeed have a hard time accessing traditional debt finance," and why the business plans of small social entrepreneurs are rejected 98% of the time by traditional venture capitalists (Lehner, 2013; Ridley-Duff & Bull, 2011).

Though labor ETI funds seek alternative, labor-friendly investment opportunities, there is hardly any mention of a worker cooperative focus in the investment principles guiding these funds (Quarter et al., 2008). And although there is a National Cooperative Bank in the USA (with over \$1.6 billion in assets), this bank targets funds to cooperatives of all sorts (not just worker-owned cooperatives) and less than 5% of its loans and investments go to worker-owned cooperatives (Witherell, 2013). The Canadian Cooperative Investment Fund features similar patterns.

Worker cooperatives are underserved by existing capital markets. The potential for targeted union-fund investment to make a significant difference in this sector is strong. With their decentralized and flexible business model, worker-owned cooperatives are a good match for today's globalizing informal economy—yet they lack adequate capital to fully exploit their potential. Unions have deep wells of intellectual capital, financial resources, and organizational might, and yet their membership and power are shrinking as they face new economic realities. Both cooperatives and unions, therefore, can benefit from partnership and collaboration (Witherell, 2013). Direct private equity investing through regional labor funds such as the Invest Northwest Fund provides one model for how unions can better fund local worker cooperatives. But there is a recent innovation in both policy and technology that has the potential to allow small- and medium-sized enterprises, including local worker cooperatives, to go beyond reliance on large private equity investments by institutional funds or affluent "angel investors" and to instead pursue broad-based public investment in small sizes, through the open market—equity crowdfunding. If strategically pursued by cooperatives and labor advocates, the technological and policy innovations that support crowdfunding offer an opportunity for significant social innovation as well.

17.4 The Equity Crowdfunding Revolution

Taking advantage of the democratization of information and connectivity afforded by social media, crowdfunding appeals in the last decade have raised millions of dollars in donations to support thousands of small-scale initiatives. Crowdfunding—the mobilization of small scale donations or investments from a crowd of individuals—has funded activities ranging from indie band tours across America (\$60,000 raised by the UK rock band Marillion), the production of independent movies (*The Age of Stupid* film project raised £1.5 million British Pounds), and social purpose ventures (the Tesla Museum project raised \$1.4 million). Even before crowdfunding was fully legalized as an investment strategy in 2012, there were over 500,000 crowdfunding appeals made over the internet through crowdfunding portals like Kiva, Kickstarter and IndieGoGo, which ultimately attracted millions of small donors who gave over a billion dollars to small businesses nationwide (Best, Neiss, & Jones, 2012; Drake, 2012).

Before a recent wave of reforms legalizing crowdfunding as an investment strategy in most OECD nations, all crowdfunding transactions were required to be *donations* to small businesses, rather than *equity investments*. Under US securities law, for example, it was illegal for average people to give their support to a small or local business with the expectation of economic return. This is because prior to the crowdfunding law, companies were prohibited from offering equity to the general public without full registration with the Securities and Exchange Commission (SEC) and adherence to all SEC rules, which is costly and complicated. Furthermore, only SEC-accredited investors (less than 2% of the population [Shuman, 2009]) were allowed to

directly purchase those equity securities, substantially limiting the kinds of companies allowed to offer their stock publicly and the pool of people who were allowed to invest in those companies.

The consequence of such rules, dating back to the US Securities Act of 1933, was to centralize capital formation in a small circle of accredited investors, who were predisposed (and restricted by law) to direct their investment attention to established, SEC-registered companies—companies that had the financial wherewithal to pay lawyers and financial experts handsomely to prepare their public offerings. Though small businesses could seek crowdfunded *donations* to support their visions of social entrepreneurship, the scale of likely donations was significantly limited by the fact that even social impact investors are understandably interested in turning a profit on their investment, and not just in donating to social causes (Rey-Marti, Mohedano-Suanes, & Simon-Moya, 2019).

But in recent years, multiple countries—mostly in North America or Europe—have changed their securities regulations to facilitate crowdfunding (Hornuf & Armin, 2017; Pekmezovik & Walker, 2016). For example, the USA changed its security rules through the Jumpstart Our Business Startups Act (JOBS ACT) in 2012. The JOBS Act amended federal securities law to benefit small and emerging businesses by easing rules on public offerings by small businesses and by broadening the base of people allowed to buy equity in those companies. In signing the law, President Obama responded to a groundswell of pressure from innovative venture capitalists, small businesses locked out of traditional venture capital circles, and progressive economic thinkers who all supported crowdfunding liberalization as a way to decentralize capital formation, foster innovative businesses and social enterprises, and encourage small business florescence (Best et al., 2012; Bradford, 2012; Sustainable Economy Law Center, 2012).

Perhaps the most dramatic reform was Title III of the JOBS Act, which created a new exemption from federal securities law for "crowdfunded" securities offerings. This exemption substantially democratized investment into small businesses, by making it possible for small businesses to raise money through small investments from a large number of people, even without filing an array of financial and registration documents with the SEC under traditional securities law. Furthermore, small-scale investors under Title III do not need to be SEC accredited (Bradford, 2012; Vidra, 2012). Anyone in the public who is attracted to a small entrepreneur's internet crowdfunding appeal can invest in the company, joining with a crowd of other small donors in mobilizing what can be substantial cash infusions into the business. In 2012, for example, Pebble Watches raised more than \$10 million dollars in less than 30 days from 69,000 small web donors (Heesun, 2013).

There are, of course, restrictions meant to direct crowdfunding to small businesses and to balance the desire for freely flowing, decentralized capital investment with the need to minimize investor risk and the dangers of financial chicanery or ineptitude by either businesses or investors. In the USA, for example:

 A business can sell no more than \$1 million of securities in the aggregate to all investors.

- No single crowdfund investor can purchase more than \$2,000 of securities or 5% of the investor's annual income or net worth (10% for investors with an annual income or net worth exceeding \$100,000).
- The transactions must be conducted through a registered funding portal or broker who must adhere to rules meant to ensure investor knowledge of the risks involved.

Because crowdfunding avoids the necessity to incur expensive legal and compliance costs of a traditional stock IPO, it allows small entrepreneurs access to investment by the general public, thereby contributing to the "democratization of the financial markets" and opening up avenues for channeling of worker's capital into social ventures (Hernando, 2016; Hornuf & Armin, 2017). Small companies with unique business models now have an alternative source of venture capital, which has historically been controlled by a small circle of traditional profit-seeking investors. These small companies can now turn to community finance circles—crowds of small-scale donors contacted across the internet and who are more likely than accredited Wall Street investors to support small, local businesses with a "social purpose" (Lehner, 2013). By decentralizing processes of capital formation, crowdfunding undermines the power of traditional capital investors, transfers the social web's model of informal cooperation to the world of investment, "and leads to democratization and transparency in finance" (Rothler & Wenzlaff, 2011, 5; see also Best et al., 2012; Fink, 2012).

The USA legalized crowdfunding in 2012. Austria followed suit in 2013. Crowdfunding was legalized in the UK, Belgium, and the Netherlands in 2014 and in Germany, Spain, and Italy in 2015. Malaysia, Singapore, Thailand, and India also began substantial moves to allow crowdfunding starting during that same period (Twoon & Chow, 2016). China started to liberalize its tight securities regulations in 2015, allowing for internet-based investing for the first time, though national legislation still restricts crowdfunding appeals to private offerings to select circles of qualified investors. Even so, there are now approximately 120 equity crowdfunding internet portals doing business in China (Huang, Chiu, Mo, & Markerison, 2018), and by 2018, China had become the largest market for crowdfunding in the world—accounting for 37% of the global market (PR Newswire, 2019).

With this expanding list of countries adopting legalizing versions of crowd-funding, a new paradigm of socially innovative investment possibilities has emerged (Hernando, 2016; Hornuf & Armin, 2017; Sadzius & Sadzius, 2017). Supporters hail crowdfunding as ushering in an era where average people will have the ability to support local business or social purpose business ventures, and where businesses can turn to sources of capital beyond the Wall Street moguls who prioritize high-profit rates over such concerns as local embeddedness, social purpose, or fair labor practices (Elk, 2012).

Examples of "social impact" businesses funded through the new tool of equity crowdfunding abound. In Italy, a sustainable tree harvesting company (Paulownia) raised 500,000 Euro in 56 days for their business startup. Romania has embraced crowdfunded social entrepreneurship through their Institute for Social Economy, which has facilitated a range of arts and culture business enterprises such as creative

recycling businesses, arts pavilions, and renewable energy companies (Enache & Morozan, 2014). Spain's *La Bosa Social* is an equity crowdfunding portal featuring dozens of small social enterprises that have averaged a rate of return of about 20% over many years (Rey-Marti, Mohedano-Suanes, & Simon-Moya, 2019). Though equity crowdfunding is still largely concentrated in the developed world, The World Bank has reported on a wide range of "green shoots" across the developing world—social entrepreneurs and incipient crowdfunding portals from Africa to South Asia to Latin America—that are eager to embrace the crowdfunding revolution as a solution to the long-existing capital gaps in the developing world (Best, Sherwood, Richard, Lambkin, & Raymond, 2013; Pekmezovik & Walker, 2016). In these ways, the rise of equity crowdfunding represents a democratization of capital formation—a radical "disruption of the finance supply chain and distribution mechanism" that has been previously controlled by a tiny percentage of accredited institutional investors, and that has the potential to reach underserved capital markets across the globe (Drake, 2012).

The scale of democratic capital that could be unleashed through crowdfunding is immense. Even before America's JOBS act, when crowdfunding could only be through donations without any equity return, \$750 million was given through 532,000 American crowdfunding campaigns (Best et al., 2012). In the wake of global legal reforms like the JOBS Act, available crowdfunding portals have dramatically expanded worldwide, and hundreds now exist, even in tightly regulated nations like China (Huang et al., 2018). Just between 2014 and 2015, crowdfunded capital grew from \$16 billion to over \$34 billion worldwide, and by 2016, crowdfund capital worldwide had surpassed the entire traditional venture capital industry, which averages about \$30 billion each year (Barnett, 2015). Though other estimates put global crowdfunding amounts at lower levels (one market research study reports global crowdfunding levels of just over \$10 billion in 2018) (PR Newswire, 2019), it is clear that crowdfunding levels are significant and growing fast. In North America, 14% of all new entrepreneurs now raise their startup up capital through crowdfunding appeals (Rey-Marti, Mohedan-Suanes, & Simon-Moya, 2019). In Italy, another early adopter of enabling legislation, equity crowdfunding levels grew at an average annual rate of 85.7% from 2005 to 2015 (Feola et al., 2017). Overall, North American levels of equity crowdfunding grew 480% during this period, while EU crowdfunding grew 1036%, and Asian crowdfunding levels grew by 2290% (Huang et al., 2018). Observing these trends, the World Bank predicts that crowdfunding investments could reach \$100 billion a year in developing countries alone by 2025, while more conservative estimates a \$30 billion a year market in 2025 (Gaskell, 2016; PR Newswire, 2019).

The growing scale and ease of crowdfunding offer unions a socially innovative way to maximize the deployment of "workers' capital" in pursuit of a humane economic system. But it important to understand that the crowdfunding revolution, to date, has still largely attracted only more wealthy, accredited investors, who can give larger sums of money than average individuals under provisions of most nations' crowdfunding laws. In the USA, for example, Title II of the JOBS act allows companies to raise unlimited amounts through crowdfunding, but only from accredited

investors with a personal net worth of at least \$1 million, not counting their home value (or annual income of more than \$200,000 a year). Crowdfunding from affluent investors who invest large amounts under TITLE II has so far substantially outpaced crowdfunding levels from less affluent investors under TITLE III of the JOBS act, which allows individuals of any income or net worth level to invest, but only up to \$2,000 (or 5% of their annual income). Furthermore, under TITLE III, companies can raise no more than \$1 million total in a crowdfunding campaign. One study found that in the early years of crowdfunding, the likelihood of a startup business obtaining adequate financing through crowdfunding was no higher than for businesses utilizing traditional financing routes of international venture capital funds and angel investors—with success rates of 1–5%. "The author concludes that there are presently few genuinely entrepreneurial ventures funded through crowdfunding platforms" (Pekmezovik & Walker, 2016, 389).

What these patterns reveal is that although crowdfunding has opened up substantial new avenues for social impact investing by average people, the fact is that these new investment opportunities have so far not been much utilized, and traditional accredited investors still dominate the field through their unlimited, large investments. There is opportunity for broader public participation and a more democratized use of crowdfunding tools to disrupt traditional investing practices, but creative leadership by intermediaries like labor unions may be needed in order to best pursue these unfulfilled opportunities of the crowdfunding revolution.

How can unions, in specific ways, help channel crowdfunding dollars from a broader pool of average workers into labor-friendly enterprises? To be clear, unions would not be allowed under the US JOBS Act (or under most other nation's crowdfunding legislation) to channel their pension fund investment dollars or any other institutional investment fund into crowdfunded worker cooperatives—simply because the JOBS Act (and similar enabling legislation in other countries) targets individual donors and frees them to make small investments in non-SEC registered businesses. Nor would union leadership be able to offer specific investment advice to their members, urging them to invest in any specific crowdfunded business, as such formal investment advice remains illegal under most crowdfunding legislation, except when done by accredited brokers, promoting SEC-registered companies. But there are several ways that unions might operate within the parameters of new crowdfunding laws to build on the latent support that their members might have for worker cooperatives and to bring the efforts of unions and coops closer together through campaigns targeting small-scale nonaccredited investors. We lay out some possibilities in the ensuing paragraphs.

17.4.1 Educate Workers About Crowdfunding

Labor unions could provide education for their members regarding crowdfunding dynamics, with a goal to move their members toward broad-minded "social unionism" (DeMartino, 2004; Waterman, 1993). While union education campaigns have

often been confined to specific union issues, such as employer–employee relations and workplace safety, recent approaches in union education have embraced more diverse subjects, helping union members connect their own struggles with surrounding community issues, ranging from sustainability issues to disability and immigrant rights and even to gay rights (Ceronsky, 2012; Levesque & Gregor, 2006; Luce & Nelson, 2004; Read, 2007).

Considering crowdfunding education campaigns, unions could partner with community organizations to help members understand the benefits of crowdfunding in supporting local cooperatives and building a sustainable economy. Through union education campaigns, members can be made aware of what crowdfunding is, what kinds of businesses can be invested in, and how to invest. Union members can be taught how crowdfunding can channel individual investment dollars into businesses that share union values, even while earning an equity return for the investor.

Such education campaigns could be modeled on practices like the Labour Letters of Endorsement Program, which a United Way website describes as follows:

The AFL-CIO president asks presidents of AFL-CIO affiliated unions, state federations and central labor councils to send letters endorsing United Way campaigns to their memberships. The Labor Letters of Endorsement Program encourages individual union members to volunteer their time and contribute their resources to United Way campaigns (www.united wayerie.org/learn/partners).

Along those same lines, a Labour Letters of Endorsement or other education campaign could highlight crowdfunding opportunities and demonstrate how individual members can now dedicate their money to gaining an equity stake in innovative social ventures (without advising union members to invest in any identified, specific business, which would be illegal under crowdfunding law).

Union education campaigns can be effective at catalyzing action among union members (Ranghelli, 2011; Zullo, 2011). For example, the Labour Letter of Endorsement Campaign results in millions of dollars every year in charitable contributions to the United Way by union members (accounting for two-thirds of all funds raised by the United Way each year). Crowdfunding research also shows that frequent campaign updates, in accessible language familiar to the audience, have a significant positive effect on catalyzing investments (Block, Hornuf, & Moritz, 2018). Labor unions can make their educational efforts especially effective by building on labor's growing success with new information technology and social media mobilization. For instance, the Minnesota Nurses' Association in 2010 used an extensive social media campaign to rack up its contact numbers, including "495,000 Facebook page views and 11,285 new fans in a 90 day period" (Nemo, 2012).

In another example of union-catalyzed social investment patterns, the previously discussed Canadian Solidarity Fund uses a worker-education strategy effectively to channel individual worker investments into targeted private equity campaigns. Canadian unions assign local union representatives to organize at the workplace and in their communities and to encourage community members to invest in the fund. Sophisticated financial and investment training is provided to these union representatives and to members of the general public (Lincoln, 2000). These techniques have been

successful in educating union members and other community investors that social goals like environmental sustainability, high wages, and business commitment to the local community can align with economic investment choices, as Canadian labor investment funds are now some of the largest sources of investment capital in the country (Comeault & Wheeler, 2008; Quarter et al., 2008). Especially in communities and populations with limited experience in equity investing, education campaigns and mentorship programs have proven very important in enabling the success of crowdfunding efforts (Pekmezovik & Walker, 2016).

17.4.2 Certify Unionized Crowdfund Advisors

The National Crowdfunding Association has launched a Certified Crowdfund Advisor certification program. As described on the CCA website, The CCA certificate "identifies the holder as being an expert in crowdfunding and thus professionally able to help everyone from small business owners to investors regarding how to participate in crowdfunding" (National Crowdfunding Association, 2012; see also Best et al., 2012). Dedicating union dollars to helping members of union locals and state labor federations achieve such certification would facilitate the educational strategy discussed above, while providing authoritative and specialized investment education to union members interested in building up worker cooperatives.

The potential impact of such labor-friendly crowdfund advisors should not be discounted, especially in developing economies where equity crowdfunding is such a new development and has not yet been institutionalized through crowdfunding eco-systems and broad-based public understanding. In all countries, but especially in countries with limited experience with equity crowdfunding, a significant obstacle to crowdfunding efforts is lack of understanding and trust among the potential crowd of public investors. To overcome this lack of trust, intermediaries like established labor unions can play a key role in teaching the public about crowdfunding, building a sense of legitimacy behind this economic innovation, and seeding a local ecosystem of support for crowdfunding campaigns (Rey-Marti, Mohedano-Suanes, & Simon-Moya, 2019). As the World Bank's 2013 report on global crowdfunding notes, "crowdfund investing is unlikely to thrive if social networks do not exist or communities lack 'constellations of trust' between members of the community because investors will not be able to trust that founders will fulfil their promises and create a return on that investment" (Best et al. 2013, 53).

17.4.3 Establish a Union-Sponsored Crowdfund Portal

Unions can help mobilize social purpose spending by their members by establishing a union-sponsored crowdfund portal to facilitate investment in worker cooperatives that share union values of worker empowerment and broader social justice. Under

crowdfunding laws in most nations, businesses can only connect to potential investors through an independent "middleman" portal—a web-based platform that ensures that the businesses on their site meet minimum standards outlined in the law and that small investors using the portal are educated into the risks and opportunities of investing. Many crowdfunding platforms already exist, such as IndieGoGo, Kiva, and Kickstarter. Furthermore, many of these extant portals have a specific angle—such as portals that focus on green businesses (Green Unite), arts-related businesses (New Jelly), local agricultural initiatives (Three Revolutions), innovative product designers (Christie Street) or on projects friendly to lesbian, gay, bisexual, and transgendered individuals (FundPride).

Along those lines, a union collaborative could come together to launch a crowdfund portal that features only worker cooperatives that share union-friendly business practices and values. In providing information about businesses featured on the union crowdfunding portal, the portal could publish metrics to rate businesses on a "social purpose" scale, using such tools as the Social Return on Investment (SROI) index, the Impact Reporting and Investment Standards (IRIS) index, or the Global Impact Investing Rating System (GIIRS), (www.thesroinetwork.org; Fiola, Parente, Onofrio, & Pellegrino, 2017; Lehner, 2013). Under US securities law, these crowdfunding portals can even feature open forum electronic bulletin boards, which "allows potential investors to communicate about an offering...[and] the public to share knowledge about investment risks, businesses and particular entrepreneurs" (Pekmezovik & Walker, 2016, 424).

Union members (who arguably are more willing to accept lower rates of return in favor of social investment goals [Quarter et al., 2008]) could be directed to this portal to facilitate their investments into union-friendly worker cooperatives. Such a portal would have important legal restrictions on its communications with users. For example, crowdfunding portals cannot offer authoritative investment advice or recommendations regarding any specific company, though they may feature open forum public bulletin boards. They are only allowed to act as a kind of educational clearinghouse, focusing all their offerings only on one kind of business (worker cooperatives), and sharing information such as which businesses are union organized and where businesses might be rated on the SROI scale.

17.4.4 Provide Technical Assistance to Worker Cooperatives

Many worker cooperatives lack the technical skills to take most effective advantage of the new investing environment. Unions could develop training academies and outreach efforts targeted at socially responsible worker cooperatives and assist coops in navigating a crowdfund offering. Developing a union cadre of CCA-certified crowdfunding advisors would facilitate this goal. Such a strategy would build on unions' long history in facilitating worker-buyouts of companies in America (Hochner et al., 1988).

17.5 Conclusion

Seeing social innovation possibilities through to scale often depends on the strategic actions of advocates and activists on the ground (Gallego-Bono, & Chaves-Avila, 2019). In the world of crowdfunding, social media technological innovations and securities law policy innovations have opened avenues to funding socially innovative business models such as worker cooperatives. But these potentials will only be fully explored through strategic processes of adaptation and exaptation by labor institutions and their leaders. If unions and worker coops can deepen their relationship by taking advantage of innovations in socially responsible investing and crowdfunding, "it is possible that the combination of the worker-owned and managed model with such unions will infuse a renewed energy in the membership to democratize and take control of their workplace" (Art & Kim, 2011; Curl, 2010; Geminijen, 2012).

While supporting worker-friendly businesses built around a social mission, union crowdfunding support of worker cooperatives can also build local union power. For example, it is quite possible that the worker-owners of union-supported, crowdfunded cooperatives might also choose to become union members themselves. Unions can reach out to network and build good will among local cooperatives and can develop mechanisms for allowing cooperative owners to become community members of the union (Ryder, 2008). Such efforts by the unions to build community alliances through crowdfunding campaigns and extend union membership to the cooperative owners these campaigns support would advance a form of social movement unionism in which unions no longer restrict themselves to waged workers at specific worksites. Instead, unions might conceive of themselves as a broader alliance of people committed to similar economic and social goals, including circles of coop owners (DeMartino, 2004). In a case-study of several "advocatory social movements" in Spain, Diaz and Cacheda (2016) find that participation in cooperative crowdfunding campaigns can help build and sustain these new kinds of union-community connections because crowdfunding campaigns naturally help disseminate progressive ideas, build collective identities, and facilitate communication about campaigns targeting destructive forms of capital in the community. "This is the main potential of crowdfunding," Diaz and Cacheda (2016, 146) conclude. "It's capacity to articulate a multi-level space for social movements that provide efficient channels of finance, divulgation and involvement. Crowdfunding is creating a new public space...which can be amplified through the economic support of the community in social networks, while crowdfunders can interact with promoters to spread social movements' claims and grievances." As unions face a new world of decentered and disorganized labor and seek to deploy deep wells of workers' capital in pursuit of a more humanistic world, crowdfunding campaigns may help unite community and labor activists together in seeding alternative economic imaginations. But achieving these alternative economic futures will require strategic effort. With recent changes in securities law and crowdfunding technologies across the globe, new avenues have been opened for unions and

coops to jointly advance the democratization of capital through crowdfunded cooperative workplaces—but exploring these avenues will require creative adaptation to the technological and policy innovations of this moment.

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Chapter 18 Asia Pacific Cooperatives Responding to Covid-19 Crisis



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Abstract Cooperatives were hailed as resilient to crisis and seen as a model to pursue with greater vigour, after the economic crisis of 2008. Currently, they are passing through another crisis, which is of much larger dimension, in terms of its impact and uncertainty. It is therefore of interest to examine how they are responding to the crisis created by the pandemic of Covid-19. Cooperatives all over the world are responding and trying to do their best to protect their members and workers from the adverse impact of Covid-19. While the reporting on their activities seems to be not up to the desired level, based on the information from the reporting cooperatives, we can say that cooperatives are certainly responding keeping in mind the values and principles they are structured upon. In the Asia Pacific region, cooperatives are primarily trying to focus on relief measures and providing social and economic protection to their members and workers. They are partnering with state and/or responding to state mandates to an appreciative extent. Some cooperatives are exhibiting a much longer term and futuristic response trying to insulate their businesses from continued economic uncertainties and adjust their approach to business as well as meeting the needs of the members, to the 'new normal', that of living with the virus. The case example of IFFCO and ULCCS clearly demonstrates that cooperatives have a highly forward-looking approach and are functioning very much in tune with the principle and values cooperatives stand for.

Keywords Crisis response · Changing member needs · Worker protection · Relief measures · The 'new normal'

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18.1 Introduction

The cooperative model evolved in the nineteenth century to address a socioeconomic crisis that the working class was facing. Since then, new forms of cooperatives have evolved especially during varied crisis periods and cooperatives have quickly responded to the needs of a crisis period. In the Asia Pacific region, the governments in many countries have relied on cooperatives to overcome pressing socioeconomic challenges. For instance, in India, the British regime introduced Agricultural Credit Cooperatives to overcome the financial stress faced by the farming community.

Cooperatives operate based on principles and values that set the framework for a member centric and need-based enterprise (ICA 1995). Therefore, by their very nature, they respond to the changing needs of the member community. Evolution of new forms of cooperatives ranging from worker cooperatives to health cooperatives to the recent emergence of platform cooperatives has all been based on the changing needs of the community over time and space. Similarly, innovations in the cooperative services, be it micro finance, marketing strategies such as joint buying, direct delivery from producers to consumers or cooperative consortiums to benefit from scale of operations, have all occurred as a response to the needs of the members. It is, therefore, natural to expect that cooperatives respond quickly and strive to protect the interests of the member community whenever there is a crisis.

18.2 Crisis Response by Cooperatives

Cooperatives have demonstrated their ability and willingness to respond to crisis at different times in the past. In fact, during periods of crises, people benefit more through the value of cooperation, solidarity, and mutualism.

Cooperatives have responded and protected the interests of the community during the times of war. For instance, during the World War II when there was a crisis of food shortage, the government of India introduced the consumer cooperatives and used them as instruments of public distribution system and therefore they came to be nicknamed as war babies (Wilson and Santhi 2018). In the recent past, when the world is witnessing a huge crisis of refugees in many parts of the world due to wars or internal conflicts, cooperatives are seen to be an effective instrument to protect the interest of these vulnerable groups (ILO 2015).

There is evidence showing how cooperatives in different parts of the world responded to and protected the interests of the community during the periods of natural disasters (ILO 2001) and saved the jobs through worker cooperatives when private enterprises faced bankruptcy (ILO 2014). It is now well documented as to how cooperatives demonstrated utmost resilience and protected the interests of their members and workers during the economic crisis of 2007–08 (Birchall and Ketilson 2009). In fact, the year 2012 was declared as the International Year of Cooperatives (UNO 2012) and following on, the International Cooperative Alliance prepared a

blueprint seeking to make the cooperatives the fastest growing form of enterprise by 2030 (ICA 2013a, b) mainly due to this potential and strength of the cooperative sector.

In the Asia Pacific (AP) region, cooperatives have contributed significantly during the crisis as well as during the post-crisis reconstruction in times of natural disasters. Earthquake, Tsunami, and Typhoon are the most common disasters experienced in the AP region as shown below. Given the long history of such disasters, cooperatives in the region seem to have developed an appreciative level of preparedness to respond to such crisis. This is well illustrated by the fact that the cooperatives of the region joining together at the seventh Cooperative Forum held in Kobe, Japan adopted a 'resolution on the role of cooperatives in times of Natural Disaster' (ICA-AP 2012).

During the great eastern earthquake in 2016, the Japanese insurance cooperatives were engaged in educating people on safety measures and engaging those in the relief camps with socialization activities, apart from providing financial support (JCIAI 2018). When the earthquake struck the Kyushu region, the Japanese health cooperatives were among the first to send donations and despatch doctors (ICA 2016). The consumer cooperatives played an active role whenever earthquake struck any part of Japan. 'Cooperatives were heavily affected by the 2005 Kobe earthquake: damages and losses were estimated at around JPY 50 billion. (However), cooperatives were particularly efficient in resuming activity. Their members initiated mutual help and volunteered to assist victims to supply basic goods (like food, water and blankets) and services to the homeless' (José 2010). Similarly, during the tragic East Japan earthquake and tsunami of March 2011, Japanese cooperatives, once more, promptly mobilized to support the victims with food, energy, and care for self-sufficiency in the affected communities.

In Indonesia, cooperatives played a major role in taking care of and rehabilitating the orphans after the severe earthquake and tsunami (ILO/ICA 2014). In Sri Lanka, cooperatives in general and credit cooperatives and fisheries cooperatives, in particular, were involved in a big way in the post-tsunami recovery and rehabilitation process in the aftermath of the 2004 tsunami crisis (Jayasuriya et al. 2006). The role of cooperatives during the post-2004 tsunami reconstruction in the area of housing, fisheries, and agriculture is well documented (UNO 2005). In the Philippines, cooperatives quickly joined hands with government and NGOs both in relief and reconstruction efforts after the typhoon Haiyan devastated many parts of the country in 2013. The National Co-operative Business Association (NCBA CLUSA) joined hands with the National Rural Electric Cooperative Association (NRECA) and the World Council of Credit Unions (WOCCU) to help thousands of rural electric and credit union members (ICA 2013a, b).

It is thus clear that cooperatives have been proactive and responded to the needs of the community in times of crisis. Many times, cooperatives themselves were victims, losing their property and businesses due to disasters, but recovered soon enough to be able to perform their hand-holding responsibility. It is, therefore, natural to expect cooperatives to respond similarly in the present times of the Covid-19 pandemic.

18.3 The Covid-19 Crisis

The Covid-19 crisis is similar to other crises in the past only in as much as they were unexpected and put the community in great stress and danger. But the present crisis has many other and much larger dimensions compared with the natural disasters that the countries and the cooperatives in the region faced. It is global, it is continuing well beyond 6 months with no immediate relief in sight, it is comprehensive involving health hazards, economic shocks and social implications. For once, we have a crisis for which no agency—neither the international agencies nor the national governments, businesses or the civil society—has the wherewithal to tackle effectively.

The present situation is aptly summarized in the following lines. 'With fears of a new recession and financial collapse, times like these call for resilient and strong leadership in healthcare, business, government and wider society. Immediate relief measures need to be implemented and adjusted for those that may fall through the cracks. Medium- and longer-term planning is needed to re-balance and re-energise the economy following this crisis. A broad socioeconomic development plan including sector by sector plans and an ecosystem that encourages entrepreneurship is also needed so that those with robust and sustainable business models can flourish' (Nicola et al. 2020: 193).

All institutions in the economy and society are affected and so also the communities' world over. Of course, governments have been the first to respond to the crisis through policies and other support systems such as medical services, food and food grains to the needy, supporting scientific research leading to a remedy, keeping the economic activities ticking and social structures cohesive. The civil society actors including cooperatives, social businesses, and the non-profits are the next in line to respond, since they normally function in close proximity with communities.

Needless to say, cooperatives too are facing challenges and passing through difficult times. They are facing cash flow issues, significant reduction of activities through the restrictions on movement and contact put in place under the lockdown, loss of income in line with these restrictions, especially within specific sectors such as tourism, transport and culture (Coop Europe 2020). Cooperatives are at crossroads with the duality of devising strategies for their own survival and at the same time responding to the needs of their primary stakeholders. For cooperatives, it is a testing time. It is also a great opportunity to showcase their distinct features and strengthen the cooperative identity. It is, therefore, imperative to examine the response of cooperatives in the Asia Pacific region to the situation created by the Covid-19 pandemic. We will first briefly discuss the activities undertaken by some of the cooperatives in selected Asia Pacific regions, namely South Korea, Indonesia, Japan, Nepal, Philippines, Singapore, and Sri Lanka. Thereafter with the help of two case studies in India, we will discuss in detail about their intervention during this crisis time.

18.4 Response by Cooperatives in Asia Pacific Region

Cooperatives throughout the Asia Pacific region are reporting on their responses to the Covid-19 crisis. Most of the information available is primarily in the form of these reports put out in the websites of the cooperatives or compiled and presented by their national apex organizations or international organizations like the ICA-AP. It appears that analytical or evaluative studies have not yet been made and obviously so, given that there is still a great amount of uncertainty about how much and how effectively institutions have been responding to the needs during Covid-19 pandemic times. Even though cooperatives are mostly involved in relief and remedial measures, they are innovative to the extent that such activities are outside the domain of regular activities of cooperatives. Also, cooperatives seem to be supporting not only members but also the community at large.

Cooperatives in Korea, one of the earliest countries to be hit by the pandemic, are among the first in the region to report about their initiatives. Consumer cooperatives in Korea quickly responded to the needs of the member community. From providing masks and free meals to continuing to stock up shelves, consumer coops have been showing how they can make a difference in their local communities. Since consumer cooperatives basically undertake food retailing, their business by end of February 2020 increased by 40% compared with the same period in the previous year. Door delivery of products, distribution of ready to eat meals, providing basic sanitation materials to members, distribution of leaflets providing details about the precautions to be taken by people and fundraising to support the needy are some of the activities undertaken by these cooperatives. iCoop, the federation of consumer cooperatives in Korea set up a Disaster Response Committee and initiated a Social Healing Project (Voinea 2020).

In Indonesia, DEKOPIN the national apex organization for cooperatives has formed three task forces in key areas: (i) To provide medical equipment for hospitals which are at the frontline in fighting the outbreak; (ii) To identify and collect data for cooperatives which are affected by Covid-19, in terms of business, decreased livelihood, employment; and (iii) To mobilize social solidarity funding, particularly of the Islamic Social Fund during the holy Ramadan month to help vulnerable people. Cooperatives in Iran have reported some unique initiatives. In Tehran, the Handicraft Cooperative Union has taken bold steps in cleansing and disinfecting pavements and ATMs across the district, whereas, Rah-e-Roshd cooperative school has joined the nationwide Dastyar campaign, announcing readiness to provide their comprehensive online education service to all schools across the country to help them make up for the hiatus faced by schools due to the lockdown (ICA-AP 2020).

In Japan, HeW Coop Japan set up a task force as early as February 2020. The task force undertakes activities such as sharing of basic information on prevention, like hand washing and maintaining social distance; collecting information on member cooperatives by phone or e-mail; and responding to requests from member cooperatives. HeW Coop Japan submitted requests to the national government and political

parties through Japanese Consumers' Co-operative Union (JCCU) regarding difficulties and challenges in the healthcare and welfare businesses. The National Federation of University Cooperative Associations (NFUCA) which is the apex cooperative of campus cooperatives of which students are the major group of members, is proactively involved in helping students in and off the campuses. Providing updates using social media, enabling connections among new students and between new students and senior students, helping international students by supplying subsidized food products and conducting online survey to understand the challenges faced by students are some of the initiatives of NFUCA. Though university cooperatives are likely to see some setback such as reduced sales due to campus lockdown, they continue to be a bridge between students and the different constituents of the university by providing necessary information (ICA-AP 2020).

The largest cooperative in India, Indian Farmers Fertilizer Cooperative has contributed about US\$3.6 million to the Prime Minister's Relief Fund to facilitate creating health-related facilities. Many cooperatives have declared moratorium on the loan repayment by members who have borrowed for agriculture and business activities. Self Employed Women's Association, one of the largest women cooperative federation has initiated many activities such as educating rural women about health and sanitation, production and distribution of low-cost sanitizers, distribution of generic drugs at a subsidized rate, and introducing a comprehensive and integrated insurance package, which provides financial help and compensates wage loss in case a member gets infected with the virus (Muralidhara and Chettri 2020).

In Nepal, the National Cooperative Federation (NCF) has created a Corona Prevention Fund to support the Corona Control Cooperative Centre and handed over the accumulated fund to Coronavirus Infection, Prevention, Control and Treatment Fund established by the Federal Government. In Palestine, the Economic and Social Development Centre (ESDC) is handling the sterilization materials for 26 cooperatives, to be used in production and other places with daily operations and customer interactions. They are conducting a survey of families/farmers/workers affected by the lockdown, resulting in losing jobs and incomes; implementing a voucher project to provide relief to the most vulnerable families.

CLIMBS Life and General Insurance Cooperative in the Philippines mobilized their own team to check on members' welfare in areas badly hit by COVID-19; increased access to online platforms for members to communicate their concerns; and set up the CLIMBS COVID-19 Task Force to create a Crisis Management Plan and Crisis Communications Plan. The Singapore National Cooperative Federation (SNCF) has collaborated with the Singapore Statutory Boards Employees' Cooperative and GP + Cooperative to purchase and distribute masks to migrant workers; to fund sponsorship towards initiatives to support migrant workers; and distribute snack hampers to front-liners. SANASA in Sri Lanka established a special disaster relief operation committee to address concerns regarding their daily wage employments, the daily cash-base business and shortages in daily essential requirements. The Committee was established through the donation of one day salary from all employees of affiliated companies. This has gone towards providing food rations to needy members; providing assistance to low-income communities; distributing

relief ration packs to economically challenged families; and providing healthcare equipment to hospital staff (ICA-AP 2020).

The above are just a few random examples. Similar cases of cooperative initiatives towards addressing the pandemic crisis situation are found in almost all the countries. Making financial contribution to relief funds, undertaking member awareness programmes, supplying the medical and daily use necessities to member household and joining hands with government and other agencies in specific relief measures are some of the common initiatives of which the cooperatives are part of.

18.5 Case Examples

Given that the situation is still very fluid and cooperatives like any other institutions—political, economic, or social—are still exploring the ways and means of responding to the Covid-19 crisis, it may not be a right time to try and evaluate the cooperative responses. We, therefore, thought it fit to narrate the overall approach of a cooperative and this is done by selecting two Indian cooperatives, namely, Indian Farmers Fertiliser Co-operative (IFFCO) which is a leading agricultural Co-operative and largest fertilizer co-operative in the world and Uralungal Labour Contract Cooperative Society (ULCCS) Limited, a large-scale cooperative in the state of Kerala in India for the purpose of a detailed analysis.

18.5.1 Indian Farmers Fertiliser Co-operative (IFFCO)

Indian Farmers Fertilizer Cooperative Limited is one of the biggest cooperative societies, which is wholly owned by Indian Cooperatives. IFFCO was founded in 1963 with just 57 cooperatives and today it is an amalgamation of over 36,000 Indian cooperatives with diversified business interests ranging from general insurance to rural telecom apart from their core business of manufacturing and selling fertilizers. IFFCO took the onus of fighting against the spread of the virus among the farmers and other stakeholders and worked out a multi-pronged strategy. The initiative taken by IFFCO is listed out below.

- Apart from contributing a sizeable amount to the relief fund, this cooperative
 has started educating the farmers about the transmission of coronavirus, hygiene
 practices, and social distancing so that they could keep themselves safe while at
 work
- 2. IFFCO launched "Break the Corona Campaign" to spread awareness about this virus and facilitating breaking the chain of transmission on the ground.
- 3. It ensured the availability of fertilizers (for the Karif Season) to the farmers.
- 4. The IFFCO Field Officers (400) and other staff including the IFFCO plant personnel and volunteers in nearby areas across India attended to their relief work.

- Designated as 'Corona Troopers of IFFCO', these volunteers at the front line were responsible for education and relief distribution. These Corona Troopers of IFFCO reached out to the farmers and community online through WhatsApp, etc., and also offline through one to one interaction by organizing relief distribution camps, awareness camps etc.
- 5. IFFCO reached out to nearly 05.5 million people and distributed more than 4 lakhs, vitamin C strips containing 10 tablets. Over 3.5 million medicated soaps, 3.5 million masks, 100,000 sanitizers and a lot of medical kits. In addition, 40,000 ration kits (containing rice, pulses, spices and cooking oil) and 4 million of food packets were also distributed to migrant labourers, workers and needy families for providing succour during these tough times at various locations including the national highways in Bihar, U.P, and Punjab.



6. IFFCO mobilized several women self-help groups and they have developed over the years as a part of their rural livelihood development programme. The woman SHGs were given the training to produce masks from textile material and these women together made around 5000 masks that were distributed by the field team to the entire state.

IFFCO has taken steps to fight coronavirus especially in the rural parts of India focusing on the welfare of the farmers. It has always framed all its policies and programmes keeping the dual goals of upliftment of farmers and the strengthening of co-operative movement in mind.

18.5.2 Uralungal Labour Contract Cooperative Society (ULCCS)

ULCCS is a worker cooperative and basically focussed on construction sector (both are severely affected during the present crisis) has been functioning for nearly a

century and of course the authors have been familiar with its working and had easy access to information related to its activities.

Started in 1925 by 14 labourers, ULCCS is today one of India's largest cooperatives in the area of infrastructure development. Roads, bridges, flyovers, and buildings are the main forte of this cooperative, though over the years, it has diversified into many other areas such as agriculture, education, and information technology. ULCCS Ltd is one of the oldest labour cooperatives completely manned by the workers. Known for its history of completing the projects ahead of the scheduled timelines, without compromising on quality, ULCCS Ltd has been recognized by UNDP as a model Cooperative. It is the only primary cooperative society in India to be a member of the International Cooperative Alliance (ICA). ULCCS Ltd is also an accredited agency of National Skill Development Council (NSDC).

'ULCCS Ltd directly employs over 13,000 labourers. Each direct labour in turn creates indirect employment of up to 4 times, especially in the rural market. In effect, 40,000 people, most of them hailing from rural hamlets, depend on ULCCS Ltd for their livelihood. The workers are paid daily wages which are 30% higher than the average wage paid in the industry. All the workers are provided with a Bonus which is equal to 20% of the average wages drawn by them in a year. Workers are covered with Social Security benefits like Provident Fund, Employee State Insurance, Pension and Gratuity. They are also provided with Family insurance and medical allowance. Every worker is provided with an accident cover insurance policy providing financial assistance up to INR 1.5 million in case of any medical emergencies. Workers are also provided with financial help in the form of interest-free soft loans and the share of profits is also distributed among worker members by way of dividends. In addition, the workers get almost 50% of their salary as benefits' (Kumar 2020: 2).

The first Covid-19 positive case to be reported in India was from the state of Kerala, where ULCCS is operating. Kerala is the most literate state of India and has been in the forefront of many initiatives involving people's participation. It is home for a large domestic migrant labour and also has the unique feature of exporting a large part of its own migrant workers to the West Asian countries. So, the immediate effect of the pandemic and the lockdown is that the domestic migrant workforce left the state whereas much larger quantum of reverse migration is taking place with its own people coming back from the countries where they were working. This is a very unique situation in India and given the density of population and meagre agricultural possibilities in the state of Kerala, a big challenge in socioeconomic terms. In this context, keeping the larger interests of its worker members and also the community around, the ULCCS has taken many initiatives, which are listed below.

- Started a Cooperative Disaster Management Fund to provide immediate relief to the needy worker members as well as the general public.
- 2. Liaised with National Cooperative Union of India to set up a national-level committee to study the impact of Covid-19 pandemic on the cooperative sector.
- Partnering with state government and providing human resource (volunteer) and technology support to government in its effort to reaching out to the affected people.

- 4. A Disaster Management Team, which was established a few years ago when the state suffered from severe floods, is currently geared to serve as an emergency helpline both to members and the general public.
- 5. Paid full salary to all its workers for the lockdown period, even though there was no work at that time.
- 6. Made arrangements through its own transportation, to the desiring domestic migrant workers to return to their home towns in other states.
- 7. 'More than two-third of the migrant workers have chosen to stay back and they are housed in 72 camps across the state by providing them with food and all other amenities including medical help. None of the workers of ULCCS is infected, which itself shows the care taken by the society' (Kumar 2020: 05).
- 8. Donated INR 20 million to the Chief Minister's Relief Fund.
- 9. As a result of total lockdown and reduction in economic activities, destitute who were living without homes and a fixed job were suffering a lot. The cooperative identified and adopted 51 of them and will provide them with jobs and social security.
- 10. The major business for ULCCS has been in the domain of construction sector. This sector is severely affected due to the pandemic and the consequent lockdown. Realizing that too much dependence on one domain might create problems during crisis like the present one, the cooperative has taken steps to strengthen its other verticals such as Information Technology, Agriculture and Education.
- 11. The cooperative has been actively pursuing social welfare activities that include 'UL Care NayanarSadanam', which focuses on rehabilitation of mentally challenged persons, 'UL Care Madithattu', a Senior Citizen's daycare which envisages the care of the senior citizens of the society and Prashanthi School, a special school of more than 150 children with special needs and which employs more than 40 trained and dedicated staff. These initiatives have now acquired special significance, especially the senior citizen care centre that protects the most vulnerable people.
- 12. To help the non-resident Keralites returning due to pandemic issues in the countries where they are working, an action plan is prepared, under which the returnees can make investments with assured periodic income.
- 13. Through its skill development programmes, the cooperative is engaged in upskilling and reskilling needy people. Under the present circumstance, this activity is very helpful since the trainees can acquire new skills and shift from their current work profile to new jobs that are in demand.
- 14. Tying up and supporting other smaller cooperatives engaged in the manufacturing of masks, disinfects, soaps, and hand sanitizers and helping them to market their produces.
- 15. Setting up a think-tank to devise a long-term action plan to achieve sustainable business and to ensure sustainable development of its members and the region.

18.6 Analysis and Conclusion

Social innovation is said to be the innovative activities and services that are motivated by the goal of meeting a social need (Mulgan 2006). In the times of a crisis like the Covid-19, any initiative outside the domain of an institution's regular activity, aimed at addressing the emerging social needs might be considered as a socially innovative activity. Cooperatives in the Asia Pacific region have exhibited their dynamism and proactiveness through their quick and timely response to help the members as well as the community around, affected by the Covid-19 pandemic. Not all cooperatives are reporting what they have been doing, either because they are too preoccupied attending to the needs of the day or because they are not accustomed to formally reporting such activities. The ICA-AP has initiated a platform making it easy for the cooperatives to report on their initiatives and hence we are able to get some information.

An overview of the major responses by the cooperatives suggests that they are trying to address the immediacy of the situation. Therefore, the activities mostly range from providing financial contribution to the needy people or to the designated relief funds, distributing free of cost food and medical requirements to the needy, protecting the economic interests of their workers by ensuring that they are not out of work and are paid their salaries on time, educating the members and the general public about the pandemic and the precautions to be taken to prevent it, etc. These are in line with what the state machineries and other civil society actors are doing.

However, many cooperatives have thought 'out of the box' and are trying out innovative and comprehensive ways of responding to the crisis, which is threatening the basic foundations of society and economy. ULCCS is a case in point. This cooperative is responding keeping the long-term interest and realities in mind. While providing relief measures and caring for the health and economic security of the members as a short-term measure, the cooperative is also thinking about and putting plans in place, in such a way that its business domains would be diversified and also its members are reskilled and equipped to be able to handle new job profiles. Its approach is to live with the 'new normal' and to ensure that the organization remains stable and sustainable while providing safety and economic and social security to its worker members.

The focus on strengthening its new verticals in the business domain such as agribusiness and information technology is an indication of the futuristic nature of its approach. The cooperative understands the need for developing multiple lines of businesses and equipping its members and their children for such businesses. One can certainly be appreciative of such an approach, though it is too early to evaluate it in terms of impact and long-term suitability.

Many cooperatives world over must be engaged in similar initiatives and action plans as that of ULCCS. The available information clearly suggests that cooperatives, true to their general feature of constantly evolving organic entities, are transforming again. This time around, they are getting ready for a future, seen as a 'new normal'.

Interestingly, cooperatives are not demanding sops and concessions to protect themselves but are mostly showing their resilience to crisis once again. That indeed is the biggest positive for the cooperative movement and all those who have reposed faith on this self-help model of development.

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Chapter 19 Cooperatives and Social Innovation: Conclusions and the Way Forward



R. Manjula and D. Rajasekhar

19.1 Introduction

This final chapter is devoted to present conclusions emerging from the volume. In doing so, the following elements¹ embedded in the concept of social innovation are kept in mind. The first element is that innovations are initiated by institutions or organizations whose primary goal is social. Second, the purpose of innovative activities and services is to meet the unmet needs of members. Third, social innovations emerge when the market fails. Fourth, social innovations need to be people-centred in the sense that people should be at the centre of initiation and implementation of innovative activities and services. Fifth, social innovations tend to be disruptive in the sense that they replace existing activities and services. Sixth, social innovations should be efficient, sustainable and bring social justice. Seventh, it is not necessary that social innovation will always result in good development outcomes. The outcome can be positive (further empowerment and further impetus for change) or negative (loss of motivation and faith among people in the very social innovation itself). Hence, there is a need for monitoring and evaluation of the impact of social innovation on people. Eighth, benefits of social innovation should go to the entire society not for a few individuals, and that social innovation should not lead to elite capture tendencies.

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¹For more details, see the second chapter in this volume on theories and concepts of social innovation.

When people come together for greater benefits in the form of cooperatives, they would also come up with innovations to address the vexed problems such as unemployment, ill-health and poor educational outcomes. These innovations are not extensively documented in the literature. This book on 'Cooperatives and Social Innovation' therefore becomes important as it discusses about cooperatives and social innovation and presents case studies on social innovations by cooperatives in the countries from the Asia Pacific region. These case studies provide an in-depth analysis of social innovations in the areas of finance, tourism, consumers, workers, producers, climate-smart agriculture, health insurance, social media and so on.

Of the 19 chapters in this volume, 2 are on Introduction and Conclusions, 2 are on concepts of social innovation, and review of social innovation in cooperatives and the rest are case studies from the Asia Pacific region discussing the social innovations by the cooperatives. This chapter is presented in four sections. After this introductory section, the second section discusses the major conclusions emerging from each chapter. In the third section, overall conclusions from the volume are presented. In the last section, future areas of research and policy advocacy in cooperatives and social innovation are identified.

19.2 Chapter-Wise Conclusions

Chapter-wise conclusions are presented in the ensuing paragraphs based on the following: (i) Broader theory or empirical observation made in the literature pertaining to social innovation; (ii) Definition of social innovation; and, (iii) Theoretical and conceptual points emerging from each of the case studies.

The conclusions emerging from the chapter on 'theories and concept of social innovation' by **D. Rajasekhar** are the following. First, the concept of social innovation, although was in use since the eighteenth century, gained considerable importance in the academic literature and policymaking from the turn of the twenty-first century largely because of the financial crisis of 2008 and austerity agenda of countries in Europe. Second, the research studies on social innovation were mostly undertaken in the universities located in Europe, the USA and Canada, and the studies were conceptual and literature oriented. Third, the literature pertaining to social innovation in cooperatives is practically non-existent. Fourth, important theories influencing social innovation are social action, social and solidarity economy, innovations, social entrepreneurship, social investment and social capital and new public management. Fifth, the meaning of social innovation constantly expanded over a period of time in response to changing social needs and social relations.

The next chapter on 'Cooperatives and Social Innovation: A Critical Review' by **Yashavantha Dongre and T. Paranjothi** reviews the available literature on social innovations in cooperatives. Their main conclusion is that cooperatives and social solidarity organizations are the major institutions facilitating social innovation as a strategy to serve the community and deliver social goods. Even though the region did not have supportive legal environment and state patronage cooperatives carried out

innovations related to platform economy, employment, care services, social protection and alternative energy. Such social innovations are not only for social purposes but also for the very survival of cooperatives in the competitive environment in which they operate. Conducive policy/legal environment together with incentives (social innovation as a parameter in the assessment) will lead to social innovations among cooperatives.

D. Rajasekhar contends that the health insurance, which was introduced to provide the much needed social protection of health insurance to members of cooperatives in the Indian state of Karnataka, did not fully succeed as effective alliances with organizations were not established for the idea to grow and scaled up. The author concludes that health insurance by cooperatives as a social innovation would become more successful if there are effective alliances among local organizations such as community-based organizations and local government, and public health centres in the implementation of health insurance by cooperatives.

In their case study of three Community Based Tourism (CBT) cooperatives in Malaysia, **Najmah binti Nawawi, Shamsiah binti Syamsudin and Christina Andin** conclude that CBT cooperatives were successful in the initiation of tourist downstream activities, enabling members to have increased income, and the strong cooperation among members. The authors conclude that the success of tourism cooperatives in providing economic benefits to the local community depends on whether they have an appropriate business model in place or not.

Akihisa Nonaka in her chapter on 'Failed Market-Oriented Society and Working Co-ops' Biodiesel-Based Food Systems after the Great East Japan Earthquake' shows that the social innovation of biodiesel production through cooperatives by using locally available used vegetable oil enhanced local food and fuel systems and served better in the tsunami disaster as compared with a centralized market economy. However, high costs associated with biodiesel and inability to provide fuel for a longer duration implies that this social innovation is inefficient. The author, however, argues that biodiesel production by cooperative is an important social innovation because it is produced with locally available used vegetable oil improving sustainability potential. Second, biodiesel is produced by persons with disabilities.

In the chapter on 'Role of cooperatives in climate-smart agriculture', **R. Manjula** observes that farmers experiencing the climate change adopted strategies for climate-smart agriculture. However, these strategies were undertaken without adequate information on positive or negative consequences. She concludes that cooperatives, sticking to their traditional role of disbursing credit only for crop production, could not provide information on new seeds and new agricultural technologies suitable to climate change and, in the process, did not meet the unmet needs of farmers due to paucity of funds and lack of interface with the local government and other community-based organizations. She concludes that institutions that lack the mandate and knowledge to implement climate-sensitive measures can diminish the adaptive capacity of farmers, leading to inability to meet their unmet needs.

Sanjay K Verma in his chapter on 'Social Media as an Effective Tool for Social Innovation in Indian Cooperatives' argues that cooperatives need to invest on social media for effective communication. He discusses barriers faced by cooperatives

such as inability to develop required competency to use the social media and lack of complete knowledge on usability of digital space. Given the wide network and reach of cooperatives, the author argues that the cooperatives can emerge as lead players in social innovation if they invest time and resources on social media.

Ma. Jenny C. Advincula in her Chapter on 'A Phenomenological Study of the Lived Experiences of PHCCI Summer Youth Program Tutees Turned LabCoop Officers' discusses about 13-year long summer programme run by PHCCI-MPC, Tacloban, Philippines that enabled six tutees to become laboratory cooperative officers and potential future leaders of the guardian cooperative. The chapter concludes that such a programme will discover and develop not only the talent and skills of the youth but also leadership potential. The policy suggestion is that cooperatives should invest on and empower the youth to develop them as responsible second-line leaders as it is often found that the success of cooperatives hinges upon the availability of second-line leaders.

Ajit Kumar in his chapter on 'Cooperative and Social Innovation in Finance—A Case Study of Mann Deshi Mahila Sahkari Bank' concludes that social innovations (new loan products, delivery channels and so on) by cooperative bank for women address the credit needs of women in the informal sector and include the financially excluded sections. An important insight from the chapter is that the poor borrowers do not mind the cost of innovative and customized products so long as these products provide an easy access to finance and enable them to utilize the same for starting and expanding their livelihood activities.

Arunima Guha in her chapter on 'Co-operative Sector and Social Innovation in finance' introduces grading in cooperatives as a social innovation tool. She argues that grading of cooperatives with variables such as scale and diversification, franchise strength and growth potential, financial flexibility, governance, financial policy and ratios will address the vexed problem of financial irregularities in cooperatives. Rating will also promote accountability and clean image among the public, which will in turn benefit members of cooperatives in the long run.

Discussing social innovations of Dharani cooperative to address the deleterious effects of natural degradation faced by small farmers in a drought-prone area, C A V Sathish Kumar and C Shambu Prasad conclude that cooperatives can link small farmers to the new and emerging market for organic crops best suited to drought-prone areas. This, however, requires innovations across the whole value chain and not just at the production or marketing end, thus suggesting the need for constant innovation by cooperatives. The authors highlight lack of social capital as an important barrier and call for cooperatives to invest in enhancing the collective capacity of producers for their sustainable future.

C Pitchai and S V Akilandeeswari discuss innovative business practices adopted by two cooperatives for the benefit of members. The authors note that the industrial cooperative has adopted two innovative practices, namely, value addition and auction system. With computerization of the entire auction process of tea, the cooperative could avoid the exploitation of middleman and get better price for tea growers leading to enhanced satisfaction among members. Second, the mobile-based technological innovation simplified the auctioning process leading to price stability by avoiding

the syndicate among merchants and enhanced value addition leading to members getting dividend every year. The chapter concludes that social innovation resulted in several benefits to members.

The chapter by **Misa Aoki, Taiki Kagami and Takashi Sugimoto** highlights the importance of 'Han' system that facilitates close cooperation between members and workers in consumer cooperatives to bring out products that are needed by the members, promotion of cooperative business, vitality of cooperatives and members' participatory democracy. They recommend that cooperatives all over the world should develop ways to establish workers' and members' participatory governance. A larger point made in the chapter is that the commitment and performance of cooperative workers are not improved solely by labour conditions such as higher wages or promotion but by the social innovation of closer contact with passionate cooperative members.

The chapter by **Leo Parma**, **Maria Antonette Pasquin and Bienvenido Nito** concludes that worker cooperatives are solution to workers in contractual arrangement, as they provided a better deal. Since the state or the market could not provide such a deal to worker, social innovation of workers cooperative is superior. However, barriers of inconsistent legal framework and overlapping functions among regulatory agencies inhibited worker cooperatives' capacity to be a viable solution. The chapter, therefore, recommends that the government needs to revisit the legal framework.

The chapter by **Neha Christie and C Shambu Prasad** concludes that innovative interventions undertaken by the Vasudhara milk cooperative contributed to the empowerment of tribal women. The authors argue that new policy changes of the dairy cooperative have not only brought economic empowerment of women but also provided opportunity for developing their leadership abilities. The authors argue that the model of Vasudhara milk cooperative can be replicated in other milk cooperatives of the country for empowering the women especially tribal women.

Minsun Ji and Tony Robinson argue in their chapter that workers capital is a promising tool for social innovation. They note that although workers capital is a powerful tool, the challenges lie in coordination and execution. The authors examine the policy innovations in crowd-funding coupled with technological innovations and argue it has opened social innovations by cooperatives. The chapter discusses in detail the legal developments, establishment of different types of funds and equity crowd-funding. The authors plead for educating the workers about crowd-funding and explain various methods of mobilizing funds. They call for strategic efforts in pursuit of a more humanistic world, which would enable the community and labour activists to unite.

Yashavantha Dongre and T. Paranjothi in their chapter on 'Asia Pacific Cooperatives Responding to Covid19 Crisis' argue that even though Covid19-related initiatives reported by cooperatives are primarily intended towards relief measures, they are innovative in the sense that cooperatives are going beyond their regular activity domain and responding to the needs relating to crises. They also note that cooperatives are using the crisis period to put in place strategies that help developing

more resilient structures and businesses. The chapter provides a glimpse at cooperatives thinking beyond the crisis period and devising innovative measures to facilitate greater preparedness to face crisis as well as attaining stability in the long run.

19.3 Overall Conclusions

In this section, overall conclusions emerging from the volume are identified as they may have implications for cooperatives in the Asia Pacific region.

Social innovations in the form of new products and services alone will not bring lasting solution to members. As has been demonstrated in the chapter on health insurance by cooperatives, the new service succeeded in enabling some members to obtain medical treatment. But, members despite availing health insurance incurred welfare loss on account of inability to obtain treatment for the illnesses. Such a partial success is attributed to inability to have interface or alliances with government departments, local government and community-based organizations in providing awareness and promoting health insurance benefits. Likewise, lack of interface between local government and cooperatives came in the way of promoting climate-smart agriculture. A broad lesson therefore is that social innovations will be more successful in meeting the unmet needs of people if organizations promoting social innovations have alliances and interface with local organizations.

Heckman's (1999) theory of social investment and social capital influenced the literature on social innovation. Heckman argues that social investment in informal and non-institutional learning will build social capital and lead to social innovation. Social investment and social capital will lead to social innovation and benefits to the community in the short as well as long-run, as has been theorized by Heckman. A validation to this theory is provided by this volume. Efforts by cooperatives to provide non-institutional training on leadership development resulted in the identification of second-line leaders in the cooperative movement.

There is literature which argues that social innovations can be fostered and supported through social media (Charalabidis et al. 2014). This is extended to cooperatives as well. It is concluded in this volume that cooperatives have potential to emerge as lead players if they invest time and resources in the use of social media for fostering and supporting social innovations.

Malek and Costa (2014) argue that social innovations in community-based tourism failed to involve local community because of operational constraints in governance arrangements and flaws in community participation strategies. In contrast, cooperatives are more likely to be successful in eliciting community participation in tourism development because as member-based organizations they do not face constraints in the community participation.

It has been noted in the literature that social innovations should have certain attributes such as efficiency (James et al. 2008). This volume reaches more nuanced conclusion on this. For instance, the case study on biodiesel produced by cooperatives in Japan was inefficient in terms of costs and inability to supply for the entire duration

of tsunami crisis. But, the production of biodiesel by cooperatives led to sustainability and involved vulnerable sections (persons with disabilities) in the production. Likewise, financial products offered by cooperative banks were expensive than those offered by public sector banks. Even then clients were happy with these so-called expensive products from cooperative banks because the access to finance has gone up even among the vulnerable section of informal workers. The volume, thus, makes a contribution to the literature that if social innovations contribute to sustainability and social justice, efficiency of social innovation is not very important to the community.

The literature also highlights barriers to social innovation such as limited access to finances, poorly developed networks (TEPSIE 2014). This volume highlights the following barriers faced by cooperatives. First, the legal environment is not conducive. Second, cooperatives lack mandate and knowledge to implement climatesensitive measures. Third, capacity to use social media for advocating and disseminating activities for wider reach is limited. Fourth, social capital for enhancing the collective capacity of small farmers in strengthening agricultural value chains is lacking in some cases. Fifth, cooperatives face capacity constraints to develop business models for new and innovative products and services.

Active collaboration between cooperative members and workers can be beneficial in bringing out products and services that are most needed by the community. Such collaboration is needed to bring the most relevant social innovations.

Worker cooperative model is better arrangement for workers in contractual system of arrangement. Similarly, producers and marketing cooperatives need to come with an appropriate model to enhance the collective capacity of the producers.

19.4 Further Research and Policy Advocacy

In the previous two sections, we have identified conclusions on social innovations by cooperatives from the Asia Pacific region. The foregoing discussion shows that the volume makes a significant contribution to the scarce literature on social innovations by cooperatives. In order to further the research on social innovations by cooperatives, we have identified three areas that require further attention in terms of research and policy advocacy.

The case studies in this volume show that cooperatives, as member-based organizations, initiate social innovations for the benefit of members. Cooperatives are bringing out innovations to address member problems such as high and mounting healthcare expenditure, inability to receive relief during natural disaster, climate change, inadequate access to financial services, deleterious effects of natural degradation, low and fluctuating prices for members' produce, lack of qualitative services and worker insecurity on account of contractual employment. These innovations are significant in their own right. But, in view of the literature identifying certain attributes to social innovation that they have to bring in social justice, benefit all the sections and empower people, there is need to analyse the perceptions of members. For instance, an in-depth analysis of the extent to which health insurance benefits

reached the poor revealed that members incurred welfare loss on account of limited health insurance benefits. Likewise, member perceptions on the utility of new products and services are captured in the chapters on financial services provided by cooperative bank, industrial cooperative and agricultural marketing cooperatives. In the case of the other case studies also, there is some mention of the extent to which social innovations benefited members; but, in these chapters, member voices are not strongly heard. Hence, the future research on social innovations among cooperatives should bring out the member perceptions on the extent to which new innovative products and services made a difference to them in their livelihood, social justice and empowerment.

A few case studies in this volume discuss social innovations to strengthen cooperatives in terms of introducing new services and products such as tourism, youth leadership development, grading to cooperatives, new products, crowd-funding and so on. While these initiatives are great in their own right, what is perhaps missing is the demand perspective. Supply-side analysis is important to have proper documentation and needs to be carried out. But, a question that would linger in the minds of readers is that 'will these social innovations benefit people?' It is therefore important to undertake the research from the demand side as well. Future research on social innovations and cooperatives should cover the following: (i) how are new products and services of cooperatives affecting the intended section of population; (ii) to what extent people benefited from new products and services in livelihood promotion, human resource development and empowerment; and (iii) what impediments are faced by people in accessing new products and services. Such a research will address the concerns that normative standards of social innovations such as efficiency, sustainability, social justice and empowerment are met.

The volume concludes that there are barriers to cooperatives in coming up with social innovations for the benefit of their members. These are identified as obstructive legal environment, lack of capacity to provide awareness and technical knowledge on climate-smart agriculture, capacity to prepare business plans, use of social media and so on. The international agencies such as International Cooperative Alliance and national agencies such as National cooperative Union of India need to undertake systematic activities aimed at policy advocacy based on evidence-based research.

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