



37th Annual National Research Conference
COOPERATIVE CONNECT
(National and Global Perspective)



**INDIAN SOCIETY FOR
STUDIES IN COOPERATION**

VAMNICOM Campus, Savitribai Phule University Road,
Pune 411 007





Cooperative Connect (National and Global Perspective)

**(Proceedings and Papers of
37th Annual National Research Conference)**



Indian Society for Studies in Cooperation

VAMNICOM , Campus, University Road, Pune 411 007

www.isscpune.in

email : isscpune@yahoo.co.in

Cooperative Connect

(National and Global Perspective)

(Proceedings and Papers of 37th Annual National Research Conference)

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Indian Society for Studies in Cooperation
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Pune 411 007

**37TH ANNUAL NATIONAL
RESEARCH CONFERENCE
GOA**

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The views expressed in papers are of the Authors and not necessarily of ISSC, Pune

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Preface

Preface

Indian Society for Studies in Cooperation (ISSC) completed its 37th Annual National Research Conference in collaboration with Government College of Arts, Science and Commerce, Khandola-Marcela, Goa and Vaikunth Mehta National Institute of Cooperative Management, Pune at Multipurpose Hall, on 9th and 10th December 2022. The theme of Annual National Research Conference was **“Cooperative Connect” (National and Global Perspective)**.

The Theme of the Conference was **“Cooperative Connect” (National and Global Perspective)**. This is the 75th year of India’s Independence. Therefore, as a part of the Amrut Mahotsav, we will begin to connect cooperatives with all stake holders and society, nationally and globally This Conference focuses to play an important role in strengthening Indian cooperatives on the National and Global stage and work towards realizing Prime Minister Narendra Modi’s aim of “Sabka Saath, Sabka Vikas”.

The Inaugural function began with watering of Plant by Shri Subhash Shirodkar, Honorable Minister for Cooperation, Government of Goa, Shri Ramakant Khalap, Ex-Dy Chief Minister Goa, Shri Kuldeep Singh, CGM, NABARD, H.O. Mumbai, Shri G.H.Amin, Chairman, ISSC, Dr. Purnakala Samant, Principal, Government College of Arts, Science and Commerce, Goa and Dr. Anil Karanjkar, Hon. Secretary, ISSC were present on dias at the occasion. The Inaugural function was attended by participants comprising of Cooperators, Members of the Society, Academicians,

Officials, Students of various universities, Faculty and Students of Government College, Goa..

We also thank , Shri Ramakant Khalap, Ex-Dy Chief Minister Goa for delivering Key Note address. Valedictory Address by Dr. K.Ramesha, Former Director, NIBM, Guwahati. We congratulate the paper presenters and delegates for participating in the Technical Sessions by Online and Offline Chairman of various Technical Sessions for moderating.

I am thankful to Dr. Purnakala Samant, Principal and their team and Director, VAMNICOM, for their hospitality and support to make this conference successful. I am also thankful to all the delegates who came from such a long distance and participated in the conference. I am sure that without untiring efforts of Shri Anil Karanjkar and his team, this conference would not have been a grand success.

I acknowledge the financial assistance provided by all the sponsors – especially NABARD, Goa, NCUI, New Delhi, Maharashtra State Cooperative Bank Ltd., Mumbai, Pune Peoples Co-operative Bank Ltd., Pune, Gujarat State Coop. Union, Ahmedabad. The Aslali Sewa Sahkari Mandli Limited, Aslali, Ahmedabad (Gujarat), Gujarat State Coop Credit Societies Federation Ltd., Ahmedabad, Karnataka State Souhadra Federal Co-operative Ltd, Bangalore and Pune District Central Cooperative Bank Ltd., Pune, The Goa State Co-operative Bank Ltd., Goa and also Goa Bagayatdar Sahakari Kharedi Vikri Saunstha Marydit, Goa.

I would also like to thank the Office Bearers of ISSC for taking keen interest to make the Conference a success and members of the Editorial Board for bringing out this publication.

Ghanshyambhai Amin
Chairman, ISSC, Pune



Indian Society for Studies in Cooperation
37th Annual National Research Conference, Goa
(9th -10th December 2022)

PROGRAM

Day-I

9th December 2022

09.15-10.15AM Registration

10.30-11.45AM **About ISSC & Conference**

Dr. Anil Karanjkar
Hon. Secretary, ISSC

Inaugural Function

At the hands of

Shri Subhashji A. Shirodkar

Hon. Minister for Cooperation Govt of Goa

Key Note Speaker

Adv. Ramakant Khalap

Ex-Dy CM, Govt. of Goa

Guest of Honour

Shri Kuldeep Singh

Chief General Manager,
NABARD, Mumbai

In Presence of:

Dr. Purnakala Samant

Principal

Government College of Arts, Science &
Commerce, Khandola Macela, Goa

Presided by

Shri Ghanshyambhai H. Amin

Chairman, ISSC, and Gujarat State Coop. Union Ahmadabad

Vote of Thanks

Dr. C. Pitchai

Prof. & Head, Gandhigram Rural Institute
Tamil Nadu

02.00-03.00PM Plenary Session I &II

(Research paper presentation and discussion)
(Parallel Sessions)

03.15-04.45PM Plenary Session III &IV

(Research paper presentation and discussion)

05.00PM

Annual General Meeting of ISSC

Day-II **10th December 2022**

09.30-.11.00AM Plenary Session V &VI
(Research paper presentation and discussion)
(Parallel Sessions)

11.15-12.45 Plenary Session VII &VIII
(Research paper presentation and discussion)

01.00-02.00PM Open Forum - "An Insight to Sustainable Model of SHG's Catalyst
Role in Women Entrepreneurship and Women Empowerment" (With
special reference to Amaravati District) by Dr. Ankita Ojha, followed by
participants comments.

02.00-02.30PM **Valedictory Function:**
Dr. K. Ramesha
Director (Rtd.), IIBM, Guwahati

In Presence of:
Dr. Purnakala Samant
Principal
Government College of Arts, Science &
Commerce, Khandola Macela, Goa

Award Distribution

Vote of Thanks
Dr. Anil Karanjkar
Hon. Secretary, ISSC

Indian Society for Studies in Cooperation

C/o. VAMNICOM, University Road,

Pune 411 007

Proceedings of 37th

Annual National Research Conference, Goa

(December 9th -10th , 2022)

Indian Society for Studies in Cooperation (ISSC) completed its 37th Annual National Research Conference in collaboration with Government College of Arts, Science and Commerce, Khandola-Marcela, Goa and Vaikunth Mehta National Institute of Cooperative Management, Pune at Multipurpose Hall, on 9th and 10th December 2022. The theme of Annual National Research Conference was “**Cooperative Connect**” (**National and Global Perspective**). The society received 34 papers for the Conference. The details and overall impact of the entire event are described below:

DAY - 1

(9th December 2022 at 10.00 AM)

(Multipurpose Hall, Government College Goa)

Inaugural Function:

The Inaugural function began with the watering of plant by Shri Subhash Shirodkar, Honorable Minister for Cooperation, Government of Goa. Shri Ramakant Khalap, Ex-Dy Chief Minister Goa, Shri Kuldeep Singh, CGM, NABARD, H.O. Mumbai, Shri G.H. Amin, Chairman, ISSC, Dr. Purnakala Samant, Principal, Government College of Arts, Science and Commerce, Goa and Dr. Anil Karanjkar, Hon. Secretary, ISSC were present on dais at the occasion. The Inaugural function was attended by participants comprising of Cooperators, Members of the Society, Academicians, Officials, Students of various universities, Faculty and Students of Government College, Goa.

During the inaugural ceremony, Dr Anil Karanjkar, Secretary, ISSC welcomed the dignitaries, guests, and delegates and briefed the gathering about the objectives, functions, and progress of ISSC's activities. He also briefed about the relevance of the theme “**Cooperative Connect**” (**National and Global Perspective**) in today’s scenario.

Shri Subhash Shirodkar, Honorable Minister for Cooperation, Government of Goa, in his address expressed that the youth to become job providers, instead of job seekers by associating with the cooperatives. He asked the final year students to set up cooperative societies for which the government will provide all support. He said that the cooperative sector in Goa has risen to great heights with no sector left untouched.

Shri Ramakant Khalap, Ex-Dy Chief Minister Goa delivered the keynote address. He said that the cooperative sector in Goa should be strengthened and ways have to be found so that the agricultural sector is revamped and the youth take interest in farming activities. He visualized that Goa should become the cooperative of the country.

Shri Kuldeep Singh, CGM, NABARD, H.O. Mumbai laminated the various research activities that NABARD is undertaking and suggested number of research projects that students and ISSC can undertake. Shri Singh assured all support and assistance in research activities.

Dr. Purnakala Samant, Principal, Government College of Arts, Science and Commerce, Goa said that the College is proud and privilege to organize such research conference. College is trying to increase the continuation of students in the filled of co-operation.

Shri G.H. Amin, Chairman, ISSC and Ex. Vice-President NCUI, New Delhi presided over the inaugural function and delivered the presidential address. He expressed his deep gratefulness to Dr. Purnakala Samant, Principal, Government College of Arts, Science and Commerce, Goa for holding ISSC’s Thirty Seventh Annual National Research Conference. During his address he highlighted that this is the 75th year of India's independence. Therefore, as part of the Amrut Mahotsav, we will begin to connect cooperatives with all stake holders and society, nationally and

globally. This Conference focuses to play an important role in strengthening Indian cooperatives on the national and global stage and work towards realizing Prime Minister Narendra Modi's aim of "Sabka Saath, Sabka Vikas".

The inaugural program ended by vote thanks presented by Dr C. Pitchai.

Technical Session - I (9th December 2022)

The Technical session was conducted in the Multipurpose Hall, in the forenoon. Researchers were given 25 minutes to present their paper and 15 minutes for discussion. This technical session was chaired by Dr K. Ramesha Director (Rtd.), IIBM, Guwahati, along with Rapporteur: B.Punniyan, Research Scholar, GRI, Gandhigram.

The following papers were presented during technical session I.

1. A study on Connect of PACS with their members to gain viability-(A study of PACS in the Chandrapur district of Maharashtra State (India) by Sukdeo B. Patil, (Retd. Additional Commissioner & Joint Secretary (Cooperation), Government of Maharashtra, Mantralaya, Mumbai.
2. Cooperative University: A Boon for Connect with Youth by Sanjay Verma, Director Publication/Public Relations, NCUI, New Delhi

Technical Session - II

The Technical session was conducted in the Multipurpose Hall, in the afternoon. The session was presided over by Session Chairman. Researchers were given 25 minutes to present their paper and 15 minutes for discussion. This technical session was chaired by Chairperson: Dr. E. Vinaikumar, Former Dean, CCBM, KAU, Kerala, Rapporteur: N. Vijaykumar, Research Scholar, CCBM, KAU, Kerala.

1. Connecting Rural Women: A Case of Maharashtra's First All-Women Dairy Cooperative by Shivaji Argade, Scientist, ICAR-Central Institute of Fisheries Education, Mumbai and Ankush Kamble, Senior Scientist, ICAR-Central Institute of Fisheries Education, Mumbai –400061

2. Cooperative Care for Senior Citizens in Kerala -An Exploratory Study by Dr G. Veerakumaran, Prof. and Head, Dr. Shaheena P, Professor and Head Dr Vinaikumar, Former Dean, Kerala Agricultural University, Thrissur, Kerala
3. Cooperatives Connecting People for Vibrant Rural Economy – A Case Study of Senjerimalayadi palayam PACCS in Coimbatore District by Dr.K.Dhevan, Asst. Professor, Department of Cooperation, The Gandhigram Rural Institute (Deemed to be University) And Dr.B.Baskar,Asst. Professor, Department of Cooperation, The Gandhigram Rural Institute (Deemed to be University)
4. Sustainable Development Goals (SDG) and Cooperatives in India by Dr.S.V.Akilandeeswari, Assistant Professor & Head, Department of Business Administration, Athoor Cooperative Arts and Science College, Dindigul, Tamil Nadu and Dr.C. Pitchai Professor and Head, Department of Cooperation, The Gandhigram Rural Institute (Deemed to be University), Tamil Nadu.
5. Value Chain Management Practices of Farmer Producer Companies (FPCs) by M.Ragubalan, Research Scholar, Department of Cooperation, The Gandhigram Rural Institute (Deemed to be University) and Dr.C. Pitchai Professor and Head, Department of Cooperation, The Gandhigram Rural Institute (Deemed to be University), Tamil Nadu. and Dr.S.V.Akilandeeswari, Assistant Professor & Head, Department of Business Administration, Athoor Cooperative Arts and Science College, Dindigul, Tamil Nadu
6. A Study on Connect with Farmers through PACCS in Dindigul District, Tamil Nadu by B.Punniyan, Research Scholar, Department of Cooperation, The Gandhigram Rural Institute (Deemed to be University) and Dr.C. Pitchai Professor and Head, Department of Cooperation, The Gandhigram Rural Institute (Deemed to be University), Tamil Nadu
7. Mangrove Eco Tourism – A Case of Swamini Self Help Group in Sindhurdurga District of Maharashtra by Ms.Akshata, PG Student, ICAR, Mumbai

DAY - 2
Technical Session - I
(10th December 2022)

The Paper Presentation commenced on 10th December 2022 in the parallel sessions. The offline session was presided over by Chairperson: Shri. Sanjeev Khadke, Joint Commissioner (Rtd.), Coop. Elections, Govt. of Maharashtra Coordinator: Dr K. Dhevan, Assistant Professor, GRI, Gandhigram, Rapporteur: Relita Fernandes, Research Scholar, Govt. College, Goa, in the Forenoon. The following papers were presented during the session.

1. A study on Marcela residents' Perception Towards promoting Rural Tourism through Rural Cooperatives in the state of Goa by Namrata Balu Jadhav, Student, Government College of Arts, Science and Commerce Khandola, Marcela Goa
2. A Study on Green Initiatives Adopted by Goa Bagayatdar as a Cooperative by Riya Raju Bharne, Student, Government College of Arts, Science and Commerce Khandola, Marcela Goa
3. Lending Practices of Loans & Satisfaction level of Entrepreneurs towards The Goa State Cooperative Bank Ltd. by Namita Chandrakant Haldankar, Student, Government College of Arts, Science and Commerce Khandola, Marcela Goa
4. An examination of the role played by the Marcela Urban Co-op Credit Society Ltd. in rural youths' skill development by Afsana Badshah Mokash, Student, Government College of Arts, Science and Commerce Khandola, Marcela Goa

The Paper Presentation offline session was presided over by Chairperson: Shri. Prasanna Kumar, Vice President, KSCSF, Karnataka Coordinator: Dr.K.Dhevan, Assistant Professor, GRI, Gandhigram, Rapporteur: Relita Fernandes, Research Scholar, Govt. College, Goa, The following papers

were presented during the session.

1. An Analysis of Factors for Overdues of Primary Agricultural Credit Societies In Maharashtra State by Prof. Dr. Deepak Y. Chacharkar, Head Post Graduate Teaching Department of Business Administration and Management, Sant Gadge Baba Amravati University, Amravati.
2. Co-operative intervention in collection and marketing of Non-Timber Forest Products (NTFPs) in Kerala by Dr. Ushadevi K. N, Professor & Head, Department of Rural Marketing Management, College of Co-operation, Banking and Management, Kerala Agricultural University, Thrissur and Vijaykumar N, Research Scholar, Department of Rural Marketing Management, College of Co-operation, Banking and Management, Kerala Agricultural University, Thrissur
3. Members of PACS & their Connectivity & Involvement in computerization of cooperative societies by Shrikant M. Chougule, M.com, G D C & A, co-operative auditor. Kolhapur
4. Role of Marcel Urban Cooperative Credit Society in Shaping the Economic Condition – Case Study by Ms. Pradiksha Ghadi, Faculty, Government Arts and Commerce College, Khandola, Goa.

OPEN FORUM

"An Insight to Sustainable Model of SHG's Catalyst Role in Women Entrepreneurship and Women Empowerment (with special reference to Amravati District) by Dr Dr.Ankita Ojha, Department of Business Administration and Management, Sant Gadge Baba Amravati University, Amravati.

ONLINE PAPER PRESENTATION

The Paper Presentation online session was presided over by Chairperson: Dr Mukund Tapkir, Chair Professor, V.K. Patil Chair for Cooperation, Savitribai Phule Pune University, Coordinator: Dr S.V. Akilandeswari, Assistant Professor & Head of Business Admn., Athoor Cooperative Arts &

Science College, Tamil Nadu Rapporteur: M. Ragubalan, Research Scholar, GRI, Gandhigram, The following papers were presented during the session.

1. A Study on the Performance of Self Help Groups Assisted by DCCB Branch, Dindigul District, Tamil Nadu by Dr.B.Baskar, Asst. Professor, Department of Cooperation, The Gandhigram Rural Institute (Deemed to be University)
2. A Study on Business Development Plans for PACCS in the Union Territory of Puducherry: In Connect with Members Participation by B. Kanimozhi, Research Scholar, Department of Cooperation, The Gandhigram Rural Institute Tamil Nadu
3. Service Quality in Health Care System –A Study of Member’s Perception and Satisfaction in Kattappana Cooperative Hospital by S.M.Sury, The Gandhigram Rural Institute Tamil Nadu
4. Livelihood Development of Members: A study on Dairy Cooperatives in Puducherry by V. Dhanalakshmi, Research Scholar, The Gandhigram Rural Institute (Deemed to be University), Tamil Nadu
5. The Role of Dairy Cooperatives in Connecting Women's Empowerment With Rural Development by V. Durga, Research Scholar, Department of Cooperation, The Gandhigram Rural Institute (DTBU), Tamil Nadu
6. Innovative Practices of Consumer Cooperative Wholesale Stores in Tamil Nadu by Dr.M.Jansirani, Asst. Professor, Department of Cooperation, Athoor Cooperative Arts and Science College, Tamil Nadu
7. Kerala State Cooperative Federation for Fisheries Development Limited (Matsyafed): A Paradigm Shifter from Welfare to Wealth by Akilandeshwari, A., Ph. D. Scholar & Scientist, ICAR-Central Institute of Fisheries Education, Mumbai

8. Paradigm Shift in Functioning of Multipurpose Fisheries Cooperative Society in Versova, Mumbai by Ankush Kamble, Senior Scientist, ICAR-Central Institute of Fisheries Education, Mumbai
9. A Study on the Employee Satisfaction of Nalappuram District Cooperative Bank Ltd. by Naila, Research Scholar, Kerala Agricultural University, Thrissur, Kerala
10. Successful Dairy Cooperative Turned into Weak: A Case Study by S.Ramya, & Kasivishwanathan, II M.Com. (Cooperative Management Student). The Gandhigram Rural Institute, Tamil Nadu
11. A Case Study on Financial Performance of Dindigul District Central Cooperative Bank Ltd. by .Lakshmiprabha, M.Soloman Infant Perbethuvu & S.Thowfick Mohideen II M.Com. (Cooperative Management Student), The Gandhigram Rural Institute, Tamil Nadu
12. An Analysis of Purchase and Sales Performance of the Gopichettipalayam Agricultural Producers Marketing Society Ltd. by V.Kruthika, B.Sakthiesh Kumar & S.Mohana Devi II M.Com. (Cooperative Management Student), The Gandhigram Rural Institute, Tamil Nadu
13. A Study on Innovative Business and Services in the selected PACCS of Dindigul District, Tamil Nadu by R.Sharmila, P.MohamadhaIrfana & P.SriArthi, II M.Com. (Cooperative Management Student), The Gandhigram Rural Institute, Tamil Nadu
14. A Study on the Financial Performance of Central Cooperative Banks in India by C.Aashika, M.Haripriya, II M.Com. (Cooperative Management Student), The Gandhigram Rural Institute, Tamil Nadu
15. Performance of Cooperative Sugar Mill by C.V.Shamini & T.Karthickraja, II M.Com. (Cooperative Management Student), The Gandhigram Rural Institute, Tamil Nadu
16. Risk Management Involved in Maintenance of Livestock and its effect on Rural Economy by Vivek Ksheersagar, Ex. MD, Katraj Dairy, Pune

Valedictory Function

The Valedictory Session started at 2.00 PM on 10th December 2022. The Valedictory address was given by Dr. K. Ramesha Director (Rtd.), IIBM, Guwahati in presence of Dr. Purnakala Samant, Principal, Government College of Arts, Science and Commerce, Goa; Dr Mukund Tapkir and Dr. Anil Karanjkar.

Dr. K. Ramesha Director (Rtd.), IIBM, Guwahati delivered the valedictory address in this speech he elaborated that youth are in distress and confused about their career. Students are not taking cooperation as subject because they think that there is no good opportunity. For this purpose, we have to make cooperation more attractive so that the students can take this subject for their graduation or post-graduation. If the sector is attractive and ensure for good jobs students definitely selects the field of cooperation.

Award Distribution: As per practice Society distributed best research paper awards for the paper writers who submitted and presented their papers in 36th Research Conference under "Prof. R.V. Nadkarni Best Research Paper Award". There are two categories for award as well as consolation prizes as detailed.

Sr.No.	Category of Participations	Prize Amount
1	Non-Research Scholar	Rs.5,000/-
2	PG/UG Students	1st Rs.3,000/- 2nd Rs. 1500/-
3	Eight Consolations Prizes	Rs. 1000/- each

Vote of thanks was extended by Dr. Anil Karanjkar, Secretary, ISSC. He thanked Dr. Purnakala Samant, Principal, Government College of Arts, Science and Commerce, Goa and Shri G.H. Amin, Chairman ISSC, Delegates, paper presenter and Members of the Governing Council, the entire team of ISSC, and Government College of Arts, Science and Commerce, Goa for conducting the 37th Annual National Research

Conference. Dr Karanjkar announced a special encouragement to the students of Government College, Goa Two students of College will be awarded the seed capital of Rs. 60,000/- for their Start Up, unconditionally. He expressed heartfelt gratitude to all the dignitaries for sparing valuable time to address the delegates.

On behalf of ISSC, he expressed gratitude to all the sponsors – especially NABARD, Goa, NCUI, New Delhi, Maharashtra State Cooperative Bank Ltd., Mumbai, Pune Peoples Co-operative Bank Ltd., Pune, Gujarat State Coop. Union, The Aslali Sewa Sahkari Mandli Limited, Aslali, Ahmedabad (Gujarat), Gujarat State Coop Credit Societies Federation Ltd., Ahmedabad, Karnataka State Souhadra Federal Co-operative Ltd, Bangalore and Pune District Central Cooperative Bank Ltd, Pune, The Goa State Co-op. Bank Ltd., Goa, The Bgayatdar Sahakari Kharedi Vikri Saunstha Maryadit, Goa.

He especially thanked all the faculty members, staff and volunteer students who made it possible to manage the entire event. He said that the event would not have succeeded if delegates from all over India would have not come enthusiastically.

PART 2



01

Cooperative University: A Boon for Connect with Youth

Sanjay Verma*

Abstract:

The paper takes an overview of the youth-centric policies/programs of cooperatives in India, and finds that there has not been a strong connect with the youth. Though several cooperative awareness programs are conducted for youth, but still a long-term connect with youth is a big missing link. Based on this, the paper suggests a model where the setting up of cooperative university can be a big leap forward towards connecting the youth. The paper comes up with various strategies to attract the youth through a cooperative university. The paper concludes that it can be a big game-changer for attracting the youth towards cooperatives.

Keywords:

Cooperatives, Gender Equality, Self Help Groups, Women Empowerment

Introduction:

In July 2021, a separate Ministry of Cooperation was formed to give due attention to the Indian cooperative sector ensuring its further growth and development. Youth constitute the most significant segment of any society and serve as very essential assets to any socio-economic movement. As per the World Cooperative Monitor (2020), cooperatives provide job opportunities to 10% of the employed population, and the largest 300 cooperatives generate about \$2,146 billion in turnover while providing the services and infrastructure. The exact proportion of youth in this is not easy to determine, but the cooperative model of enterprise contributes to youth employment not by only providing salaried employment, but also facilitating job creation through self-employment. Cooperatives also play a role in formalization of informal employment through collective voice and economies of scale and extension of social protection. Across the globe,

*Director(Pub/PR), National Cooperative Union of India, New Delhi

many initiatives are undertaken for ensuring better youth participation. In some countries, access to cooperative entrepreneurship training is provided through national youth employment programs.

Cooperatives and Youth:

In India, Nehru Yuva Kendra Sangathan endeavors to promote National Yuva Cooperative Society to connect and channelize the productivity capacity of youth workforce. Nehru Yuva Kendra Sangathan (NYKS) is an autonomous organization of the Department of Youth Affairs and Sports, Government of India.

The objective of National Yuva Cooperative (NYC) is to launch across pan-India, economic ventures by the young citizens based on the core cooperative principles of self help, participation and cooperation. Yuva Sahakar Scheme – Cooperative Enterprise Support and Innovation Scheme, launched in 2019 and linked to Cooperative Startup and Innovation Fund (of Rs.1000 crore, and authorized by NCDC), helps in encouraging newly formed youth cooperatives to take advantage of innovative ventures, especially by societies with innovative ideas. The Scheme provides better incentives to the cooperatives working in the North-East India and the aspirational districts; and ensures that exclusive benefits are provided for women and scheduled caste/tribe candidates.

The International Labour Organization (ILO) Recommendation 193 on the Promotion of Cooperatives can provide guidance to the major cooperative stakeholder on what measures should be taken. With the right support and progress in addressing the challenges, advances can be made to ensure that the right conditions are in place so that the cooperative model of enterprise can improve livelihoods and help break the barriers which young people face in taking their place in society. Cooperatives can offer a better future to young people.

The cooperative movement in the Asian Pacific region is looking to effectively integrate youth into its fold, for such integration is beneficial both to the youth and the cooperative movement. In the Asian Pacific region, including India, a typical feature of youth involvement in cooperatives is the presence of campus cooperatives in educational institutions – be it schools, colleges and universities with students, teachers, and staff as members. University cooperatives in Japan, school cooperatives in Malaysia, and youth cooperatives in Indonesia are some of

the outstanding examples of successful endeavors of youth in cooperative world. In India, there are only few campus cooperatives, more particularly in South India. Unemployment being the gravest concern faced by youth, the cooperative sector can be an important source to look for, as it creates large-scale employment support.

Awareness Programs on Cooperatives for Youth:

Of late, many awareness programs on cooperatives are being organized for youth, more particularly, students of schools, colleges and universities by NCUI(under Coop Connect platform), state cooperative unions, and other cooperative organizations. However, these programs have served a limited purpose only. The youth though in large numbers are connected to these programs, but they are not able to gain full knowledge about the subject of cooperatives, so that they can consider cooperatives a good career option. Their exposure to the world of cooperatives does not have a long-term, or sustainable impact. Though they come up with never-ending questions on various issues of cooperatives, but due to lack of development of Cooperation as a specific discipline in mainstream education, their curiosity about cooperatives is not channelized in a proper direction so as to fetch them good employment avenues.

Need for Cooperative University:

The need for a specialized Cooperative University has been felt for a long time. At present, Cooperation as a subject of higher learning has not been given due recognition in the educational syllabus. Only few universities, most of them primarily based in South India, offer Bachelors or Masters Degree in Cooperation. These courses are not considered sought-after courses as the students keep these courses low in their priority list. In other universities, Cooperation is one of the subjects in the Bachelors/Masters Degree in Economics/Commerce course. This acts as a great limiting factor in the evolution of Cooperation as a specialized branch of knowledge which can be popularized amongst the youth.

The existing courses in cooperation in the higher education institutions are also not considered attractive for the students as far as employment prospects are concerned. Today is an era when employment, or self-employment, considerations reign supreme in the minds of young students. So, the subject of cooperatives takes a back seat as far as students' priority area for choosing educational disciplines is considered.

Against the above backdrop, the need for setting up a theme-based university has been felt by all, and the government's priority in setting up this university is well evident. With the establishment of new Cooperative Ministry, Union Minister of Home and Cooperation Amit Shah has recently announced that Cooperative University will be formed soon. This university would function as a specialized university with a focus on the subject of Cooperation. Other disciplines will exist in the university, but they will be aligned with the subject of Cooperation. Teaching, training, extension and research may be the core activities of the university. Cooperative University may offer diplomas, undergraduate and postgraduate degrees in various domains of Cooperation.

Multi-disciplinary Approach:

The Cooperative University needs a multi-disciplinary approach because Cooperation as a subject has multi-disciplinary orientation, which has not been fully explored in the existing courses on cooperatives in the universities. The youth today need multi-disciplinary education, which can draw them to the subject of cooperatives, and also make them aware of various aligned subjects which can be very important for their career development. The diverse subjects of economics, sociology, political science, administration, law, governance, sustainable development, communications, media, public relations, history, science and technology, values and ethics, etc., are all incorporated in the subject of cooperatives. They need to be treated as separate subjects with a multi-disciplinary perspective, aligned with the subject of Cooperatives. As there is emphasis on value education in the New Education Policy, the cooperative principles and values offer a fascinating subject of study in the field of cooperatives.

Similarly, study of science and technology is important as there is much emphasis on innovation in the cooperative sector. There is a strong feeling that if cooperatives do not innovate, then they cannot compete in the market economy. So, what sort of science, technology and digital interventions are needed in the cooperative sector? This is a moot question to ponder over, which may be an important part of the study of cooperatives. This may be aligned with the subject of entrepreneurship. So, the university must have a well conceptualized School of Cooperative Entrepreneurship, which may deal with these issues. This school of entrepreneurship can develop models of cooperative entrepreneurship which can attract the youth. At present the youth are not offered any model of cooperative entrepreneurship which can attract them in a big way.

NEP 2020 lays emphasis on setting up incubation centres. Though some of the cooperative organizations like NCUI have set up Incubation Centre, but the setting up of such a Centre, under School of Cooperative University, has a special significance. The incubation centre to be set up at the university level can act as a nodal centre for all the other incubation centres set up by the cooperative organizations across the states as it may have all the advanced facilities, including technological infrastructure, to manage its operations. It may act as a hub of budding cooperative entrepreneurs, amongst the students of the university, who are passionate for a career in cooperative entrepreneurship.

Evolving a multi-disciplinary approach for the Cooperative University will lead to all-round development of students who will be able to develop analytical skills. There will be strong emphasis on communication, discussion, debate, research, and opportunities for cross-disciplinary and inter-disciplinary thinking which can prove fruitful for the youth. A strong research orientation with a multi-disciplinary framework can be the core of this university. At present, the status of research in the cooperative sector is neglected. The sectoral areas of cooperatives like dairy, credit, housing, fisheries, fertilizers, marketing, primary agriculture cooperatives, youth, women and weaker sections, etc., offer a wide canvass of research. The cooperative university, in order to promote research in the field of cooperatives, must encourage young researchers by instituting fellowships for young researchers, organizing best research paper writing competition amongst youth, inviting young cooperative researchers from abroad by creating an interaction platform with young coop researchers, etc.

The youth today are aware about the best practices in private, or public sector, but they are totally ignorant about best practices in the cooperative sector. The university may set up a Centre of Cooperative Best practices, and the students may be encouraged to actively participate in the functioning of this Centre by contributing success stories of cooperatives, based on first-hand field visits. The Centre through collaborations with cooperative organizations in Asia-Pacific region may visualize ways so that this Centre can be developed for study of best practices in the Asia-pacific region. Various courses or diplomas may be offered by this Centre which can attract the youth, at least from the countries in SAARC region.

Experiential Learning and Employability:

New Education Policy (NEP 2020) lays emphasis on experiential learning. Experiential learning facilitates proper communication between students, teachers and industry. The Cooperative University based on experiential learning will have close interactions with the cooperative organizations. The university may forge joint collaborations with cooperative organizations all over the country to have arrangements for study visit of students to various cooperative organizations so that they can see the working of the cooperative organizations from close angles. The students should not only visit the successful cooperative organizations, but also those societies which are a failure. A balanced picture of cooperative development must be ingrained in the minds of the students so that they can offer solutions based on their practical and analytical insights of the working of cooperatives. The cooperative practitioners, experts, or mentors from various organizations can take up sessions on various issues of cooperative development where the students will be provided real-life situation in the cooperative organizations, so that the students develop the skill of problem-solving. Regular sessions from the cooperative practitioners/academicians/entrepreneurs will provide the students with insights regarding the skills needed in the cooperative sector. This will generate interest of the youth in taking up cooperatives as a career option, as they will become ready for many jobs available in the cooperative sector. The sessions taken up by cooperative entrepreneurs from cooperative organizations in the university will enable students to explore entrepreneurial career avenues in the cooperative sector. Similarly, the sessions taken up by key experts from various sectoral areas of cooperatives regarding various career options in the cooperative sector, will again attract the youth. A career in the sectoral areas of cooperatives like dairy, credit, banking, etc can be very rewarding from the youth,. The experts, backed up by regular mentoring of the mentors, can enable the students to be convinced about a career in cooperatives. The cooperative organizations may hire the students from the university based on not only their academic skills, but also their practical exposure in working with cooperative organizations as trainees. For this, internship may be made mandatory for the students so that they know the working of the cooperative organizations, and are exposed to real-life situation by working there for some time.

Internships and fellowships may be provided by the Cooperative University to attract students so that they can be encouraged to take up career in cooperatives. The Cooperative University offering internships to the

students will also be a big motivating factor for the students to enroll themselves into the courses offered by the university. Similarly, fellowships may be provided by the cooperative organizations, under the aegis of the university, which will definitely create a platform for the cooperative organizations to hire the best talent.

Conclusion:

With the establishment of Cooperative University, cooperative education in India is poised to make a great leap forward. Setting up of the Cooperative University can be a game-changer as far as attracting the youth to the cooperative sector is concerned. By providing the youth opportunities of employment, entrepreneurship, strong academic orientation in cooperatives with focus on research, etc., the university can slowly and steadily attract youth to come in the cooperative fold. The Cooperative University will offer cooperative education ensuring effective delivery of what is expected in terms of skills and knowledge to youth in cooperatives and supporting cooperative institutions.

02

An examination of the role played by the Marcela Urban Co-operative Credit Society Ltd in rural youths' skill development

Miss Afsana Mokashi*

Abstract:

Co-operatives are the voluntary association of members who come together to form a society for mutual benefit. They work as per their norms or procedures developed. The co-operatives play a vital role in the economic development of rural and urban areas by serving their members. There are various types of societies formed with their objectives. Some do the agricultural sector, and some serve rural and urban sectors. There are various co-operatives like housing co-operatives, credit co-operatives, agricultural co-operatives, consumer co-operatives, student co-operatives, etc., out of which urban co-operative credit society is focused in this study. Co-operative societies are wholly owned and governed by their members.

Objectives: *This paper closely inspects the role of the Marcel Urban Co-operative Credit Society Ltd. Marcel- Goa in generating employment and the reason behind employing the students.*

Design/methodology: *The case study is undertaken. The questions were framed, and the data was collected from the manager of the Marcel Urban Co-operative Credit Society Ltd., Marcel- Goa. The data is collected from both primary and secondary sources.*

Findings:

Every year, the Marcel Urban Co-operative Credit Society Ltd. Marcel-Goa. They provide training to the students and pay 5000 per month to their

*Student, M.Com part II, PG Department Of Commerce, Government College of Arts, Science and Commerce, Khandola- Marcela, Goa

trainees as a part of a stipend, which helps them support their education. Moreover, the training helps the students in acquiring various skills. They might also use those skills in specific companies, which are only restricted to co-operatives.

Limitations: *The limitation of the study is that the investigation is restricted only to Marcel Urban Co-operative Credit Society Ltd. Marcel- Goa. The role of the respective co-operative is studied about employment only.*

Keywords:

Cooperative, Employment, Internship, MUCCSL, Scheme, Training.

Co-operatives meaning:

According to International Cooperative Alliance (ICA), “co-operatives are the 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”.

According to the International Labour organisation co-operative society is “An association of persons varying in number, who are grappling with the same economic difficulties and who, voluntarily associate based on equal rights and obligations, endeavour to solve those difficulties, mainly by conducting at their own risk an undertaking for which they have transferred one or more of such their economic functions as correspond to their common needs and by utilising this undertaking in cooperation for their common material and moral benefits”.

The definition explains that the members are free to join and exit whenever they want as per their own will. The members work for their mutual benefit. Co-operatives are sovereign organisations; outside authorities do not control them. It is self-reliant and self-initiated, supported by members’ contribution to the share capital at the beginning. Cooperative provide their members with training and education for effective and efficient work performance. (Mago et al., 2013)

There are two types of co-operatives member -user co-operatives and worker co-operatives. The two main features that separate them from each other are that in the user co-operative, the members are not referred to as workers, and co-operatives are not only the source of livelihood. The producer co-operative falls under the worker co-operatives, and the

members play dual characteristics. They are members as well as workers of the co-operative. (Mago et al., 2013).

Salient features of cooperation:

- Trust in your co-operative society
- Mutual benefits and support for every member are the cornerstones of cooperation.
- Know your co-operative society.
- Develop your village or city through a co-operative society.
- Be honest and sincere in sharing the responsibilities in the co-operative societies.
- Contribute your efforts to developing co-operative societies keeping the basic principles of “one for all and all for one”.

Co-operatives existence:

According to the NCBA (2005), 750000 co-operatives serve 73 million people globally. Moreover, the number has increased to 3 million co-operatives operating the 1 billion co-operative members as per the INTERNATIONAL COOPERATIVE ALLIANCE (ICA).

The first agriculture co-operative society was established in 1844 in Rochdale, England, as Rochdale Society of Equitable Pioneer, LTD. It was a consumer co-operative. The objective behind this co-operative was to serve its members with better food, education, employment, housing and other social benefits.

Later in 1864, Raiffeisen Bank was established by Friedrich Wilhelm Raiffeisen in Germany. They were launching this co-operative to serve the rural and urban people by providing credit and saving services. Based on the idea of “self-help”. (Ortamann et.al, 2007).

Over time the development of co-operatives and its objective and role has also changed. As a result, the co-operatives are contributing to economic growth.

Co-operatives in Goa:

After the liberation of Goa, co-operatives were established in the state. The British established the first Agricultural Credit society in Maharashtra to finance the agricultural sector. The British officers started the VKSS

societies in Panchayat areas for each village. In Goa, that type of first society was established in Nagargao village in Sattari Taluka, which is operating to date.

The first urban co-operative society was established in 1991 to meet the financial crisis of non-agricultural activities. The sankhalim urban co-operative credit society Ltd. was the first urban co-operative society. After three months, on 24th August 1991, the marcel urban co-operative credit society Ltd started functioning and became the second urban co-operative society to operate in Goa.

Till March 2020, around 128 societies have been formed, with more than ten branches in different parts of Goa.

The Urban credit Society:

The urban credit co-operative societies derive their working capital from share capital and deposits. After the required 25% is set aside as a contribution to the reserve fund, profits are distributed among shareholders. The urban credit co-operative follows normal banking functions.

Marcel Urban Co-operative Credit Society Ltd. Marcel- Goa:

Adv. Arun A. Naik took the initiative to establish Marcel Urban Cooperative Credit Society Ltd., or MUCCSL, in 1991 with cooperation and by holding various meetings with active workers. It is the second bank based in Goa after the liberation, and was registered on 24th January 1991 and started its operation on 24th August 1991. The society started with only 30 members with Rs. 6000/- share capital. With the blessings of its members and goodwill earned by the bank, it can complete 30 years of its successful tenure. The society has crossed the share capital of RS. 1,80,00,000/- with a membership of 8000, still in the urge of increasing it. The society has its other three branches at Kundaim, Ponda, and Sakhalin.

The MUCCSL contributes to the development of the economic field by providing financial assistance to its surrounding villages through loans and has gained the confidence of the depositors. As a result, the MUCCSL deposits have crossed 30 crores, and advancing has reached almost Rs. 28 crores.

- The society undertakes various social welfare activities like Education Scheme to provide library materials in the form of books and cupboards to multiple schools and

- Education Adoption Scheme for the students pursuing professional studies by providing financial assistance till they complete their degree programme.

During the 30th-year celebration, the society conducted other activities to reach the general public, like

- Small market meetings for small market vendors whose turnover is around Rs.10000/- per month. The meeting ended by launching a unique scheme to provide loans up to Rs. 10000/-.
- Self-help group meet.
- Ganesh Chaturthi Bazar to display cum sell the products prepared by the self-help groups.

Classification of Employees:

- Permanent
- Probationer
- Temporary
- Trainees.

Methods of recruitment:

- By direct recruitment
- By promotion
- Appointment etc.

In 1994 the MUCCSL started the scheme of employing the students and became the first co-operative in Goa to start a such initiative, later followed by many co-operatives. The initiative was undertaken to create awareness among the students about co-operatives. The students who have completed their education up to 12th standard can avail this opportunity. The students are provided with on-the-job training methods by way of job instruction. There is no restriction that the students should be from a commerce background because the co-operative members believe that nobody learns by birth, so providing them with the proper training can fulfil the gap.

The training is for six compulsory months. The essential skills the employees or trainees get from such training are maintaining the books of record, bank reconciliation statements, calculating interest, and maintaining the books. The job performance of the trainee is measured continuously. The excellent staff keeps a watch on them and corrects them when required. The trainees / interns were paid a stipend of Rs. 5000 per month. Therefore, there are no additional expenses made to them.

Through this training, the trainees get work experience like inward, outward, and bank accounts, which can also be applicable in companies.

Literature review:

Singh Kh and Chauhan (2014) examined the impact of dairy co-operatives on income and employment generation in the beneficiaries' households. The findings suggest that dairy co-operatives have brought significant changes in dairy enterprises in the state. Higher investment in dairy enterprises, followed by maintaining better quality crossbred animals by members, leads to higher milk production and, thereby, higher income.

Das et al. (2019) assessed the possible contribution of co-operatives, one of the principal actors of social and solidarity economy (SSE), to achieve a few targets of Sustainable Development Goal 8 – Decent Work and Economic Growth. The study concludes that West Bengal Milk Cooperative may be regarded as an SSE agent, and it is engaged in achieving two targets of SDG 8.

Mago (2013) examines the role of small-scale producer co-operatives in reducing unemployment and providing income and food to the rural people of Amathole in the Eastern Cape Province of South Africa. The study revealed that co-operatives employ worker-members and could not hire employees, managers and other skilled personnel. Income and food were other notable benefits.

Velmonte (2020) focused on “How co-operative contributes to the economic development of Cebu Province specifically in Consolation, Medellin, Compostela, Poro and Tudela, Cebu. These municipalities represent respectively the five classes of municipalities, which are first-class, second-class, third-class, fourth class and fifth-class municipalities, about their income. Co-operatives, in general, helped the members in their financial aspects. In one way or another, co-operatives helped the members uplift poverty. It supports the poor in carrying out sustainable development and developing health. This is the upshot when there is an increase in wealth; health is restored.

Normark (1996) emphasised the role of co-operatives in economic development. The study concludes that A co-operative is an organisational form with comparative advantages in production that is human-capital intensive.

Anandaram and Dubhashi (1999) examined the role of co-operatives in social development. The study revealed that Co-operatives provide a platform for women to come together and acquire better bargaining power. Even in urban areas, co-operatives have a significant role to play.

Wanyama et al. (2008) assessed evidence on the contribution of co-operatives to poverty reduction in Africa. The results show that co-operatives have significantly contributed to the mobilisation and distribution of financial capital; created employment and income-generating opportunities; constituted a forum for education and training; and set up solidarity schemes to cater for unexpected expenses related to illness, social welfare, death and other socio-economic problems.

Aref (2011) focused on the contribution of rural co-operatives to poverty alleviation in Iran. The study concludes that rural residents negatively perceive rural co-operatives' contribution to poverty alleviation. They referred to rural co-operatives' dependency on the government and lack of cultural capacity for group collaboration as the main barriers to poverty alleviation through rural co-operatives.

Dogarawa (ND) investigated how co-operatives can act as agents towards sustainable community development. The study shows that for over 160 years, co-operatives have been an effective way for people to exert control over their economic livelihoods as they play an increasingly important role in facilitating job creation, economic growth and social development. The paper concludes that to be effective and successful, and co-operatives must continuously achieve two interrelated goals: enhance the viability and improve their ability to service their members; and remain an economically viable, innovative and competitive enterprise.

Singh and RS Pundi (2000) This paper characterises and distinguishes co-operatives from other organisations and highlights the important place they occupy in India's rural economy.

Martinez et al. (2020) focused on the interplay between individuals' profiles and the institutional form of business, particularly co-operative versus non-cooperative options. findings showed that some extrinsic issues are related to co-operative job preference. However, the factor that has the most significant impact is collective knowledge.

Ortmann & King (2007) analysed the principles of cooperation. Briefly, he described the history and development of agricultural co-operatives in developed and less-developed countries, with particular emphasis on South Africa. The study concludes that in South Africa, the success of farming co-operatives in the past was promoted because they served as agents of agricultural marketing boards and the Land Bank, which provided subsidised loans to commercial farmers.

Vilas Gaikar (2015) assessed 1. The development of the Co-operative movement in the five-year plan. 2) Understanding the history and significance of Indian Co-operatives. 3) Identify the troubles and suggest the improvement of the Indian Co-operative movement. The finding of this study reveals that despite the development of co-operatives over 108 years, there remains some problem concerning Restrictive provisions of Co-operatives law, lack of adequate infrastructure, Co-operatives still following traditional management techniques, Excessive Government Control and Political Interference, etc. Also, the researcher has suggested various ways by which the co-operatives can be improved. Accountability and transparency need to be brought into the implementation of the schemes. Enhancing the competitive strength of Co-operatives through their merger and division, wherever necessary, Reform in Co-operatives laws, Establishing professional Co-operatives management centres and practice human resource management, etc.

Roman (2016) analysed a competitive advantage in a credit co-operative, the role of resources. The study concluded that three sources might consider only one resource may be valuable, rare, costly to imitate and exploited by the company.

Huppi (2012) examined the role of groups and credit co-operatives in rural lending. The study revealed that successful group lending schemes work well with homogeneous groups and are jointly liable for defaults. Despite their mixed performance, lending groups and credit co-operatives have the potential to provide credit to small farmers while allowing financial intermediaries to function as viable institutions.

Ferri (2012) assessed credit co-operatives' challenges and opportunities in the global scenario. The study found that judgment was neither justified by available theories of banking intermediation nor supported by available evidence.

Analysis and findings:

The above table shows that the education fund expenditure for the year 2020-2021 has been the highest, which is above 50000 compared to the other years, followed by 2021-22 and 2017-18, which is 50000 for both.

The stipend provided to the trainees is more in the year 2021-22 that is 500000 followed by 2019-20 that is almost 200000, and during the year 2020-21, the expenditure made on providing a stipend to trainees is significantly less, which is 50000 due to pandemic as the students were not given training during this period.

The amount spent for felicitating the students who have scored good marks in their academics are felicitated, so the amount spent on them is high during 2020-2021, which is the average amount spent that year was 60000 and above.

Conclusion and suggestions:

The Marcel Urban Co-operative Credit Society Ltd. Marcel- Goa is the second co-operative society established in Goa but the first urban credit co-operative society to come up with such an incredible idea of providing training or internship to the students to develop their skills also to make them stay connected with the co-operatives. In addition, they provide a stipend of 5000 per month, which the students can use to support their education during that period.

Further, the Marcel Urban Co-operative Credit Society Ltd. Marcel- Goa's fundamental role can be studied despite focusing only on the training/ internship provided.

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Sustainable Development Goals (SDG) and Cooperatives - A Study in Tamil Nadu

Dr.S.V.Akilandeeswari¹ and M.Ragubalan²

Abstract:

Cooperatives are well-placed to contribute to sustainable development's triple bottom line of economic, social and environmental objectives plus the governance agenda, not least because they are enterprises that endeavour to meet the economic progress of members while satisfying their socio-cultural interests and protecting the environment.

They offer an alternative model for social enterprise, with contributions to sustainable development well beyond job creation. Since cooperatives' share in GDP and total enterprises is currently relatively small in most countries, their promotion and expansion could be an important instrument for achieving the Sustainable Development Goals (SDGs).

Keywords: Cooperatives, Social enterprise, Job Creation, Sustainable Development.

Introduction:

At the UN in New York the Open Working Group created by the UN General Assembly proposed a set of global Sustainable Development Goals (SDGs) which comprises 17 goals and 169 targets. Further to that, a preliminary set of 330 indicators was introduced in March 2015. Some SDGs build on preceding Millennium Development Goals while others incorporate new ideas. A critical review has revealed

¹Assistant Professor and Head, Department of Business Administration, Athoor Cooperative Arts and Science College, Dindigul, Tamil Nadu-624302.

²Research Scholar, Department of Cooperation, Gandhigram Rural Institute – Deemed to be University, Tamil Nadu

that indicators of varied quality (in terms of the fulfilment certain criteria) have been proposed to assess sustainable development. Despite the fact that there is plenty of theoretical work on quality standards for indicators, in practice users cannot often be sure how adequately the indicators measure the monitored phenomena. Therefore stress is on to operationalize the Sustainable Development Goals' targets and evaluate the indicators' relevance, the characteristic of utmost importance among the indicators' quality traits. The current format of the proposed SDGs and their targets has laid a policy framework; however, without thorough expert and scientific follow up on their operationalization the indicators may be ambiguous.

Everyone entitled to human rights and a livelihood to eradicate poverty by 2030 and sustainable development goals integrate social, economic & environmental goals; stop climate change and reduce unsustainable consumption. Inclusive economic growth to all people to benefit from the growth through employment creation, good governance and dependable institutions. Cooperatives act as new global partner for coherent multilateral decision-making and strict enforcement of rules.

Methodology:

A survey was planned and conducted. The survey findings were made for the purpose of study to find out how the cooperative business model is contributing towards achieving sustainable development. A total of 291 respondents of primary cooperatives, cooperative unions and federations of cooperatives formed as the sample for the study. Among the SDGs, eleven goals were identified that are more relevant to cooperatives.

Selected Goals:

Goal 1: No Poverty.

Goal 2: Zero Hunger.

Goal 3: Good Health and Wellbeing.

Goal 4: Quality Education.

Goal 5: Gender Equality.

Goal 6: Clean Water and Sanitation.

Goal 8: Decent work and Economic Growth.

Goal 9: Industry, Innovation and Infrastructure.

Goal 10: Reduced Inequalities

Goal 11: Responsible Consumption and Production.

Conceptual Model:

Based on the review of the conceptual framework for sustainable development, it will be possible only when there are number social enterprises. Among social enterprise cooperative models it is simple and easy to adopt. It helps its members to overcome their problem by themselves with its values. Self- Help is the best help to develop an individual.

FIGURE 1

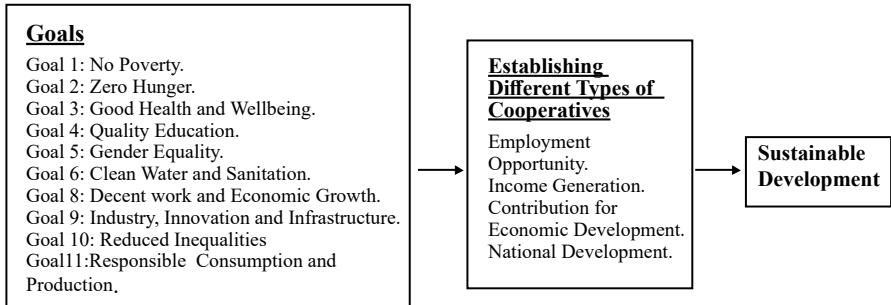


Figure 1. Conceptual model of the study

From the above figure it is found that the goals of SDG can be achieved through the cooperatives very easily. And, there are various types of cooperatives that help in achieving the sustainable development and also its members.

Results and Discussions:

Post-2015 Development Agenda:

Rio UNCSO in June 2012: UN Secretary-General’s High-Level Panel of Eminent Persons (HLPE) proposed the post-2015 Development Agenda Five transformative shifts to guide the post-2015 Development Agenda:

Universal equality: Everyone entitled to human rights and a livelihood to eradicate poverty by 2030 Sustainable development: integrate social, economic & environmental goals; stop climate change and reduce unsustainable consumption. Inclusive economic growth: all people to benefit from growth through employment creation, peace, good governance and dependable institutions for all citizens. A new global partnership: coherent multilateral decision-making and strict enforcement of rules.

Sustainable Development Goals As proposed on the SDGs, June 2014:

- End poverty
- Promote sustainable industrialization
- End hunger: Achieve food security and adequate nutrition, and promote sustainable agriculture
- Reduce inequality:
- Attain healthy life for all at all ages. Build inclusive, safe and sustainable cities Equitable and inclusive quality education and life-long learning opportunities. Promote sustainable consumption and production.
- Attain gender equality: Empower women and girls.
- Promote actions to address climate change,
- Secure water and sanitation.
- Attain conservation and sustainable use of marine resources, oceans and seas.
- Ensure access to affordable, sustainable, and reliable modern energy services. Protect and restore terrestrial ecosystems and halt all biodiversity loss. Promote strong, inclusive and sustainable economic growth and decent work for all.
- Achieve peaceful and inclusive societies, rule of law, effective and capable institutions. Strengthen and enhance the means of implementation and global partnership.

Cooperatives' are potential to contribute to the proposed Sustainable Development Goals (SDGs). Respondents noted that the proposed SDGs are well-aligned with the priorities of their organizations. Many of them indicated that the high potential of cooperatives and their movement to contributing to the achievement of the proposed goals. The respondents identified the following as goals where cooperatives have the most potential to contribute to: Ending poverty was supported by 84 per cent of the respondents, and in creating jobs, sustainable livelihoods, and equitable growth was also stated by 84 per cent. Potential of cooperatives was also seen significant for the following proposed SDGs: Ensuring food security and good nutrition by 84per cent. Providing quality education and lifelong learning,Ensuring good governance and effective institutions, and Empowering girls and women and achieving gender equality were agreed by 68 per cent.

Table No. 1. SDG and Cooperatives for the Development

SDG Goals	Suitable Cooperatives
Goal 1: No Poverty.	PACCS, PCARD Bank, Dairy Cooperatives, Urban Cooperative bank, Handloom Cooperatives, Labour Cooperatives
Goal 2: Zero Hunger.	PACCS (PDS), Agricultural Cooperative Marketing Society, Consumer cooperatives.
Goal 3: Good Health and Wellbeing.	Hospital Cooperatives, IMPCOPs,
Goal 4: Quality Education.	NCUI, NCDC, NABARD, ICMs, VAMNICOM, JCTCs, Cooperative Colleges and schools, Students Cooperatives.
Goal 5: Gender Equality.	SEWA, Women’s Cooperatives, 30 per cent representation in board of all cooperatives,
Goal 6: Clean Water and Sanitation.	Waste Picker and Recycler Cooperatives.
Goal 8: Decent work and Economic Growth.	All types of Cooperatives
Goal 9: Industry, Innovation and Infrastructure.	IFFCO, KRIBHCO, AMUL, Labour coops (like ULCCS, Dinesh Beedi etc.), Hospital Cooperative.
Goal 10: Reduced Inequalities	All Types of Cooperatives
Goal 11: Responsible Consumption and Production.	Processing Cooperatives (Sugar, Spinning, Handloom& Weavers, Handicrafts, Dairy, Fertilizer cooperatives)

Close to 85 per cent of the respondents reported their institutions were involved in the promotion of decent work and job creation. Cooperatives contribute to this goal by: Creating stable employment, advocating and promoting social protection for all and complying with international labour standards and fundamental principles and ensuring rights at work.

They endeavour to meet the economic progress of the members while satisfying their socio-cultural interests and protecting the environment. It is found that the good governance features in the principles of cooperatives.

Poverty reduction, Income generation, Employment creation Social welfare

services, Gender equality and women's empowerment. Cooperatives expand economic opportunities for women, Gender divisions of labour, Quality education and lifelong learning, Cooperatives facilitate access to education (coop schools, teacher coops, educational support for members and families, Serve as lifelong learning centres, Ensure healthy lives, Health sector coops (hospitals, health insurance, healthcare delivery, other social care and home-based care services).

Food security and good nutrition:

Cooperatives produce and market food - Increase producers' access to inputs and markets - Over 50 per cent of the world's agri- produce marketed by cooperatives - Improved nutrition through diversified diets, knowledge sharing, extension. Access to water and sanitation, cooperatives provide these services in urban and rural areas, offering alternative to public and private sectors, sustainable energy, cooperatives contribute to secure sustainable energy. Increasing the share of renewable energy.

Integration of renewable energy projects, Connection to electricity supply, Employment creation, livelihoods & equitable growth, Cooperatives create employment & generate income, Safeguard jobs, Support livelihoods, Promote equitable distribution of profits to ensure equitable growth.

Sustainable natural resource management

Environmental cooperatives-Social cooperatives encouraging reuse of resources, Waste pickers & recyclers coops, cooperatives governance based on values of self-help, self-responsibility, democracy, honesty, openness, equity & equality. Democratic member control a key principle of coops, promotion of stable and peaceful societies, cooperatives are source of "positive social capital". Cooperatives in post-conflict situations: credit, counseling, skills development, Promote reconciliation and peace building Global enabling environment and long-term finance, Cooperatives bridge trade barriers between developed and developing countries, eg. fair trade contribute to the stabilization of global financial crisis. Cooperatives provide the financial base for development activities.

Table No. 2. T-Statistics on the Opinion of Members

Sl. No.	SDG-Variables	Co-operators opinion	
		t – statistics	
1.	Social Stability	2.9281	2.570*
2.	Employability	3.1699	2.788*
3.	Income	3.0948	2.306*
4.	Self- Development	3.1307	2.604*
5.	Health and Sanitation	3.2418	2.548*
6.	Respect	3.3627	2.782*
7.	Participation	3.3627	2.782*

Source: Outcome of data analysis and interpretation using SPSS, Note: * Significant at 5 per cent level.

Table No:3. Applicability of SDG Goals

SDG Goals	Responded Institutions	Employability	Socio- Economic Development	Governance
Goal 1: No Poverty.	291	273(93.81)	250 (85.91)	280 (96.22)
Goal 2: Zero Hunger.	291	291(100)	291(100)	291(100)
Goal 3: Good Health and Wellbeing.	291	273 (93.81)	250 (85.91)	280 (96.22)
Goal 4: Quality Education.	291	273 (93.81)	250 (85.91)	280 (96.22)
Goal 5: Gender Equality.	291	195 (67.01)	201(69.07)	175 ((60.13)
Goal 6: Clean Water and Sanitation.	291	273 (93.81)	250 (85.91)	280 (96.22)
Goal 8: Decent work and Economic Growth.	291	273 (93.81)	250 (85.91)	280 (96.22)
Goal 9: Industry, Innovation and Infrastructure.	291	273 (93.81)	250 (85.91)	280 (96.22)
Goal 10: Reduced Inequalities	291	198 (68)	87(30)	6(2)
Goal11:Responsible Consumption and Production.	291	291(100)	291(100)	291(100)

Source: Primary Data, Inside Parentheses are percentage

Conclusion:

Cooperatives are resilient to crises:Cooperative enterprises across sectors have continued to grow and prosper during the crises, which is reaffirmed

by the survey results. Majority of respondents observed that the number of cooperatives has grown and contributing for fulfilling the SDGs. Further, it was found that the individual membership in cooperatives has increased and number of people employed by cooperatives too has risen.

Challenges faced by cooperatives are innumerable, irrespective of it, the contribution by the cooperatives towards achieving sustainable development is commendable. The challenges faced by the cooperative are inadequate enabling environment for cooperative development and the government support to cooperatives had either remained the same or declined in the past decade.

The contributions cooperatives during the pandemic period are appreciable and the responding institutions reiterated that they were in forefront in helping the needy and people below BPL. The identified Sustainable Developmental Goals by the responding cooperatives have done and yeoman service in all respect. The Government may not be in a position to be more active in certain areas of SDG and the cooperatives have volunteered to support the people. The Non-Governmental organisations too have certain limitations in rendering services to the people, whereas, the cooperatives were in forefront in providing support to the needy. It is very clear from the study that the cooperatives are the panacea for all the rural ills or the people under the below poverty line, under privileged, marginalised etc. By considering these aspects, the Government India has formed a separate ministry for cooperatives.

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Connecting Rural Women: A Case of Maharashtra's First All-Women Dairy Co-operative

¹Shivaji Argade, ¹Ankush Kamble,
²Sagar Wadkar and ³Laxmi Mhatre

Abstract:

Collective action is intrinsically linked with uplifting individual and social capacities to act differently and challenge the distribution of power that constrains the capabilities of men and women. Collectivization of farm women through Self Help Groups or Cooperatives is the most effective institutional mechanism to address challenges in production and post-production stages of any agribusiness value chain. Building collective action of farm women not only help in achieving targeted income but also transforming gender relations at household, community and institutional levels by enhancing their stake in all aspects of agribusiness value chain. Though women contribute over 75% of the workforce in India's dairy output of 198.48 million tonnes annually, the top positions in dairy cooperatives across the country are occupied men. Women are mostly involved in animal husbandry operations like cleaning, feeding, milking, etc. In 2015, Maharashtra's first all women dairy cooperative (Maval dairy) established at Maval in Pune with 335 members with an aims to empower women, economically and socially along the dairy business value chain. The share capital of the firm was Rs. 1,000 per member. Today, a new membership to the firm costs Rs. 5000. It has started with 9 women SHG members and reached to 1,231 women members. Maval dairy cooperative is the best example for a successful rural women entrepreneurship model. Hence, the model can be replicated in other parts of the State and Country to establish women enterprises and support women's transition from 'Job Seeker' to 'Job Provider'.

¹Scientists, ICAR-Central Institute of Fisheries Education, Mumbai – 40006

²Advisor (Research & Study), National Cooperative Union of India, New Delhi- 16

³Production Head, Maval Dairy, Maval, Pune - 412106

Introduction:

India's livestock sector shares about 4.11% of India's Gross Domestic Product (GDP) and 25.60% of total agriculture GDP. India is the largest milk producer ranked first in milk production contributing 23% of global milk production with milk production of 198.48 million tonnes of milk in the year 2019-2020. Milk has become the single largest agricultural commodity in terms of the value of the commodity produced. Dairying has emerged as an important source of income and employment for marginal and small farmers and employed 80 million dairy farmers directly (NDDDB, 2020).

I. Background Literature Review:

a) Dairy co-operative status in India:

The first dairy society - The Katra cooperative dairy society, Allahabad was registered in 1913 in Uttar Pradesh. The first farmers' integrated dairy cooperative was established in Anand (Gujrat) in 1946 which is popularly known as AMUL (Anand Milk Union Limited). Uttar Pradesh State is having the highest number of dairy co-operative societies followed by Bihar and Maharashtra in the year 2020. Region wise number of dairy co-operative societies in India, top three states are Bihar (23510), Odisha (6,053) and West Bengal (4236) in Eastern Region; Maharashtra (20,762), Gujrat (20144) and Madhya Pradesh (10,094) in Western Region; Uttar Pradesh (31,958), Rajasthan (15,067), Haryana (7500) and Punjab (7385) in Northern Region; and Karnataka (16,416), Tamil Nadu (10,076) and Telangana (5176) in Southern Region (Fig.1). In terms of membership in these societies, the State of Gujarat (36.10 lakhs) ranked first followed by Karnataka (26.28 lakhs), Tamil Nadu (20.30 lakhs), Maharashtra (17.94 lakhs), Uttar Pradesh (12.58 lakhs) and Bihar (12.05 lakhs). The membership is very less in all States located in eastern India except Bihar (Fig. 2). In case of milk procurement, about one-third of total milk procured by these co-operatives comes from Gujarat State followed by Karnataka, Tamil Nadu and Maharashtra (NDDDB, 2020). Today, the dairy cooperatives operate in almost all the States and Union territories of India.

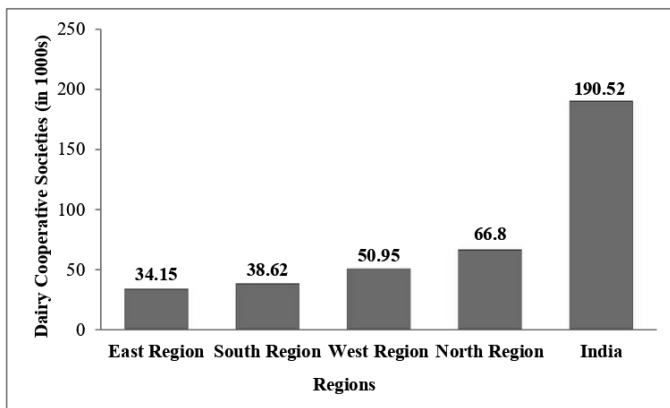


Fig.1 Number of dairy cooperative societies across India in the year 2020

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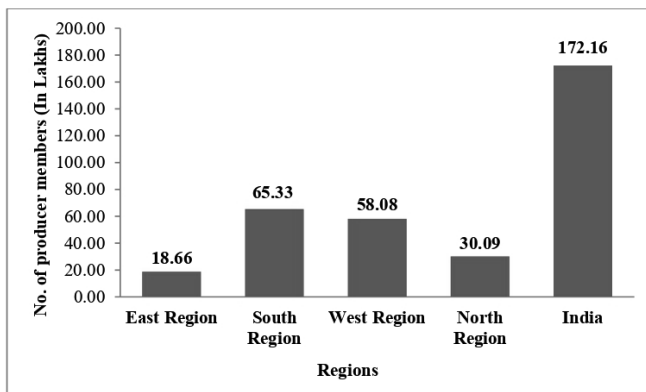


Fig.2 Number of producer members across India in the year 2020

Fig.2 Number of producer members across India in the year 2020

b) Current concerns of the dairy cooperative:

Though the spread of the dairy cooperatives in number looks impressive, still it covered only 18% of the total villages and only 17% of the dairy farmers have membership of the dairy cooperatives. The milk procurement of total milk production through cooperative societies is only 15% of the

total milk production. Dairy cooperatives procure around 507.48 lakhs Kg of milk per day in the year 2019 (NDDB, 2020). The economic survey of 2018-19 highlighted that more than 50% of the marketable surplus of milk is still handled by the unorganized sector. The private dairy sector is catching milk producers in rural areas and providing lucrative milk prices which are major threats to dairy cooperative societies at village level. The main concerns of the dairy cooperatives are limited coverage of villages, lack of flexibility in milk collection system, poor connectivity to remote villages, limited involvement of women in cooperative management, political influence in the cooperatives, delayed or no payment to milk producers, poor pricing system, inefficient marketing system, lack of leadership, etc. (Sheela and Ramegouda, 2013).

c) Women in dairying and dairy cooperatives:

The livestock sector is largely considered as livelihood intensive and gender sensitive. Livestock sector provides employment to 18 million people of which nearly 70% of them are women. Women contribute over 75% of the workforce in India's dairy sector. Rural women were found to devote 90% of the labour force in livestock farming. About 75 million women as against 15 million men are engaged in dairying in India (Ramesh et al., 2018). Active participation of women in all spheres of dairy cooperative business and governance is central to dairy development in the country. During 2019-20, the number of women members increased to 5.33 million registering an annual growth of 3.9% over the previous year (NDDB, 2020).

Cooperative movement has provided opportunities to women to organize their economic activities with small capital and transformed their lives by providing economic independence. Carla and Markus (2017) found that women who were cooperative members produced and sold larger amounts of milk per day compared with non-members. Consequently, they have attained a significantly higher productivity per animal, and dairy income is more important in their total household income than for non-members. Kumari & Malhotra (2016) analysed the impact of membership of women in dairy co-operative society on their income and employment and found that monthly income from both crossbred cows and buffaloes has been found to be more in women dairy cooperative society's members than non-members. The average annual employment was observed more for member households than non-member households. The study concluded that women dairy co-operatives are instrumental in enhancing income and employment of women dairy farmers.

II. Problem Identification:

Despite sharing larger responsibility in dairying occupation, the socio-cultural norms are restricting women's participation in the cooperative system. The contribution of women in dairy production is remarkable but their participation in dairy organizations is very limited. The top positions in dairy cooperatives across the country are often occupied by men members. Though women typically perform the majority of activities related to milk production, they are underrepresented in the membership and board structures of mixed-gender dairy cooperatives in India. Women dairy cooperatives are established using a top-down approach. Women are typically underrepresented in the planning and implementation stages. Women who are supposed to manage cooperatives at the village level often lack adequate experience and training as a result they may become marginalized if allocated the role of shadow manager (Narayanesamy and Roy, 2000; Padma, 2021).

Dairy cooperatives significantly contributed towards improving women member's livelihoods but to what extent it has transformed gender relations and empowered women in their endeavor remains unanswered. Mostly, women are forced by men members of their family to be part of women dairy cooperatives even if they themselves are not interested to join. This politically driven effect may result in increased control by men over the women cooperatives indirectly; resulting in the latter's weak perception of their decision-making ability (Carla and Markus, 2017). Women who live in male-headed households seem to face considerable barriers to participation in decision making. Therefore, women's participation in dairy cooperatives does not automatically lead to their greater economic autonomy and empowerment. It should not be assumed that once women collectively organized, they will become empowered. Women must have to take control over decision making and earn income from their collectives in the real sense.

Collective action as a means of transforming gender relations:

Active participation in collective actions increases self-confidence and self-esteem among individuals. It is intrinsically linked with uplifting individual and social capacities to act differently and challenge the distribution of power that constrains the capabilities of men and women. Collectivization of farm women through self-help groups, cooperatives, farmer producer

organisations, etc. is the most effective institutional mechanism to address challenges in production and post-production stages of any agribusiness value chain (Pierre-Marie, 2018). Building collective action of farm women through cooperatives not only help in achieving targeted income but also transforming gender relations at household, community and institutional levels by enhancing their stake in all aspects of agribusiness value chain in terms of increased women's ability to contribute more to their family's income, increased joint decision making on gender division of labour and how to use earned money, increased sense of independence and capability to perform their roles and responsibilities at home and society, increased ability to generate the cash resources needed to meet their financial obligations both in the home and towards developing their businesses, increased sense of hope and financial sustainability, increased access to resources and services, increased women's mobility and exposure to new economic and educational opportunities, strengthened women's capacity and confidence to speak and act on behalf of their business and community, etc. (Bolin, 2020). Being gender transformative means, all women's collective action needs to be facilitated. All women's collective enables them to play a pivotal rather than a peripheral role in their venture.

Formation of All Women Dairy Cooperative Societies (WDCS):

The Cooperative Development Programme had paved the way for women involvement in dairy cooperatives. National Dairy Development Board initiated Women's Dairy Cooperative Leadership Programme (WDCLP) on pilot basis in 1995 in Valsad (Gujrat), Kolhapur (Maharashtra), Waynad (Kerala) and Goa. The objective was to strengthen cooperative movement by significantly increasing the participation of women as active members and as leaders in governance of cooperative societies, unions and federations. The success of this programme led to its replication in other dairy cooperatives throughout the country. The Ichhamati Milk Union, an all women milk union in West Bengal has emerged as a success story of the rural women in true sense of self-reliance. The Mulkanoor women cooperative dairy at Karimnagar District of Telangana State is the first all women enterprise started in the year 2002 with 14 villages, 200 Members. Over the 19 years of existence in the market the villages increased to 56 and members 40435. The Maval Women Dairy Cooperative (first all women dairy cooperative in Maharashtra and second in the Country) started in the year 2015 at village Takave, block Maval, district Pune (Maharashtra) which is one of the best examples of a women's collective action for the livelihood enhancement of women in rural areas of Maharashtra.

III. Case Study Methodology:

The Maval Dairy managerial staff interviewed and has provided secondary data and related information in the form of Annual Reports (2015-2019) since inception of Maval dairy. The primary data and required information about the service quality and benefits of Maval dairy perceived by women members were collected through focus group discussions. The study includes field observations, issue descriptions, best practices, and experimentation with new ideas, as well as statistical data analysis.

IV. Case Study Description and Analysis:

Tata Power Company has conducted a series of feasibility surveys in the Thokalwadi dam affected tribal villages of Maval block with the help of *ACL India limited* and found that most of the area was rain fed and dairy can be the best option to support women's livelihood. In 2015, they started to mobilize women farmers, collection of share capital and finally Maharashtra's first all women dairy enterprise (Maval dairy) at Maval with 335 members came into existence. Initially, the share capital of the firm was Rs. 1,000 per member and today, a new membership to the firm costs Rs. 5000. Presently, Maval Dairy has 12 women directors. Mrs. Bharti Shinde holds the chairmanship and Mrs. Radha Jagtap holds the vice-chairmanship (Fig. 3). Maval dairy cooperative has 1231 members from 41 villages with 15 advanced milk collection centers which procure around 7,000 litres of milk daily (Table 1). In order to run the plant at its full capacity, the cooperative has started other support services like mini dairy farms, veterinary services, training for managing dairy farms and product marketing. The dairy co-operative received support from Tata Power Company to launch its own brand Creyo (mobile application) to sell milk and milk products like paneer (cottage cheese), cream, buttermilk, etc. within a 60 km area and nearby cities like Pune, Mumbai and Lonavala. The products are delivered in 18 hours to the consumer & only natural ingredients shall be used for product manufacturing. Door to Door marketing will be done by ABHAS (women members) initially and Product would be delivered by Customer Service Executive (Girls). Tata Power has financed around 40% of the Rs. 20 Crores project and trained women for clean milk production and animal management. Maval dairy provides employment to more than three thousand families directly or indirectly. The total revenue of Maval Dairy was 17.46 lakhs in the year 2016-17 (Annual Report, 2016-17).

Table 1 Year wise comparative status of Maval Dairy

Particulars	2015	2016	2017	2018	2019
No. of villages covered	24	26	26	28	41
No. of members joined	335	841	920	1157	1231
Share capital (Rs. in Lakhs)	NA	3.39	6.57	8.70	9.89
Milk procurement (Litres per day)	500	3000	3500	6500	7000
No. of small scale milk producers trained	40	80	80	22	168

(Source: Maval Dairy Annual Report 2015-16, 2016-17 & 2018-19)

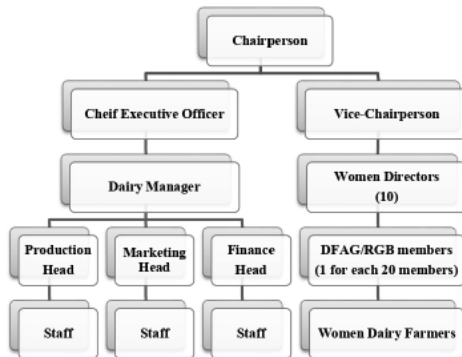


Fig.3 Maval cooperative dairy organizational structure

Fig.3 Maval cooperative dairy organizational structure

What is Creyo?

It is an online platform to connect farm women producers to potential consumers throughout the country. Creyo is connecting women producers across India with conscious consumers to create a world for everyone - safer products for the consumers, better returns for the women farmers, and a sustainable environment. It helps to deliver the product within 18 hours at doorstep without any adulteration. It helps to return 75% of MRP to the farm women producers. It connects the potential consumers directly to farm women producers. It collects the packaging material back and recycles it (Source: www.creyo.com)

How it works?

- 1) The cattle are milked at the women farmer's homes in different villages of Maval block.
- 2) The milk is brought to the collection centre for testing fat content and added water.
- 3) Creyo vans transport the milk in sealed stainless steel cans to the dairy, avoiding contamination and preserving the freshness and purity of milk.
- 4) The milk is pasteurised, homogenised, standardised and packed by testing against 13 parameters including for adulteration to ensure ISO standards.
- 5) Creyo vans carry the milk in insulated containers to the stock points for distribution.
- 6) Creyo Women Customer Service Executives deliver the milk at doorstep in insulated bags.
- 7) A sample of the milk delivered to consumers is periodically sent to the lab for testing.
- 8) The majority of the above-mentioned activities are fully run by the women members of Maval Dairy.

Services provided through Maval dairy: Maval Dairy has launched three basic services for all its members consisting of animal feed supply, green & dry fodder supply and veterinary services. These services are being provided to all members at reasonable rates at their doorstep.

- a) **Animal feed supply:** The animal feed service was launched on 1st November, 2015. The service was started to provide animal feed at reasonable rates. Feed storage godowns were set up in eight villages for timely supply of animal feed. These services are being provided to all members at reasonable rates at their doorstep. It helps to reduce their cost of milk production. This initiative helps women dairy farmers to save Rs. 100-150 per bag of feed.
- b) **Green & dry fodder supply:** The fodder services started on 17th February, 2017. Usually, the green or dry fodder is scarce during the summer season. Maval dairy set up a fodder cutting machine and trained women entrepreneurs for making silage. These services are being provided to all members at reasonable rates at their doorstep.

Initially, the fodder supply unit used to deliver 30 Kg fodder per day to dairy farmers earning daily revenue of Rs. 3600. The women farmers were trained on green fodder production techniques of azolla cultivation and hydroponic fodder production.

- c) **Veterinary services:** Two veterinary service centers have been started at village Wadeshwar and Parthewadi to provide veterinary services to the milking animals. It includes timely vaccination, artificial insemination, etc. These services are being provided to all members at reasonable rates at their doorstep.
- d) **Sewage treatment unit:** The Maval dairy has set up the sewage water treatment unit. The treated slurry is supplied to the member farmers for applying in their fields as manure at reasonable rates.
- e) **Training and capacity building:** The women farmers were trained for clean milk production. The women members of Maval dairy were trained on dairy management aspects. The women farmers were trained on green fodder production techniques of azolla cultivation and hydroponic fodder production. Maval dairy provided training to 22 women members on the ‘Entrepreneurial Leadership and Business Management Program’ in the year 2018.
- f) **Credit services:** Maval dairy provides loans to its members for purchasing milking animals at reasonable interest rates. Maval dairy provided credit services for purchasing of around 2500 milking animals (Cow/buffalo) to its members.

V. Case Study Observations and Suggestions:

1) Maval Dairy’s Success Strategies:

- Notably, the dairy is also setting a record in terms of milk rates. Depending on the fat, buffalo’s milk is priced at Rs. 46-70 per liter and cow’s milk at Rs. 32-40 per liter.
- Maval dairy has started selling products online and through retail directly to the consumers. This will enable higher prices for milk producers as well as supply of products to consumers at affordable prices.

- The payment to all milk producers is paid at regular intervals of 15 days on their bank account numbers directly. Maval dairy passes on 75% of the profits from the sale of milk and milk products directly to the milk producers.
- The quality of milk is excellent as only female shareholders of Maval dairy supply milk to the dairy.
- Maval dairy employs young family members of shareholders for dairy works like milk collection, feed supply, marketing, etc.
- Maval dairy provides veterinary services and fodder (green and dry) supply to its members at their doorsteps at reasonable rates.
- Maval dairy has its own animal feed service centre for providing quality animal feed at reasonable rates to member's doorsteps which saves their time and money. The service centre also provides technical guidance on feeding management and animal maintenance for quality milk production.

2) Suggestions to strengthen all women's cooperatives:

- a) **Enabling environment:** Women's cooperative is an economic organization in the self-interest of its members. The interference of men from the women member's family needs to be restricted to ensure the clear links between responsibility, authority and accountability of women's in their endeavors.
- b) **Good governance:** It is essential for the success of any cooperative and to sustain it in the long run. But, the interference of men from the women member's family badly affects the women's decision making power and related activities. They either misuse it for their private purpose or use it in a manner, which is not in the best interest of members and their endeavors.
- c) **Professionalism:** Women's collective fails if it has not employed committed and competent professionals and empowered them to use their knowledge and skills creatively to achieve the desired targets. Along with active participation of women members, the continuous knowledge & skill up gradation and related training of the members is an imperative to empower women and strengthen their collectives.

VI. Conclusion:

Building collective action of farm women not only helps in achieving targeted income but also transforming gender relations at household, community and institutional levels by enhancing their stake in all aspects of the agribusiness value chain. Maval dairy provided the platform to rural women in Maval block of Pune to form their dairy collective. Their success reflects in terms of positive dynamic change in membership, procurement of milk, share capital and net profit year over year. The collective efforts of these women helped them to reduce the cost of milk production at their respective dairy farms. It ensured an alternate source of income and employment to the rural women and their all-round self-sustaining socio-economic development. For their success, Maval dairy was awarded by 'Mini Dairy Entrepreneurship' certificates. Maval dairy cooperative is the best example for a successful rural women entrepreneurship model. Hence, the model can be replicated in other parts of the State and Country to establish women enterprises and support women's transition from 'Job Seeker' to 'Job Provider'.

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05

Dairy Cooperatives and Rural Development: A Connect with Women Members

¹V. Durga , ²Dr. C. Pitchai

Abstract:

A women-centered approach was recommended for increasing the formation of a sufficient number of Women Dairy Cooperatives (WDC) in rural areas, the purpose of WDC is to provide a supplementary source of income, a structured platform to hunt amends of individual, and social criticisms of the women to empower them. Rural women suffer from the curse of being socio-economically invisible. The government works hard on their behalf towards making them visible on the local and global stage by taking them into viable socio-economic organizations. Among these organizations, the dairy sector is one doing the vital role in women's empowerment. Particularly, dairy cooperatives aiming at the sustainable development of rural women. In this context, the present study examines rural women's social change and economic development through dairy cooperatives. The study specifies that the socio- and economic setting, awareness of dairy cooperatives, and participation of rural women members in dairy cooperatives have helped them attain social change and economic development.

Keywords: Dairy, cooperatives, women empowerment, employment, rural development.

1. Introduction:

Agriculture provides employment to millions of people by direct and indirect means. Dairy production is an indoor economic activity, and it

¹ Research scholar, Department of Cooperation, The Gandhigram Rural Institute (DTBU), Tamil Nadu, India.

² Professor and Head, Department of Cooperation, The Gandhigram Rural Institute (DTBU), Tamil Nadu, India.

provides employment and income opportunities for millions of rural people especially poor women. Their dynamic contribution to the development of dairying has made the country the prime milk producer in the world. In India, dairying is a female-dominated enterprise. There is no doubt that women have always engaged in dairy activities and animal husbandry in addition to their daily household activities. Women's development and rural development-related issues are important concerns of the Governments world-over. Dairy cooperatives are one such self-help organization aiming at the sustainable economic and social development of rural women as the major proportion of the population lives in rural areas depend more on farming. The major roles played by dairy cooperatives in the sustenance of landless and poor people in the village economy and their lives are quite evident.

According to the Food and Agricultural Organization (FAO) note on dairy production, women traditionally have a very significant role in dairy farming. Women with of superior leadership roles capable to take bold and wise decisions. They generally engage in small scale livestock operations, such as artisan, and also the role as cook, mother, and wife. They are also involved in small scale marketing, river transportation, agriculture, and animal farming, housework, and community affairs. They are the ones who are generally responsible for all domestic activities, such as housework, food preparation, and child care. Women usually play a key role in livestock rearing but have little voice in the decision making. By contrast, they always remain invisible workers. While compared to men, most of the activities of the dairy farm were performed by women, so the farm women spent about 294.34 minutes a day on dairy farming activities. India primarily follows a rural-based non-profit economy. Fifty four percent of India's workforce is engaged in agriculture, and 37% of workers are women (Bureau, E.T. 2022). Forming dairy cooperatives has played a significant role in the empowerment of women.

2. Objectives:

The main objective of this study is to know the role of women's dairy cooperatives in connecting women's empowerment with rural development. Those objectives are:

1. To study the role of women's dairy cooperative unions in the establishment of women cooperatives by allow them to organise and manage the same.

2. To know the impact of women's dairy cooperative on the socio-economic empowerment of women.
3. To analyse the leadership capacity of the women members in the dairy cooperatives.
4. To find out problems faced by women dairy farmers and suggest appropriate measures.

3. Methodology:

This study is totally based on the secondary data retrieved from available books, newspapers, government publications, articles by professional associations, databases such as statistical data and annual reports from government websites, and Google scholar. This study is to examine and understand the role of women in dairy cooperatives and the social change and economic development of rural women attained through dairy cooperatives.

4. The connection between Women and Dairy Cooperatives:

Women living in rural areas tend to spend much of their life time in agriculture or agriculture allied activities, including dairy farming. They tend to perform various roles and perform activities in dairying every day. This makes it important to understand how they contribute to various aspects of dairying. According to a report released in 2018 by the National Cooperative Union of India (NCUI), 4.85 million women members contribute 30% of the total membership in dairy cooperative societies (Swetha Krishnan, et al. 2021). Women Dairy Cooperatives connect rural women through dairy farming and enable rural women to get themselves labelled as cooperative supporters. Women themselves are building their own membership base by getting themselves promoted.

4.1. Significant Participation of Women:

Women play an important role in dairy farming. A large number of women's dairy cooperative societies helped them to rise their participation in dairy farming and marketing. Animal Husbandry and Dairying report stated that in India, women indicate 70% workforce in the dairy sector. There are 1.9 million dairy cooperative societies across the country with about 6 million women members (FAO. 2020). In due course of time, women are able to take up leadership roles, giving them the strength to use

their voices and their perspectives to take crucial decisions and develop their own full potential through the management training given by dairy cooperatives.

4.2 Boosted Income:

The cooperative model has the advantages of superior control by farmers, economical for small & marginal farmers, transparency, uniformity of payment, and training facilities that have boosted the income of millions of women dairy farmers in India. In August 2020, the major milk producer of India, Amul Dairy exposed a list of 10 women dairy farmers who turn into millionaires by supplying milk to Amul (Nikitha, L. 2017). The performance of women in cooperatives resulted in a growth in milk production, income, and accumulating assets, necessitating the opening of their personal accounts in banks, controlling expenses, and safeguarding themselves by saving their money. This gave women the confidence to exercise their power and rights in society.

4.3. Stimulates Leadership among women:

Women-led cooperatives are also good settings for preparing women from rural areas for higher leadership positions. In some occurrences, these are the first step towards breaking away from traditional practices. Through WDC rural women became more open to interaction with government officials which helped them in shedding their hesitations. Vitrally, the successful dairy cooperatives helped women to lift their status and credibility and participation in decision making in the home and in society. Women gained a respectable place among their family members through leadership and earning capacity. A study report across Rajasthan revealed that with the earnings generated by the women through dairying, 31% of the women had transformed their mud shelters into cement shelters, and 39% had built concrete sheds for their cattle in their place (Shweta and Ashok, K. 2018).

4.4. Defeat structural obstacles:

In our country, millions of women have experienced transformation in their life after becoming a member of dairy cooperatives. This also helped women and young girls, especially single parents to increase their earnings, and lead a self-respecting life. The real empowerment of women will come only when women really solve their problems (Pitchai, C. 2002). And many

women who never had an approach to education or proper employment pay school/college fees to help their children's education without anybody's support.

4.5. New knowledge and Skills:

Women in rural areas are mostly illustrate and they are not even known to read and write. However, after becoming members in dairy cooperatives, they gain more knowledge and skills. In addition to working with larger collectives, they have mastered how to use the nuances of finance and marketing. They are putting their interest in educating themselves. Women's development helps to develop their families and at larger extend the society.

5. Women Dairy Cooperatives in different states of India:

Women dairy cooperatives enable rural women to access information about the cooperative's business process, understand, and learn about the values of cooperation, and acquire the ability to state their concerns (Dutta, PB. 2012). Once women's participation is ensured by WDCs, the organization can in time develop their participation into a leadership role by providing them with the appropriate training. As per the report of NDDDB, in March 2019, 34000 exclusive women's dairy cooperative societies were established in the nation. All women's dairy cooperatives include real users in the organization. The state governments are now aiming to empower women by creating dairy cooperative societies, designed to exclusively help them in this farming activity.

5.1. Andhra Pradesh:

The Andhra Pradesh government has set up 9,899 women co-operative societies at the village level and launched several schemes such as YSR Cheutha and Aasara to provide interest-free loans from the Andhra Pradesh State Cooperative Bank (APCOB) through the district cooperative banks (Staff Reporter 2021). When a new training program is launched, it is a very important milestone for the future of the self-help group in agriculture, it is only the first step of the project and a door to a stronger future.

5.2. Karnataka:

The Karnataka Milk Federation (KMF) is known as the largest federated dairy cooperative in south India and the seventh-largest dairy cooperative in our country. The brand name of the dairy is “Nadhini” in Karnataka. It has about 2.2 million milk producers in 2016. Totally 4239 women’s dairy cooperatives were located in Karnataka in 2020, which was 26% of the WDCs in total dairy cooperatives (Geetha, RS. 2021). KMF advocates a government policy and practice that seeks to extend training time, elevate skill levels, and create work and employment opportunities for developing sustainable employment for women in large numbers.

5.3. Gujarat:

In Gujarat, out of 3.50 million milk producer members, 36% are women members. In 2011, the total number of women members was 0.8 million, it is grown to 1.25 million in 2021. At the same time, in 2006 the Dairy Cooperative Society (DCS), especially women-only dairy cooperatives started with supplying 400 liters of milk every day. The Motipura Mahila dairy Cooperative Society (MDC) contributed a total of 10,000 liters of milk regularly and yielded an annual turnover of Rs 24 million in 2019 (Prashant Rupera. 2021). Sharada Patel is a member of the director’s board of Kaira District Milk Union, the head organization of dairy cooperatives and also branded as Amul. She plays a vital part in enhancing women in dairy cooperatives and in initiating many new WDCs (Sweta Krishnan. 2021).

5.4. Tamil Nadu:

In Tamil Nadu, there are 12,585 Primary Milk Producers Co-operative Societies at the village level, out of which 2,075 are exclusive Women Milk Producers Co-operative Societies. These primary milk co-operative societies procure around 38 lakh liters of milk per day from their members and after selling around 4.5 LLPD locally, the remaining quantum of milk is sent to the district unions and Metro dairies (Anonymous. 2022). The government took various actions to start up the WDCs in many districts by giving financial support under Tamilnadu Adi Dravidar Housing Development Corporation (THADCO) schemes. This scheme is especially for scheduled caste women’s development (Anonymous. 2022). WDCs may give great results than the other dairy cooperatives in Tamil Nadu.

5.5. Rajasthan:

The Rajasthan dairy cooperatives are essential to overcome many obstacles, such as illiteracy or economic ignorance, claiming that social handicaps, and stimulating the development of socio-economic growth of the women. At present, Rajasthan state has a total of 13,878 registered dairy cooperative societies of which 5,494 are WDCs under 21 milk unions, 39.59% of total dairy cooperatives (Carala Dhomwirth. 2019).

5.6. Punjab:

In Punjab, there are as many as 950 women milk cooperative societies working in the state. These societies are associated with the milk producers' unions of Milkfed, which are offering a regular income between Rs 4,000-6,000 per month to these women members (Staff Reporter, 2021). Regional Demonstration and Training Centre, Jalandhar (Punjab state) presented capacity building training programmes for DCS Women Management Committees. Interestingly, where a number of milk cooperative societies formed by men have repeatedly faced failure due to the village and party politics. At the same time, the societies formed by women in the same villages have been evidenced to be a huge success. WDCs are showing better performance, activities, and results than cooperatives which are run by men.

6. Strengthening rural women's leadership in dairy cooperatives:

The active participation of women will promote action and psychological empowerment for women. However, in the past, women are typically found to be nowhere in decision-making bodies and leadership roles of agriculture and dairy cooperatives sectors. For solving this problem, women-only dairy cooperatives have been recommended as a possible solution. To support women in the dairy sector, the Ministry of Women and Child Development introduced the Support to Training and Employment Programme (STEP) in 1986 (Geetha, R S. 2021). Similarly, the Indian government launched many schemes to support and strengthen rural women's leadership in dairy cooperatives.

6.1. Upgradation of skills through training:

National Dairy Development Board (NDDB) introduced many training and skill development programs for rural women to shine in dairy

cooperatives. Likewise, NDDDB has started a program to provide training for farmers about scientific agriculture practices all over the country, these programs provide best practices on animal health, fodder value, hygienic milk production, account management, and marketing (Sapovadia. 2006). Another one is the Support to Training and Employment Programme (STEP). WDCs also carry out programs for the benefit of rural women, apart from milk procurement, milk marketing, and providing technical input for their members. The women members get more benefits than the non-STEP members.

6.2. Better and sustainable employment opportunities:

The women's dairy cooperatives provide better employment opportunities to make money to support their family members. It really makes sense in every rural women's life. Most of the rural women are illiterate. They cannot get a job and earn money on their own. WDCs help them to earn more money and transform themselves into a new personality in society (Sheela, K.S. 2013). Not only employment, but women are also members of cooperative societies. They got freedom from financial dependency on family members.

6.3. Eliminating middlemen:

Dairy cooperatives continue to play a role in helping to invent new business models for the production, pricing, and marketing of dairy products. Dairy cooperatives are taking part in the global transformation of the dairy value chain, by strengthening backward and forward linkages between manufacturers and small farmers by breaking away from middlemen and guaranteeing farmers a minimum price for milk. Eliminating middlemen from the dairy market will help rural women to get reasonable payment for their milk and grow faster.

6.4. Facilitation of organization of women:

Creating an easy way to facilitate to organize women is a tough task for dairy cooperatives. The NDDDB has a vital role in setting up women-led producer enterprises like Shreeja Mahila Milk Producer Company in Andhra Pradesh, which was established with 24 women members and now has more than 90,000 members, with an annual turnover of approximately Rs. 450 crore (Bureau, E. T. 2022). STEP programs provided Rs. 5,000 to Rs. 10,000 to purchase cattle. Through these kinds of facilities, rural

women easily become a member of the dairy cooperatives and make the path for development (Shweta. 2018). Through this funding and support, milk unions are encouraged to open the path for all women's dairy cooperatives. And also NABARD (National Bank of Rural Development) granting financial support as Rs. One crore to women farmers to purchase cattle (Prashanth Rupera. 2021).

6.5. Support Services:

In the rural area, women are depending someone for everything. They are used to suffering themselves to seek support services and medical facilities for themselves and their family members in rural areas. The dairy cooperatives created many schemes and policies to provide support services like i. Health check-ups ii. Referral services iii. Mobile crèches iv. Education facilities (Paranjothi, T. 2015). These services may support rural women to lead their life without trouble and show their importance to the family and society. They may get a better life through the support services in rural areas.

7. Conclusion:

Women's development has been playing an important role in the overall sustainable development of the nation. It is well understood that when a woman moves forward, the family moves and the village moves and the nation moves. The upliftment of women is an essential ingredient of human development. WDCs not only play a core role in empowering rural women but also form a hub of the platform for the weaker sections of them to put forth their genuine problems. However, the role played by WDC is much appreciated and can also be replicated in other parts of the country. Dairy cooperatives are connecting women with rural development and playing a vital role in improving the socio-economic conditions as a milk producers in rural areas through local milk procurement and fair price policy. For a greater acceleration rate of empowerment, future strategies must focus more and more on training and capacity building of members besides ensuring adequate linkage support.

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06

**A study of connect of PACS with their members to gain viability –
(A study of PACS in the Chandrapur District of Maharashtra State (India))**

S. B. Patil*

Abstract:

“In India cooperative movement came to be introduced in the year 1904 by first enactment of the Cooperative Credit Societies Act, 1904. The prime objective of the Act was to make available institutional finance to the farmers through the Primary Agricultural Cooperative Credit Societies (PACS) formed ‘by the the farmers, of the farmers and for the farmers.’ Gradually three-tier cooperative rural credit structure, now known as Short Term Cooperative Credit Structure (STCCS) got developed & that is continuing. STCCS is providing agricultural credit & other related services to the farmers. However STCCS continue to experience certain financial hardships.

At present under STCCS at national level there are 31 State Co-operative Banks (SCBs), 350 District Central Cooperative Banks (DCCBs) & about 95995 PACS.

In Maharashtra there is a three-tier rural agricultural credit system under STCCS. At apex level there is a State Co-operative Bank (SCB), 31 District Central Cooperative Banks (DCCBs) at district levels & 20897 PACS, including 893 ACS (Adivasi Cooperative Credit Societies) & 20 Krushak Seva Societies (KSS).

Everywhere PACS are mostly engaged in disbursement of agricultural credit only, therefore getting less income & are financially weak .

Vaidyanathan package was implemented for revival of STCCS but results are not much satisfactory. Efforts for preparation & implementation of

* Additional Commissioner & Joint Secretary, (Co-operation) (Retd.)
Government of Maharashtra

Business Development Plans(BDPs) also not given expected results.

To assist survival of STCCS, Governments are implementing various schemes such as (1) Interest Subvention Scheme for banks to enable them to make funds available to the PACS at reasonable rate of interest,

(2) Interest Subsidy Scheme as an incentive to the farmers availing crop loans & repaying on or before due dates,

(3) Financial Assistance is being given to the PACS, under the policy of Strengthening of PACS, to support them to meet administrative expenses & salaries of Secretaries.

To address the issue of weaknesses of PACS, steps for merger of weak PACS with neighbouring big sized PACS have been taken. It is seen that post merger also PACS are making losses, having imbalances, not able to go for computerisation & not able to increase volume of transactions to earn more income and to work viably.

Now Government of India has launched a scheme to computerise all existing PACS & also to form new PACS.

Cooperatives are formed by the members & those are expected to be member users entities. Therefore all members of cooperatives need to participate actively in the affairs of the cooperatives, but reality is different.

Therefore an indicative case study of PACS in the Chandrapur district of Maharashtra(India) has been carried to know the extent of connect of PACS with their members & its effects on strengthening of PACS.

3) Key Words:

STCCS, members participation, merger, strengthening, institutional credit, recovery of loans, communication, allied activities, imbalances, computerization.

4) Research Questions:

Inadequate connect of PACS with their members is hampering strengthening of PACS.

5) Likely contribution of present study to the field of Knowledge & relevant literature:

This study will be helpful to understand whether-

- (1) PACS have effective connect with their members.
- (2) If not, reasons thereof
- (3) Issues faced by the PACS in their strengthening
- (4) Problems being faced by PACS in adopting modern technology i.e. computerization/digitalization.
- (5) Probable solutions to the problems.

6) Preamble:

Indian economy is agro based. Farmers continue to face problems of non-availability of capital for investment in the agriculture.

A solution to the problem through a cooperative model of forming 'cooperatives of the farmers, by the farmers & for the farmers' has been worked out & being implemented since 1904.

This model is in operation as a three-tier system, also known as the Short Term Cooperative Credit Structure (STCCS). It is playing very crucial role in providing institutional credit & other agricultural services to the farmers. Therefore survival & strengthening of STCCS is essential.

After fifty years of the initiation of cooperative movement in the country a study was conducted by the All India Rural Credit Survey Committee (AIRSCS)(1954) to assess & evaluate the success of working of cooperative rural credit structure. The Committee observed that, '**cooperation in India has failed but it must succeed.**'

Since then various measures are being taken for strengthening of STCCS but weaknesses of STCCS remain growing.

A Task Force (Vaidyanathan Committee)(2004) was constituted to study weaknesses of STCCS & to suggest appropriate measures for revival of STCCS. Based on the recommendations of the Committee a financial package was implemented, amendments to the Cooperative Societies

Act, Rules & Bye-laws were made. But STCCS is not revived as it was expected. The root causes of the problems need to be identified.

As per definition, "cooperative society is an autonomous association of persons, united voluntarily to meet their common needs and aspirations through jointly owned and democratically controlled enterprise and adhering to the cooperative principles and values."

97th Constitution.....

Following observations of the High Powerd Committee(HPC) (2009) relating to the role of members in cooperatives are very important.

"The member owns the cooperative conjointly with other members and is expected to act with due diligence to fulfill his membership duties and responsibilities."(p.21,HPC)

"Cooperatives must be seen as autonomous, economic institutions of user members engaged in production, distribution or other services."(p22 HPC).

"Member centrality and member development would be key drivers and professionalism, quality and integrity the hallmarks."(p.53 HPC)

"If cooperatives are to succeed, it is important that members are well informed of not only their rights but also obligations and the need to participate actively in the affairs of the cooperative." (21, HPC)

The High Powered Committee (2009) stated that, "the Committee has envisaged cooperatives as primarily, autonomous, economic institutions of user members." (HPC.p.(v))

It indicates that, successful working of all cooperatives including STCCS depends upon active participation of members in the affairs of the cooperatives. As like other Co-operatives, STCCS is lacking adequate participation of members & has limitations to expand business, earn good income & get itself strengthened.

STCCS has importance in rural areas relating agricultural credit supply & generation of employment, as in rural areas there are no other sources of employment than agriculture.

Therefore with the help of PACS & other co-operatives farmers should undertake activities like cultivation, marketing, input supply, processing etc. to generate employment.

7) Connect of members with Cooperatives:

To improve connect with members cooperatives in rural areas need to enroll all eligible persons, including youths & women as members & encourage them to avail required services from cooperatives only. Cooperatives should always keep their members well informed of various services being provided by them to the members & also rights, duties & responsibilities of members towards their co-operatives. Co-operatives need to develop habit to maintain record & status of their 'active' members who participate in their affairs & use minimum services as prescribed in their bye-laws.

Cooperatives need to work as economic institutions & always remain updated to cope up with the needs of their members. In respect of non-active members, there may some restrictions be imposed on their participation in the meetings, voting and getting elected on the management committees etc. of Co-operatives.

8) Our Cooperative Movement:

In India, presently there are about 8.50 lakh cooperatives with membership of about 30 crore. Under STCCS there are 31 State Co-operative Banks, 350 District Central Cooperative Banks & about 95,995 PACS.

In Maharashtra there are about 2.17 lakh cooperatives with membership of about 5.75 crore. Under STCCS there is a State Co-operative Bank earning profit, 31 District Central Cooperative Banks of which 20 are in profit & 11 in losses, & 20897 PACS (including 893 ACS & 20 Krushak Seva Societies) of which 10050 PACS are in profit & 10366 PACS are loss making.

(9) Why to study:

Government of India has recently announced a policy to computerise existing PACS in the country & to form some new PACS also.

Viable working of computerised PACS & newly formed PACS will be subject to the active participation of members in the affairs of the PACS. But present trend appears different. In view of above, I think, it will be proper to study & know the extent of existing connect of PACS with their members & effect thereof on the viability of PACS.

A case of Chandrapur district in the Nagpur Division of Vidarbha Region ((Vidarbha Region where agrarian crises are always prevailing & number of cases of farmers suicides take place frequently) of Maharashtra State (India) has therefore been considered as an indicative case for the purpose of carrying this study.

Cooperative movement in Maharashtra & Chandrapur District

(As on 31/03/2021)

Sr. No.	Type of Society	Societies in Maharashtra	Societies in Chandrapur district
1.	Apex Central(Agri.& Non-agari.) Societies	33	1
2.	PACS	20897	392
3.	Primary Non-agri.Cr.Societies	21006	397
4.	Marketing Societies	1370	11
5.	Processing/Producing Societies	26492	233
6.	Social Services Societies	147613	656
7.	Total	217410	1690

Source:- *Cooperative Movement in Maharashtra -At a Glance-2021.*

(10) Some Features of Chandrapur district :

Chandrapur district located to the south-east part of Maharashtra & surrounded by Wardha, Gadchiroli, Yeotmal districts of Maharashtra & to south boundary of Telangana state. It has 15 talukas.

Total population is 21.94. Economy of the district is agro based. Paddy,

Jowar, Cotton, Wheat, Soya bean ,Chilly, Tur, Mug are the rain fed crops grown. Per acre average yield is very low. Scales of finances are low. Borrowing of farmers is less. Farmers are economically poor.

Total operational holdings (khatedars) are 2.98 lakh of which 2.87 lakh are enrolled as members of PACS & 10911 eligible khatedars are not yet enrolled as members. Out of 2.87 lakh members 69910 members are borrowers & 151117 members are not availing agricultural loans from PACS. Number of defaulters of loans is 66277.

(11) Present Status of PACS in the district:

At present in Chandrapur district there are 391 agricultural credit societies including 328 PACS & 63 Adivasi Cooperative Credit Societies. 130 PACS are in profit & 261 PACS are in losses. 222 PACS are having imbalances in their loan accounts. Out of 391 PACS 10 PACS disburse loan below Rs.10 lakh & 386 PACS disburse loan above Rs.10 lakh.

In the year 2022-23 Rs.56326 lakh Short Term loan(STL) is disbursed to 69583 members & Rs.363 lakh Medium Term loan(MTL) is disbursed to 327 members. Total demand of ST loan in the year 2021-22 was Rs.87427 lakh & recovery made was of Rs.45373 lakh(51.89%). Under Dr. Panjabrao Deshmukh Crop Incentive Scheme benefits of Rs.1389.95 lakh to 88715 beneficiaries have been given.

In Chandrapur district PACS do not accept deposits from the members.

Out of 391 PACS 133 are having their own offices & 258 PACS are having offices in the rental premises. All 391 PACS are having power connections but no internet connections. 148 PACS have appointed 132 secretaries of their own.

243 PACS are having Group Secretaries (GS)(regular plus retired Group Secretaries reappointed on contract basis) provided by the District Supervision Society.

Out of 391 PACS only 97 PACS are having 126 godowns of which 63 PACS use their godowns for storage of fertilizer, seeds, running fair price shops, Gas Agencies, storage of gunny bags etc. Proposals of 14 godowns of PACS are under consideration of the sanctioning authority.

In the district there are 264 money-lending licences holders & they have disbursed loan of Rs.1383.23 lakh.

(12) Government's Intervention:

STCCS is always a matter of concern for Central & State Governments.

(a) Central Government :

Extends financial support to-

- (1) the cooperative banks (DCCBs) under interest subvention scheme,
- (2) to the farmers as interest subsidy against timely repayment of loans.
- (3) Refinance to the SCB/DCCBs by the National Bank for Agriculture and Rural Development (NABARD) at reasonable rate of interest.

(b) Government of Maharashtra:

- (1) Interest subvention to the cooperative banks,
- (2) crop incentive to the farmers who repay entire loans in time, &
- (3) financial assistance is given to the PACS to meet administrative expenses.

(13) Government of Maharashtra initiative for strengthening of PACS:

In Maharashtra 65% of ST loan is disbursed through STCCS & small farmers are main beneficiaries.

As per the policy of State Government cooperative banks provide funds to the PACS @ 4% p.a. rate of interest for making disbursement to the farmers @ 6%. Earlier PACS were getting 3% margin. Now PACS are entitled to get 2% of margin. As a result of that PACS are getting adversely affected & incurring losses. Therefore Government, under its policy of Strengthening of PACS is implementing since 2014-15, the scheme of financial assistance to the PACS. Upper limit of financial benefits is raised to Rs.1.50 lakh per year per PACS, applicable from the year 2021-22. These benefits are linked to the quantum of loan disbursements made by the PACS. Benefits ranging from 0.75% to 2% of prescribed limit of quantum of Short Term loan disbursed. The amount of benefits received is to be used by PACS for administrative expenses, establishment expenses, election expenditure, statutory audit fee, preparation of crop incentive proposals, collection of funds @ 2% out of recovery etc.. Pay scales of Secretaries/Group Secretaries are to be fixed by the State Registrar of Cooperative Societies (RCS).

PACS which have completed their statutory audit timely, conducted annual general body meetings timely & placed audit report before their annual general body meetings, not having any instance of fraud or financial irregularities reflected in the statutory audit report, recovery of loan is not below 50% (when paisewari declared is less than 50 paise recovery should be at least 25%), administrative & establishment expenses of PACS having loan disbursement upto Rs.50 lakh should not exceeding 2.5% of working capital & for the PACS having loan disbursement above Rs.50 lakhs should not e exceeding 3% are entitled to get benefits under the scheme.

(14) Merger of PACS & outcome:

In Chandrapur district in the year 2013 there were in all 561 PACS. Most of them were loss making & having imbalances too. Out of 561 PACS subsequently 169 PACS have been merged with 96 big PACS. One PACS is under the process of liquidation.

After merger of 169 PACS with 96 PACS, the present status shows that, 44 PACS are in profit & 63 are in losses, 50 PACS are having imbalances, only 14 PACS are handling allied activities like sale of fertilizers, fair price shops, Paddy purchasing. No PACS is computerised. In short even after merger PACS are not working viably.

Out of 96 PACS, 40 PACS have appointed their own secretaries, 54 PACS have regular Group Secretaries & 11 Group Secretaries are taken on contract basis, provided by the District Supervision Society (DSCS).

(15) Government assistance or merger not a solution:

For strengthening of PACS mere Government assistance or merger of PACS is not an ultimate solution. After merger of PACS the retainer PACS gets extended its area of operation, additional members, additional scope of lending/business. Even then number of PACS are in losses & having imbalances, are not able to computerize, recovery of loans is poor, number of defaulters also is more.

The Task Force (2004) has recommended that, "any financial restructuring without addressing the root causes of the weaknesses of the system would not result in its sustained revival." (p.95 HPC)

Since all measures taken by the Government are not giving expected results in respect of Strengthening of PACS the root cause of the weaknesses of the PACS appears to be inadequate members participation in & lack of coordination between PACS & Members.

Therefore it is important to study the extent of connect of PACS with the members & effects thereof on viabilities of PACS. A case study of PACS in Chandrapur has therefore been carried out as below, for the purpose.

16) Methodological/Conceptual approach of study:

(A) Collection of Primary Data :

Present case study on the given subject has been conducted, based on the primary data collected through a questionnaire designed for PACS, consisting 46 close ended questions of multiple choice. The questionnaire was circulated online to the Secretaries of PACS through the district & taluka level field offices of the Cooperation Department with a request to submit their responses online.

(B) Secondary data:

Secondary data has been obtained from the notes, publications, discussions, committee reports, personal interviews and other available sources.

Office of the Commissioner for Cooperation & Registrar of Cooperative Societies(CC&RCS), Maharashtra State, Pune, District & Taluka offices (DDRCS & ARCST) of the State Cooperation Department in the Chandrapur district, Chandrapur District Central Cooperative Bank Ltd., Chandrapur District Supervision Cooperative Society Ltd. have provided the relevant data, information & held discussions with the authorities.

(17) Coverage of Questionnaire :

The questionnaire broadly covers following fields related to the PACS. The area of operation, management, eligible khatedars, enrolled members, borrowers, loan disbursement, recovery, over dues, eligible khatedars not yet enrolled as members, steps being taken to encourage enrollment, PACS in profit/ losses imbalances, conduct of annual general body meetings, status of statutory audit, extent of participation of members including youths & women in the affairs & elections of PACS, affiliation & transactions of women's Self Help Groups(SHG), formation & transactions of Farmers Producers Organizations(FPOs), attracting other players for investment in the PACS, sources of appointments of Secretaries, number of PACS each

secretary is handling, status of computerization, training & operations, availability of basic things required for computerization, online linkage of PACS with DCCB, office spaces of PACS, status of power supply, availability of mobile network, availability & use of godowns, efforts being made by the PACS to keep members connected with them to gain viability by increasing active participation of members etc.

(18) Analysis of collected data and findings:

(1) Out of 391 functional agricultural credit societies in the Chandrapur district 315(80.56%)(samples) have responded to the questionnaire which include 43 (13.7%) Adivasi Cooperative Credit Societies & 272(86.3%) Primary Agricultural Cooperative Credit Societies (PACS).

Hereinafter, for the purpose of convenience the common term ‘PACS’ is used for PACS & ACS.

Following is item wise analysis of the questionnaire.

2) Villages in area of operation: (315/391)

As an area operation, 98(31.1%) PACS have one village, 74(23.5 %) have two villages, 39(12.4%) have three villages & 104 (33 %) have more than three villages.

Number of PACS having more than three villages in their area of operation is more 104(33%).

3) Management committees: (315/391)

Management Committees of 312(99%) PACS are duly elected by their members & 3 (1%) PACS are having authorised officers appointed by the respective Registrars of Cooperative Societies.

Majority of the PACS are having elected committees 312(99%).

4) Youth participation on committees: (315/391)

On 52(16.5%) PACS there is no representation of youths on management committees, 173(54.9%) PACS have representation upto three members & on 90(28.6%) PACS there are more than four members representing as youths on the management committees.

52 (16.5 %) PACS are not having youth participation on their management committees.

5) Member participation in elections:

In 290(92.1%) PACS their members actively participate in the elections of management committees & in 25 (7.9 %) PACS members do not participate actively in the elections.

In number of PACS members do not participate actively in elections.25(7.9%)

6)Appointment of Secretaries: (315/391)

184(58.4%)PACS have Secretaries provided by the District Supervision Society from its establishment & some are appointed on the contract basis from the retired secretaries of Supervision Society.

131(41.6%) PACS have Secretaries appointed by the respective PACS themselves.

Secretaries appointed by the respective PACS are facing the problem of getting salary in time 132(41.6%).

7) No.of PACS in charges of Secretaries: (315/391)

121(38.4%)Secretaries are holding charge of one PACS each,15(4.76 %) are holding charge of two PACS each,14(4.44 %) are holding charge of more than three PACS each & 165(52.4 %) are holding charges of more than four PACS each.

194(61.58%)Secretaries are holding charges of more than one society.

8)Computerisation: (315/391)

Only 16 (5.1%)PACS have computers & 299(94.9%)PACS are not having computers.

Because of different reasons cooperatives are not able to adopt Information Technology & install computers. 299(94.9%).

9)Funding for computerisation: (315/391)

16(5.1%) PACS which own computers have used their own funds for the installation of computers.

A few 16(5.1%)PACS are having computers but without basic infrastructure.Other PACS no computers & no basis infrastructure available with them.

(10)Computer trained Secretaries: (315/391)

In respect of 177(56.2%) PACS their Secretaries are computer trained &in case of 138(43.8%) PACS their secretaries are not computer trained.

Most of the secretaries are not computer trained & their PACS have not installed computers.138(43.8%).

11)Handling of computers: (315/391)

In respect of 78(24.8%) PACS Secretaries himself handle computers, in 24(7.6%)PACS assistants of Secretaries handle computers, in 11(3.49 %)PACS persons employed on contract basis handle computers & in 202(64.1%)PACS there is no person having knowledge of operating computers.

Most of the PACS not having computers.No trained staff to operate computers.202(64.1%)

(12) computer infrastructure: (315/391)

Only16(5.1%)PACS have computers but other basic things like Tablet, Broadband Internet Connections, Telephones etc.,are not available with them.

PACS are not having basic infrastructure required for computerization. 266(84.4%).

(13)CBS connectivity: (315/391)

District Central Cooperative Bank is under Core Banking Solutions(CBS) but PACS are not connected to the bank under CBS.315(100%)

DCCB is under CBS but PACS are not connected with DCCB under CBS.315(100 %).

(14) Reasons for no computerisation in PACS: (315/391)

PACS are not computerised because 59(18.7%)PACS have very limited financial transactions,114(36.2)PACS have not felt need to go for computerisation,24(7.6%)PACS are not having computer trained staff for operations of computers & in 118(37.5%) PACS their present income is nominal from which it is not possible for them to incur expenditure on computerisation. *Most of the PACS are without computerisation because of number of reasons.299(94.9%).*

(15) Office spaces: (315/391)

129(41%)PACS have their office spaces & 186(59%) PACS are not having their office spaces. *Number of PACS are not having good office accommodation is the one of the difficulties in computerisation.186(59%).*

(16) owned office: (315/391)

129 PACS are having their office premises.Out of that 120(93%) PACS are having their owned office premises & 9(7%) PACS are having their offices in rental premises.195(61.9%) are not having their premises for office.

Number of PACS are not having their offices in their own premises.195(61.9%)

(17) Offices in pucca buildings: (315/391)

In 159(50.5%) PACS their offices are in pucca buildings & in 156(49.5%) PACS their offices are not in pucca buildings.

Number of PACS are not having Pucca office Buildings.156(49.5%)

(18) power supply: (315/391)

In 147(46.7 %)PACS they are having adequate power supply & in 168(53.3%) PACs they are not having availability of adequate power supply.

Most of the PACS are lacking uninterrupted power supply.168(53.3%)

(19) Mobile network: (315/391)

185(58.7%) PACS are having effective mobile network in their areas & 130(41.3%) PACS are not having effective mobile network in their areas.

Effective mobile network is not available in most of the PACS.130(41.3%)

(20) Membership : (315/391)

146(46.3%) PACS are having less than 500 members,105(33.3%) PACS are having in between 501 to 1000 members, 43(13.7%)PACS are having members between 1001 to 1500 & 21(6.7 %) PACS are having more than 1501 members.

Number of PACS having members less than 500 is more.146(46.3%), that brings limitations in increasing their financial transactions.

(21) Youth participation: (315/391)

In 11(3.49 %) PACS there is no youth participation, in 86(27.3%) PACS it is upto 20 youths,in180(57.5%)PACS youth participation is above 21 but less than 100 & in 37(11.7%) PACS it is more than 100 youths.

No Youth participation in.11(3.49%) PACS.

(22) Women membership: (315/391)

In 84(26.7%)PACS women membership is upto 20,in 187(59.4%) PACS it is more than 21 but less than 100 & in 44(14%) PACS it is above 101.

Women participation is inadequate.84(26.7%)

(23) Borrowers of loans: (315/391)

In the year 2020-21 in 292(92.7%) PACS,from each PACS less than 500 members availed Kharif/Rabbi credit,in case of 17(5.39 %)PACS from each PACS more than 501 but less than 1000 members availed agricultural credit ,in case of 5(1.2 %) PACS from each PACS more than 1001 but less than 1500 members availed agricultural loan & in case of 1(0.3 %) PACS more than 1501 members availed loan.

In case of most of the PACS number of members availing loan is less than 500 members per PACS. 292(92.7%).

(24) Amount of loan borrowed: (315/391)

In the year 2020-21in 87(27.6%) PACS each PACS has disbursed ST/ MT agricultural loans upto Rs.50 lakhs,in 97(30.8%)PACS each PACS disbursed loan of more than Rs.51 lakh but less than Rs.1 crore, in 121 (38.4%) PACS each PACS disbursed loan of more than Rs.1 crore but less than Rs.5 crore & in 10(3.17 %)PACS each PACS disbursed loan above Rs.5 crore.

Number of PACS disbursing loan below Rs.50lakh is more.87(27.6%)

(25) Recovery of loan: (315/391)

In the year 2020-2, 9(2.86 %) PACS per PACS recovery is below 30%,in 77(24.4%)PACS each PACS has recovery above 31 but less than 50%,in 177(56.2%) PACS each PACS has recovery above 51 but less than 75% & in 52(16.5%)PACS each PACS has recovery more than 75%.

Number of PACS having recovery less than 50% is more.-86(27.30%) PACS having recovery below 50% are not eligible to get financial assistance from Government under the scheme of Strengthening of PACS.

(26) Defaulters of loan: (315/391)

In the year 2020-21, 131(41.6%) PACS each PACS has defaulters less than 100, in 160 (50.8%) PACS each PACS has defaulters above 101 but less than 500, in 18(5.7%)PACS each PACS has defaulters more than 501 but less than 1000 & in 6(1.90 %) PACS each PACS has defaulters above 1000.

In number of PACS number of defaulters is upto 500. 291(92.38%).Such defaulters are not entitled to get benefits under crop incentive scheme & if recovery of loans of respective PACS is less than 50% such PACS will not be entitled to get financial benefits from Government under the scheme of Strengthening of PACS.

(27) Activities of PACS: (315/391)

257(81.6%) PACS disburse agricultural credit only & 58(18.4%)PACS handle loan disbursement, sale of seeds, fertilizers, insecticides & pesticides, agricultural implements, fair price shops, retail cloth stores & other services.

Majority of the PACS are just disbursing agricultural loan. 257(81.6%). Therefore their income is less & those are not financially sound.

(28) Khatedars not enrolled as members: (315/391)

In 202(64.1%) PACS in each PACS less than 500 khatedar are yet to be enrolled as members, in 12(3.80 %) PACS in each PACS more than 501 but less than 1500 khatedars are yet to be enrolled as members, in 6(1.90 %) PACS in each PACS more than 1500 khatedars are yet to be enrolled as members & in 95(30.2%) PACS no such data is available with them.

In number of PACS per PACS about 500 eligible khatedars are not enrolled as members.202(64.1%).It will affect potential of lending & providing other

services to the members & will be earning less income.

(29) Encouraging to become members: (315/391)

In 92(28.9%) PACS if any khatedar approaches to the PACS with a request to admit him as a member then only such requests are considered, in 96(30.5%)PACS they make persuasion with the eligible khatedars & try to convince them to get enrolled as members, in 128(40.6%) PACS they organize farmers camps at village level wherein eligible khatedars are convinced to get enrolled as members.

PACS enroll members only if eligible khatedar themselves approaches to the society.91(28.9%). If Initiatives are not taken by PACS to approach eligible khatedars for getting them enrolled as members, it will affect the progress of PACS.

(30) Information of Services: (315/391)

99 (31.4%) PACS distribute flyers, display information of their schemes /services on their notice boards ,3(0.96 %) PACS give information of their schemes/services to the members by way of emails, sms WhatsApp etc,178(56.5%)PACS give information of their schemes and services to the members in their annual general body meetings only & 35(11.4%)PACS give such information to the members only when an enquiry is made by the members after approaching office of the PACS.

Most of the PACS give information of loan policy & other schemes to their members in their AGBMs only or on enquiry made by the members approaching the society.203(64.44%).If proper awareness is not created about schemes/policies of PACS it will hamper business of the PACS.

(31)PACS in Profit/Losses: (315/391)

127(40.30%) PACS are in profit & 188(59.7%) are in losses.

Number of PACS in losses is more.188 (59.7%) because their volume of transactions is limited & their transactions are restricted to the disbursement of crop loans only.

(32) Imbalances: (315/391)

237(75.2%) PACS are having imbalances &78(24.8%) PACS are not having any imbalances.

More number of PACS are having imbalances.237(75.2%). Because accounting system of the DCCB is not matching with PACS & may be amount of recovery is not credited to the loan accounts & administrative expenses are made by the PACS from such recovery amount.

(33) Annual General Body Meetings : (315/391)

All PACS have conducted their annual general body meetings(AGBMs) for the year 2021-22 within stipulated time.

All PACS have conducted their annual general body meetings for the year 2021-22 within stipulated time. 315(100%)

Its a good indication that PACS started observing statutory provisions properly.

(34) AGBMs with/without quorum: (315/391)

In 220(69.8%) PACS their annual general body meetings for the year 2021-22 were having full quorum and meetings were carried accordingly & in 95(30.2%) PACS initially there was no quorum therefore meetings were adjourned & subsequently meetings were conducted with quorum/without quorum.

In number of cases annual general body meetings adjourned for want of quorum.95(30.2%).It indicates reluctance & lack of awareness on the part of members towards working of PACS.

(35) Communication of AGBMs notices: (315/391)

143(45.4%) PACS serve notice of annual general body meetings to the members through hand delivery or by postal services,42(13.3%) PACS serve notice of their annual general body meetings just by displaying notice on the notice boards of the PACS,8(2.53 %) PACS send notices of annual general body meetings by email, whatsapp, sms & 122(38.7%)PACS inform of annual general body meetings to the members by beat of drum/giving Munari in the village.

The way of communicating notice to the members is by beat of drum/munari.

122(38.7%).Oral communication in the statutory matter is not sufficient.

(36) Annual Statutory Audit: (315/391)

314(99.7%) PACS have completed their statutory audit for the year 2021-22 within prescribed period & only 1(0.3 %) PACS could not complete the statutory audit within stipulated period of time.

All PACS have carried statutory annual audit timely.314(99.7%).Its a good indication that PACS started observing statutory provisions properly.

(37) Affiliation of women SHGs: (315/391)

273(86.7%) PACS have no SHGs of women affiliated to them, in 3 (0.95 %) PACS women's SHGs avail loan from PACS, in 1(0.3 %) PACS women's SHGs send their products for sale through the PACS & in 38(12.1%)PACS women's SHGs affiliated to the PACS do no transactions with the PACS.

SHGs of women not affiliated.273(86.7%).It indicates that PACS are not creating awareness amongst their women members to form their SHGs & get them affiliated to the PACS.

(38) Nature of participation of youths: (315/391)

In 54(17.1%) PACS youth members are not participating in any activity, in 144(45.7%) PACS youth members avail loan & agricultural services from PACS, in 115(36.5%) PACS youth members avail loan, agricultural services & represent on management Committees & in 2(0.63 %)PACS youth members represent as members & directors of Farmers Producers Organizations(FPOs).

In number of PACS youths are just silent members.54(17.1%) not participating in any activity of PACS. It indicates that PACS are not creating awareness amongst the youths to participate in the affairs of the PACS and avail services from PACS.

(39) Efforts for enrollment of new members: (315/391)

60(19%) PACS organize farmers camps & convince farmers to avail loan, use other services from PACS,58(18.4%)PACS arrange programs of cooperative education and training for the farmers & through that they convince farmers to avail loans and other services from PACS,188(59.7%) PACS guide their members during their annual general body meetings only to avail services from PACS,9(2.85 %)PACS make no such efforts to convince members to avail services provided by the PACS.

No encouragement is given to members to avail loan/services.9(2.85%)It affects the business of the PACS.

(40) Formation of Farmers Producers Organizations (FPOs): (315/391)

In respect of 306(97.1%) PACS their members have not formed any FPOs, in 9(2.9%) PACS their members have formed FPOs.

FPOs not formed by member farmers .306(97.1%) because PACS are not creating awareness amongst members to form FPOs , affiliate to the PACS & avail services from PACS.

(41) FPOs availing services: (315/391)

In respect of 199(63.2%)PACS their farmer members have not formed FPOs therefore there is no question of making any transactions by them with PACS,in 6(1.90 %)PACS their members have formed FPOs & they avail loans through PACS,in 1(0.31 %) PACS members of FPOs send goods for sale to the PACS ,& in 109(34.6%) PACS ,FPOs make no transactions with the PACS.

FPOs are not doing any transactions with PACS.199(63.2%)because PACS are not creating awareness amongst members to form FPOs , affiliate to the PACS & avail services from PACS.

(42) Encouragement for investments: (315/391)

In 30(9.5 %) PACS encouragement is given to their members to give deposits to the PACS, in 140(44.4%)PACS,PACS encourage eligible khatedars to be members of the PACS, purchase shares & do financial transactions with PACS in 3(0.95 %) PACS they encourage other players to sale their goods & services through PACS, in 142(45.1%)PACS they make no efforts in this direction.

Members, public in general & other institutions are not encouraged to invest with PACS.142(45.1%).It will hamper business of the PACS.

(43) Godowns & uses : (315/391)

To 222(70.5%) PACS have no godowns of their own, in 50(15.9%)PACS they are having godowns & are being used for the storage of agricultural produces of farmers, in 27(8.6%) they have given their godowns to other parties on rental basis, in 16(5.1%) PACS they are having godowns but those godowns are not being used by the PACS.

Good number of PACS are not having their godowns.222(70.5%)some godowns are not in any use.16(5.1%)Such investment of PACS in immovable property goes waste & hampers the business of the PACS.

(44) Steps to encourage members to avail services: (315/391)

75(23.8%)PACS suggest cooperative education and training be given to the members,87(27.6%)PACS suggested that loan disbursement & provision of agricultural services for their members should be done effectively,101(32.1%) PACS suggested that elections to the committees should be conducted carefully & efficient people be elected on the boards

of directors & they should create faith & confidence in the minds of their members,52(16.5%) PACS suggested that maximum use of modern technology be made by the PACS.

Training & education, proper disbursement of loans& providing services, proper election of committees, creating faith& maximum use of modern technology are suggestions of PACS.315(100%)

(45) PACSs plan to go for different activities(BDPs): (315/391)

26(8.3%) PACS are trying to get involved in agro-processing activities,9(2.85 %) PACS are trying to encourage intensive cultivation, mechanical farming by their members,69(21.9%) PACS are trying to encourage members to increase transactions with the PACS & 211(67%) PACS are trying to increase loan disbursement & timely recovery of loans.

PACS so far have not prepared & implemented their Business Development Plans for undertaking allied activities.315(100%). Therefore their financial conditions are not sound.

(46) Encouraging members to avail services:

102(32.4%) PACS are trying to impart training and education to their members, directors & employees,114(36.2%) PACS are trying to increase their paid up share capital & efficiency in the working,23(7.3%) PACS are trying to make maximum use of Information Technology & extend connectivity with the members,76(24.1%) PACS are trying to organize joint meetings of members, committee members & employees to take review of working of their PACS.

PACS are making efforts for impart training and education to their members, committee members and employees, to increase paid up share capital, efficiency of work, making maximum use of modern technology & extending communication with members, to organise joint review meetings of members and employees & directors.315(100%)

(19) Whether Hypothesis proves ?

On the basis of various findings as listed as listed above it shows that, PACS in the Chandrapur district are not having adequate connect with their members & that is limiting their financial strengthening of PACS

Findings relating to members connect with PACS are as below:-
(samples -315/391) (1)(52 (16.5 %))PACS are not having adequate youth participation on their management committees.

- (2) Most of the members of PACS do not participate actively in the elections of management committees.(25(7.9%)),
- (3) Most of the PACS have membership of eligible khatedars less than 500.-(146(46.3%)).Therefore PACS are having limitations to increase their businesses.
- (4) In most of the PACS youths are not at all participating in the affairs of the PACS.(11(3.49%)),
- (5) In number of PACS women participation as members is inadequate. (84(26.7%)),
- (6) In number of PACS less than 500 members from each PACS,avail agricultural loan.(292(92.7%)). Therefore volume of transactions of PACS is very less.

In the district in all 1,51,117 members are not availing loans & not using any services from PACS.

- (7) In number of PACS disbursed loans by each PACS, is below Rs.50lakh.(87(27.6%)). Therefore PACS earn limited income.
- (8) Recovery of loans in number of PACS is less than 50%.(86(27.30%)). That affects businesses of PACS & such PACS are not entitled to get financial assistance from government under the policy of Strengthening of PACS.
- (9) Per PACS number of defaulters is upto 500 in more PACS.(291(92.38%)).It reduces the number of fresh borrowers, affects the business of the PACS.
- (10) In number of PACS eligible khatedars per PACS are upto 500 who are not enrolled as members.(202(64.1%)).

In the district 10911 eligible khatedars are not yet enrolled as members.

Therefore number of borrowing members & business is not increasing.

- (11) PACS enroll members only if eligible khatedar himself approaches society.(91(28.9%)). Approach of PACS in this regard is not positive.
- (12) most of the PACS give information of loan policy & other schemes to their members only in AGBM or on enquiry made by the members approaching the society.(203(64.44%)).PACS are not making efforts to increase business.

- (13) In number of cases annual general body meetings are adjourned for want of quorum.(95(30.2%)).It shows reluctance on the part of members towards affairs of the PACS.
- (14) In number of PACS the way of communicating notice to the members is by beat of drum/munari.(122(38.7%)). Effective ways of communication are not adopted by the PACS.
- (15) SHGs of women are not formed & not affiliated to PACS (273(86.7%)).PACS are not creating awareness amongst women to form their SHGs & affiliated to the PACS.
- (16) Most of the youth members are just silent members & no transactions are being made with the PACS.(54(17.1%)).PACS are not making efforts to encourage youths to participate in the affairs of the PACS.
- (17) PACS are not giving encouragement to the members to avail loan & services from PACS.(9(2.85%)),
- (18) FPOs are not formed by members.(306(97.1%)).PACS are not encouraging members to form FPOs & get affiliated to the PACS.
- (19) FPOs are not doing any transactions with PACS.(199(63.2%)).PACS are not making efforts to encourage FPOs of members to involve in transactions with the PACS.
- (20) PACS are not encouraging their members, public in general & other institutions to invest their funds with PACS.142((45.1%)).

(20) Suggestions:

(1) Relating to the members :

- (1) Enroll youths as members & encourage them to participate in the management committees.
- (2) Approach to all eligible khatedars, enroll them, including youths & women as members, encourage them to form their SHGs/FPOs & affiliate them with the PACS and to participate in the affairs, including elections, annual general body meetings of the PACS & to avail loan & other services from the PACS
- 3) Increase volume of loan disbursement
- (4) Make efforts to improve recovery of loans ,reduce number of defaulters, become eligible to get financial assistance from government.

- 5) Use effective methods of communication/serving of notices of annual general body meetings to the members,& give information of loan policy & other schemes to their members frequently.
- 6) encourage members,public in general & other institutions to invest their funds as share contribution or deposits or donations etc.

(2) Related to other matters:

- 1) possibly one village one PACS should be pattern.
- 2) establish members democratic control, ensuring representation of all segments of society
- 3) Ensure timely payment of salary to the Secretaries, increase volume of business & income
- 4) one PACS one Secretary may be the pattern.
- 5) remove difficulties ,adopt & properly /fully use Information Technology at the earliest, obtain basic infrastructure, train staff technically /appoint technically train staff
- (6) DCCB should connect PACS under CBS
- (7) Ensure owned good office accommodation in pucca building, uninterrupted power supply, Effective mobile network
- (8) diversify activities, FPOs be formed & implement BDPs, earn more, minimize losses, minimize imbalances
- (9) observe Act, rules & bye-laws

18) Use godowns:

- (10) Training & education, proper disbursement of loans& providing services, proper election of committees, creating faith& maximum use of modern technology
- 11) increase share capital, efficiency of work, making maximum use of modern technology & extending communication with members, organise joint review meetings of members and employees & directors.

(3)Suggestions on Remarks given by PACS:

- (1) Government policy & prescribe developmental procedure of working
- (2) Computerisation through Government alongwith software & internet connections.

- (3) All Secretaries of PACS may be appointed by the District Supervision Society.
- 4) Pay scales of Secretaries may be fixed by government.
- (5) Secretaries salary may be made from income of PACS/government assistance only
- 6) government is expected to make financial support
- (7) Licenses of Krushi Seva Kendra be given, old permit system may be restored.
- (8) Bank should give information to the PACS, acknowledge the transactions of PACS .
- (9) Members should cooperate with the PACS.
- (10) No Frequent loan waiver be declared.
- (11) Three-tier system be closed down. NABARD should make direct finance to PACS.
- (12) All government schemes should be routed through PACS
- (13) Capital for initiating new activities may be provided by government , information of government schemes be given to PACS.
- (14) All necessary services to the farmers be given through PACS.
- (15) Voting power be given to the borrower & regular repaying members only
- (16) Workshops for guidance to the farmers may be organised. Implements may be provided through loans .Soil testing, guidance for use of fertilizer & pesticide may also be given by government.

(21) Conclusion:

STCCS being formed & owned by the farmer members is required to survive & strengthen which is based on the active participation of members creating awareness amongst them by the PACS.

STCCS is providing agricultural credit, allied agricultural services to their members & can generate employment in rural areas. Successful co-operatives are those in which members are participating actively.

PACS have restricted themselves to credit disbursement & borrowing

members are less in number .PACS need to prepare BDPs based on the local conditions, potential & start multi- activities, adopt & use modern technology, create awareness amongst members of their rights duties & responsibilities, build up own funds, start working independently, pay dividends to the members against their contribution in share capital.

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Members of PACS & their Connectivity & Involvement in Computerization of Cooperative Societies

Shrikant Chougule*

Abstract

This paper aims to assess the awareness, perception and participation of the members of PACS in computerization of the societies. The National Bank for Agriculture and Rural Development (Nabard) had announced a Rs 5,000 crore grant-based scheme for computerization of 35,000 Primary Agricultural Credit Societies (PACS) by Financial year 2022-2023. This is a grand opportunity to develop PACS with all aspects. As per record there are about 99509 primary agricultural societies in India, working at the grass-root level for farmers.

These are working as per state co operative law as well as the bye laws accepted by these societies. A few months ago central government has created a central ministry and a central law for co operative movement and announced financial assistance for their computerization.

But there some problems to initiate the computerization of PACS, i.e. lack of adequate and trained staff, lack of necessary funds, lack of professional management, political interference, illiteracy of members, non participation of youth etc. We have to prepare proper ground for it.

Methodology :-

To increase the efficiency of the society and to serve the rural agricultural people in a better perspective the PACS should be strong and efficient to face the challenges in competitive environment and it needs to take necessary measures.

We should properly train those members. There is also need to support for infrastructure. Proper training program is a key factor for it.

*Co-operative Auditor, Kolhapur

Bibliography :-

As a co operative auditor I have conducted statutory Audits of various PACS in Kolhapur district. As well as prepared a questionnaire & discussed 25 members of PARASPAR SAHAYKARAK SAHAKARI SEVA SANSTHA MARYADIT KUMBHOJ , dist Kolhapur- The age group of these members is 30 to 40 years. Discussion was made about their involvement in transactions & computerizations of societies. Also discussed about services provided to them by institution like mobile banking, credit cards, etc. Also discussed on various aspects with the members in the annual general meeting of the society above stated.

Introduction:

Primary Agricultural cooperative societies called as PACS are playing vital role in the life of farmers by financial assistance to them. It is the basic unit which deals with rural credit to farmers by providing short-term and medium-term loan to them which helps to meet their financial requirements. It supplies agricultural inputs and provides marketing facilities also for the agricultural products. PACS are actually organized at the grass-roots level at village or a group of small villages.

PACS are the banks which are situated in rural area and plays a very important role in rural credit system by performing their activities on co-operative principles. These banks are working under the District Credit Co-operative Banks. But, the rural people are still depend on unorganized & unsecured sources such as money lenders in village, mandies, traders etc..In village the farmers are facing too many problems where PACS are not strong enough.

PACS are registered and working as per state co operative law as well as the bye laws prepared & accepted by these societies.

PACS, being registered cooperative societies, have been providing credit and other services to their members. They generally provide the following facilities to their members:

- Financial assistance based on the land owned by farmers.
- Providing fertilizers and pesticides.

It has been observed that although PACS are generally meeting out credit requirements of their members, there is a need to provide other add on services by them for their members.

The most important stage to develop PACS is Computerization. A few months ago central government has created a central ministry and a central law for cooperative movement and announced financial assistance for their computerization. Now a days the accounting as well as services provided to the members in the societies in different territories is different type. The central cooperative ministry wishes to control the activities of all the PACS in India at one system. The same type of book keeping as well as same type of transactions are expected in all over India.

According to Nabard's data, there are 95,509 PACS covering 6.3 lakh villages with 13.8 crore members in India. In Maharashtra number of PACS is 20761 with 1.08 crore. members. These are distributing Rs. 17767 cr. Financial assistance to member farmers. Central government is trying to computerize all these societies. In the first year i.e. 2022-23, the target of computerization of 13,000 Primary Agriculture Credit Societies (PACS) has been fixed, said Union Cooperative Minister Mr. Amit Shah while replying to a query in parliament recently.

The National Bank for Agriculture and Rural Development (Nabard) has announced a Rs 5,000 crore grant-based scheme for computerization of these Primary Agricultural Credit Societies (PACS) by financial year 2022-2023. This is a grand opportunity to develop PACS with all aspects. Under the scheme, assistance will be released 70% by central government , 20% by NABARD & 10% by state governments. This will very useful for computerization of PACS. Not only computerization, the scheme also will ensure integration of these PACS with the Core Banking System (CBS) of District Central Co-operative Banks (DCCBs) to ensure seamless flow of credit.

Although PACS are working for members & farmers, the involvement of members in the routine transactions of PACS is very poor. There are too many reasons for that.

Challenges in computerization:

The problems or challenges which are cropping up in the process of computerization of co-operative system are as follows....

- Non availability of computer infrastructure.
- Weak infrastructure (interrupted power and internet availability), Poor skill level and adaptability issues.
- Incomplete and inconsistent books and records of PACS.

- Non availability of Dedicated, trained adequate manpower.
- lack of professional management skills
- political interference

and so on... these societies are unable to provide adequate finance to the members and they are making delay in the sanctioning of loan. Therefore to increase the efficiency of the society and to serve the rural agricultural people in a better perspective the cooperative societies should be strong and efficient to face the challenges in competitive environment and it needs to take necessary measures. Computerization is a first step for it.

National Bank for Agriculture and Rural Development (Nabard) is playing a vital role in fulfilling the vision of the Central Government of doing computerization of PACS of the country.

Challenges in involvement of members:

As a co operative auditor, Author has conducted statutory Audits of various PACS in Kolhapur district. For this study, Author visited a well-known Primary agricultural cooperative society PARASPAR SAHAYKARAK SAHAKARI SEVA SANSTHA MARYADIT KUMBHOJ , dist Kolhapur. The society completed 100 years of transaction in the year 2017. This is a partially computerized society. In the financial year 2021-22, society distributed 6.95 cr.. loan to its members out of which 6.81 cr. was crop loan and rest was other medium term loan.

Society has 1069 members as on 31st march 2022. The annual general meeting was held on the date 13th august 2022. The notice of annual general meeting was send to all the members, but out of these members only 160 members was present to this meeting. Only 15% of members were present to this most important event. The presence was so poor. "Members are receiving proper loan & other facilities in time to time and hence they are not willing to present the meeting" said the chairman Mr. Jambu Appa Bhokare, as well as the most active director Mr. Arun Babaso Patil.

As per Maharashtra State Cooperative Law, there are too many powers delegated to its members, at annual general meeting. The decisions taken and resolutions passed by this meeting are mandatory to the society. But members are not willing to present these meetings.

In the year 2013 the 97th constitutional amendment was made by Central Government. The main theme of this amendment was to make aware the members of cooperative societies about their duties and rights.

The members were divided in two types. Active members and non active members. The voting rights and also all other rights were delegated only to active members. The conditions for active members were as follows’.

- 1- He should have paid fully the membership fees as per model bye laws.
- 2- His participation should be must in the transactions of society minimum up to rs.5000
- 3- He should present annual general meeting minimum one year in last five years.

This indicates that government is also trying the members to participate in routine transactions. They should be active enough. But in the year 2021 the 97th amendment was cancelled by supreme court.

The PACS are not doing their business with youth. The reason behind this is, as per our ancestral system the land registers on the name of any farmer after the death of his father. As per cooperative law, main condition for the membership of any primary agricultural society, the farmer should be a owner of at least 10 guntha land.

Hence the average age of the members of PACS is 45 years.

In the annual general meeting of the society stated above there was made a questionnaire for the members & data was collected by them. The information was on following ground.

- 1- Name and membership number of a member and the years he is member of society
- 2- What is the amount of financial assistance i.e. loan provided to him.
- 3- Is The documentation provided by them for disbursement of loan is proper
- 4- What is the time limit for receiving loan after proper documentation
- 5- What is the quality of services provided by the society

- 6- Is passbook / kisan credit card facility provided by the society
- 7- Mobile banking or any online assistance provided or not by the society.
- 8- Society is fully computerized or not
- 9- Any other services expecting from society
- 10- Whether he is satisfied with the services provided by the society

As a case study these questions were asked to 25 members having age group of 40 to 50. The data gathered by their answers is interesting.

- These age group of members are in connection with the Society since last 10 to 15 years by ancestral membership.
- As their main agricultural production is sugarcane', they are receiving financial assistance of Rs. 40,000 per acer.
- The documents provided by them to Society for crop loan is a single paper loan contract.
- The society had a mortgage on the land called E karar. Time limit to receive loan by Society is approximately three to five days. The time for medium term loan is longer.
- The quality of services provided by the Society is good.
- Facility of passbook / kisan credit card is not provided by the Society.
- No mobile banking or any online assistance. Society is partially computerized.
- 65% of members stated that they are expecting other add on services like soil testing, leaf testing, warehouse services for vegetables & fruits etc.

In total the members are satisfied with the society but they are expecting more by them . The conclusions were :

No members are receiving a passbook or kisan credit card printed

No members are receiving messages about transactions. No mobile banking available in Society for their customers.

The delay for disbursing loan is because of weak computer infrastructure.

75% of members are satisfied with the services provided by Society

60 % of members are satisfied with the currently computerized work of Society

No other facilities other than loan & fertilizers are provided by the Society.

This indicates that although the Society is partially computerized, giving good services to its members , there are too many challenges.

Strategies:

To increase the business portfolio of PACS so as to make it a self-sustainable entity, it is essential that the PACS should provide additional services like providing agriculture implements on hiring basis, enabling collective purchase of inputs, have good quality storage capacity as per Negotiable Warehouse System, etc. In order to enable PACS to provide more services to their members and generate income for themselves, an initiative has been taken to develop PACS as Multi Service Centers. This will enable PACS to provide ancillary services to their members and diversify their activities.

With the help of central ministry, societies should be computerized fully by proper system which should change the total view of member farmers about them. Computerization could assist them in following terms.

- The facility of soil testing, water testing and its yearly reports should be arranged for members.
- Proper information by internet for selection of crop should be provided. i.e. as per market studies which crop or vegetable or any other product is more profitable in their region.
- proper guidelines for cultivation of lands.
- As per whether reports for coming months, what should be perfect dates for plantation of seeds.

- These reports should be prepared by a trained staff of the Society & presented in proper time.
- The data should be available on mobiles to all the member farmers.
- Guidelines for selection of seeds. i.e. reputed companies seeds or the Society may provide these to its members in cash or by loan.
- Facilities for fertilizers as well as pesticides should be provided by Societies to its members in cash or by loan.
- Leaf testing report is also useful for proper growth of crop. This facility should be made available in Societies for concessional rate to farmer members.
- As per requirements of the members should be financed in time. The time taken for this finance should be only one day.
- Mobile messages for there transactions should be made available with printed kisan credit cards i.e. passbooks. The members should be informed about transactions made in their accounts.
- Time to time guideline programs should be arranged by the Societies.

Conclusion:

Now a days cooperative movement is changing very positively. Government is also trying to support by all means. Computerization, availability of funds, proper infrastructure, is easily available for us. We, the members of cooperative societies like PACS have to prepare ourselves for this very useful change. Because development of cooperative movement is development of the Nation.

Dairy Cooperatives of Puducherry Connecting members for Livelihood

¹V. Dhanalakshmi and ²Dr. S.V. Akilandeewari

Abstract:

With 70 million farmers engaged in the dairy business in India. Dairy farming is one of the major sources of income generation for farmers and it is owned and controlled by members who benefit from its service. Members take shares in the cooperative and get dividends from surplus based on the volume of milk supplied to the cooperatives. Dairy cooperatives engaged with varieties of activities to provide and boost their members and assured market of their milk. The Puducherry region has two-tier structure; one is Primary Milk Producers Cooperative Society (PMPCS) and another one is Pondicherry Cooperative Milk Producers Union (PCMPU) to collect milk from PMPCS and process and manufacture products. The member's livelihood has been developed through the service rendered by dairy cooperatives like veterinary camps, cow loan, providing cattle feed, AI services to the milch animals and so on. This study addresses the livelihood development of members in dairy cooperatives in Puducherry and suggests to re-boost their services to member farmers' livelihood development.

Keywords: Livelihood, Dairy Cooperatives, Members, PMPCS

Introduction:

India is the World's largest milk producer with 22 percent of global production, and most of the people particularly in rural areas depend on livestock. Currently, livestock has been directly contributing to the

¹Research Scholar, Department of Cooperation, The Gandhigram Rural Institute (Deemed to be University), Tamil Nadu

²Assistant Professor, Department of Business Administration, Aathoor Cooperative College

livelihood of rural people and also the food security of more than a billion people in different parts of the world. (Hegde, 2019) Besides, livestock has been playing an important role in the Indian economy and it is a vital subsector of Indian agriculture. With 70 million farmers engaged in the dairy business in India however, Cooperative is one of the integrated parts for the development of the dairy sector in India. This is the only organisation that is owned, benefited and controlled by members. A dairy cooperative is owned and controlled by dairy farmers who benefit from its service. Members take shares in the cooperative and get dividend from surplus based on the volume of milk supplied to the cooperatives. Dairy cooperatives engaged with varieties of activities to provide and boost their members.

Dairy cooperatives has three-tier organizational structure, the first level is milk production and procurement carried out by the Primary Milk Producers Cooperative Society (PMPCS) which collect milk from farmer members, and the second one is District Cooperative Milk Producers Union (DCMPU) which will collect milk from village dairy cooperatives. It processes and manufactures products and the third level is State Dairy Federation to provide marketing services and other support to the DCMPU. But, the Puducherry region has two-tier structure one is PMPCS and another one is PCMPU to collect milk from PMPCS and process and manufacture products. This study suggests the dairy cooperatives in Puducherry to re-boost their services provided to member farmers as well as help the development of dairy farmers' livelihood.

Objectives:

1. To study the livelihood development of members through dairy cooperatives.
2. To evaluate the efforts of dairy cooperatives in improving the living standards of members.
3. To suggest dairy cooperatives re-boost their members' livelihood by providing valuable services to the members.

Methodology:

Both primary and secondary based data were collected for this study. The primary data was collected through a schedule. By adopting a sampling method, taking all 101 PMPCS into account, 6 PMPCS were randomly

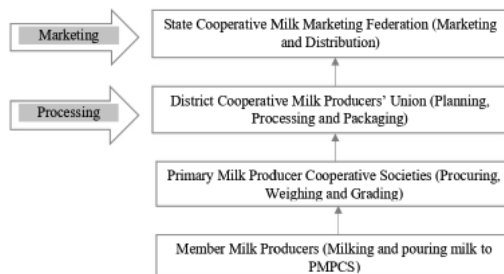
selected. In which, two were profit-making society, two moderately working society and two loss-making society selected to analyse. A sample of 150 respondents (milk producers) selected from 6 Primary Milk Producers Cooperative Society (PMPCS). Thus, 150 respondent the study were taken 25 respondent from each societies. The secondary data was collected through audit reports, annual reports published books, journals, and other related scientific databases.

Role of Dairy Cooperatives in India:

The cooperative movement was started in India during 19th century since the enhancement of “the Cooperative Credit Society Act 1904” with two main objectives, one to protect the farmers from the hands of the private money lenders and the other to improve their economic condition. Nevertheless, cooperatives play an important role in animal husbandry and the dairy sector. In the rural area, dairying and milk production is an important economic activity and has become a secondary source of income and employment to the farmers.

In 1946, the first dairy cooperative was started and functioning under the name of Kaira District Co-operative Milk Producers Union Limited of Anand, Gujarat better to known as AMUL (Anand Milk Union Limited), is the original brand name. (Sundararaj, 2011) The functional activities of dairy cooperatives were procuring, processing and marketing milk and milk products, providing macro-level inputs like cattle feed, animal health care and breeding care etc., arrange for training and education of managing committee members, staff, and members of dairy cooperative society.

Now milk is the single largest agricultural commodity in India. Further, livestock provides livelihood to two-thirds of rural communities. It also provides employment to about 8.8% of the population in India. (Thamizhkumaran J, 2016)



This chart defined, the organisational structure of dairy cooperatives and the activities carried out in each tier. Members of the dairy cooperative bring milk and pour to the PMPCS after that it grade the milk and send it to District Cooperative Milk Producers' Union have done with activities are planning, processing and packaging and finally the State Cooperative Milk Marketing Federation to market and distribute the finished product to end consumers.

Dairy Cooperatives in Puducherry:

Ponlait is a very old milk brand in the Puducherry region, the cooperative society impresses the people through the production of new varieties of products like paneer, flavoured milk, ice cream, goa and so many byproducts. The brand name Ponlait comes from the name “portmanteau” of the word “Pondicherry” and “Lait” which is French for “milk”.

The Pondicherry Co-operative Milk Producers, Union Ltd. Ponlait had started its functioning on 7th February 1955 as Pondicherry Co-operative Milk Supply Society and was marketing the milk to the urban consumers only. (The Pondicherry Cooperative Milk Producers' Union Ltd., 2022) This is the first registered cooperative society in Pondicherry under the Pondicherry Cooperative Societies Act 1972. The supply society was unable to extend any good deal of input activities to the producing members to encourage milk production and was unable to impress upon the consumers also on the quality aspects. Thus the supply society was able to function only as unorganized middlemen between the much-scattered producers and consumers. After the name Pondicherry Co-operative Milk Supply Society was changed into Pondicherry Co-operative Milk Producers' Union Ltd. In 1973, there are 106 societies have been registered and which, 101 societies are currently functioning including 19 Women Milk Producers' Cooperative Societies. There are about 41,221 Milk Producers who enrolled themselves as members in the societies function at the village level, of which around 7,525 milk producers are in active participation at present. (The Pondicherry Cooperative Milk Producers' Union Ltd., 2022)

Primary Milk Producers Cooperative Society in Puducherry:

In Puducherry, there are about 42,450 milk producers who enrolled themselves as members in the PMPCS at village level, of which around 7,596 milk producers are in active participation at present. There are 106

Primary Milk Producers' Cooperative Societies functioning at village level, out of which 101 Primary Milk Producers' Cooperative Societies are functioning and balance 5 societies are non-functional. These Primary Milk Producers' Cooperative Societies are procure around 70,900 litres of milk per day from their members and after selling around local people, the remaining quantum of milk is sent to the milk union and the same is collected through 25 Bulk Milk Cooling Centers installed across Puducherry Region.

The Primary Milk Producers Cooperative Society directly collect milk from its members (milk producers) and after sending it to the dairy Union. The Primary Milk Producers Cooperative Societies are paid remunerative prices based on the quality of milk Rs.35 per litre respectively and 15 days once they will receive milk cost from the milk union. The societies are sharing the profit with members.

Input services obtained by dairy farmers :

The input services provided by the union through dairy cooperatives are fodder for milch animals to increase the milk production, veterinary services to the milch animals, AI services to the milch animals and Cattle Insurance. The table shows that the level of input services obtained by dairy farmers for interviewed 150 respondents of 6 PMPCS, each PMPCS were taken 25 respondents.

Table No. 1 below explains that the input services obtained by dairy farmers. The supply of inputs, there are 10% of the members are answered regularly receive the cattle feed from PMPCS. Therefore, 90% of the members reported that cattle feed was not properly supplied to them, it come twice or thrice a year otherwise not. So the farmers buy CF from outside of Rs.1200 to 1500 they are struggling to buy it. As dairy societies provide CF for Rs.225 with 75% of subsidy and thereby improving the productivity of the members. 91% of the members utilize Artificial Insemination Services were always provided to them at reasonable cost by the societies and only 42% of the members are utilize the Cattle Insurance. It was found that, most of the farmers are not much aware about cattle insurance services provided by the union. Hence, the union should arrange awareness program about their input services to the dairy farmers.

Table 1: Level of input services obtained by dairy farmers

Name of the Society	Input Services		
	Cattle Feed	Artificial Insemination (AI)	Cattle Insurance
Karikalampakkam Cooperative Milk Producers' Society	-	25	16
Koravallimedu Cooperative Milk Producers' Society	6	25	10
Uruvaiyaru Cooperative Milk Producers' Society	-	23	9
Poriyour Women Cooperative Milk Producers' Society	4	25	15
Perungalore Cooperative Milk Producers' Society	-	20	8
Thiruvandarkovil Cooperative Milk Producers' Society	5	19	5
Percentage	10/150	91/150	42/150

Source: through the interview schedule

Socio-economic Characteristics of Members in Dairy Cooperatives in Puducherry:

The following table discusses the Socio-economic characteristics of selected members of dairy cooperatives in Puducherry.

Table No. 2 below discussed the educational qualification of members. Out of 150 respondents, 18% of members have completed Primary (1 to 7) education, 37% have Secondary (8 to 10) education, 9% have completed Higher Secondary (11 to 12) educational qualification, 5% have Graduate qualification, 4% were Post Graduate and 27% are illiterate. Thus, most of the farmer members are completed Secondary (8 to 10) education and most are illiterate. Table 1 reveals that most of the members depend upon dairying is their main income and their not much educated also.

Table 2: Educational Qualification of Members

Educational Qualification	Respondents	Percentage (%)
1. Primary (1 to 7)	27	18%
2. Secondary (8 to 10)	56	37%
3. Higher Secondary (11 to 12)	13	9%
4. Graduate	7	5%
5. Post Graduate	6	4%
6. Illiterates	41	27%
Total	150	100

Source: through the interview schedule

Table 3: Members' Occupation

Occupation	Respondent	Percentage (%)
1. Primary (Dairying)	45	30%
2. Secondary		
Dairying and agricultural	61	41%
Dairying and employed	20	13%
Dairying and other works	24	16%
Total	150	100

Source: through the interview schedule

Table 3: Out of the total 150 respondents of this study, 30% of the dairy farmers have involved only in dairying, 41% of the farmer members are involving dairying and agriculture, 13% of farmer members only involving dairying and employed and 16% are involved in dairying and other works.

Table 4: Income of the Member

Monthly Income	Respondent	Percentage (%)
1. 1000-3000	23	15%
2. 3001-5000	29	19%
3. 5001-7000	38	25%
4. 7001-10000	36	24%
5. Above 10000	25	17%
Total	150	100

Source: through the interview schedule

Table 4: discussed the income of members, out of 150 respondents 15% of dairy farmers' monthly income is (Rs. 1000-3000), 19% from (Rs. 3001-5000), 25% from (Rs. 5001-7000), and 24% from (Rs. 7001-10000) and that of 17% from above Rs. 10000. Thus, the most of farmer members' monthly income is from Rs. 5001 to 7000 and Rs. 7001-10000.

Livelihood Development of Members and dairy cooperatives in Puducherry:

The majority of the rural population is depending upon agriculture for their livelihood. Increasing agricultural production through the active involvement of the poor and weaker sections of society is the most appropriate solution. (Virendra Kumar K. G., 2015) Livestock is another important source of income for small farmers. Livestock contributes 40 percentage in global value of agriculture and to support the livelihood of billion people.

Dairy is one of the key source for farmer members to generate income through pouring milk into society. Dairy cooperatives are for the sustainable livelihood of local rural communities and it contribute to global food security and poverty through the supply of quality milk and milk products. Nevertheless, most of the milch animals are uneconomical due to severe genetic erosion, inadequate feeding and not proper health care.

The Pondicherry Cooperative Milk Producers Union provide input services to members like feed and fodder, breeding and animal husbandry services, and cattle insurance, besides insuring the milk producers under group insurance scheme. During 2020-2021 PONLAIT has been produced 1,451 MT of cattle feed and sold it to the members of the Milk Producers

Cooperative Societies at 75% subsidy rate. These are all the services provided through their member cooperative societies, even so, it is not enough for the dairy farmers just the PCMPU re-boost their services and that will help to the development of the members' livelihood.

Suggestions:

This study suggests that, dairy cooperatives take the necessary step to improve the livelihood of members. The following suggestions are

- The government to introduce a new scheme viz. livestock development scheme, livestock health care schemes for dairy farmers which will increase their economic condition.
- The government by strengthening the dairy cooperatives can increase the livelihood of millions of dairy farmers.
- Dairy cooperative arrange more awareness programs and veterinary programs for maintaining the dairy animals in this crucial time. Arrange free veterinary services to the milch animals at least ones in a week.
- The Union should improve the services like cattle feed, Veterinary services and Artificial Insemination to the farmers.
- The Union consider continuous supply of fodder to their members without stoppage. It will help more to the dairy farmers' livelihood.
- The Dairy union should provide proper AI (Artificial Insemination) service to the milch animals.
- The milk union should conduct regular training program for the members on proper care of milch animals.
- The Pondicherry Cooperative Milk Producers' Union give more financial assistance to the members like loan facilities for purchase of cattle.
- The Government of Puducherry provides financial assistances to PMPCS for their successful functioning.

Conclusion:

This study addresses the livelihood development of members in dairy cooperatives in Puducherry and suggests to re-boost their services to member farmers' livelihood development. Thus, it can be concluded that majority of the dairy farmers were satisfied with the functions like marketing of milk, payment of milk and supply of inputs like Artificial

Insemination services but, the members were not with the cattle feed and cattle insurance, and also the members are not satisfied with the animal health care services. The study, it can be suggested that sufficient veterinary staff to be employed by the dairy societies for providing better veterinary services to the milch animals. The member's livelihood has been developed through the service rendered by dairy cooperatives like veterinary camps, cow loans, providing cattle feed, AI services to the milch animals and so on. However, members need additional support from dairy cooperatives for their livelihood the dairy cooperative in Puducherry take the necessary step to increase the members' input services and to provide a proper way in addition, re-boost the services rendered by the societies for ensuring the livelihoods of the members.

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09

Service Quality in Health Care System – A Study of Member’s Perception and Satisfaction in Kattappana Cooperative Hospital

¹S.M.Surya, ²Dr.B.Tamilmani, ³Dr.M.Mahendran

Abstract:

Member’s perceptions about health services seem to have been largely noticed by health care providers in developing cooperative hospitals. That such perceptions, particularly about service quality, might figure confidence and consequential behaviours with regard to choice and usage of the available health care facilities is reflected in the fact that many members join the system or avail it only as a measure of last resort. Those who can afford it seek help in other countries, while preventive care or early detection simply falls by the wayside. Member’s ‘voice must begin to play a greater role in the design of healthcare service delivery processes in the developing cooperative hospitals. This study is, therefore, evidence based practice and finds the service quality factors that are important to cooperative hospitals; it also examines their links to member’s satisfaction in the context of Kattappana. A field survey was conducted evaluations were obtained from members on several dimensions of perceived service quality including responsiveness, assurance, communication, discipline. Using factor analysis and multiple regressions, significant associations were found between the five dimensions and members satisfaction. Implications and future research issues are discussed.

Keywords: Member’s perception, satisfaction, Service quality, health care, cooperative hospital.

¹Ph.D, Research Scholar, The Gandhigram Rural Institute-Deemed to Be University¹,

²professor, Department of Cooperation, School Management studies, The Gandhigram Rural Institute-Deemed to Be University², Santosh medical and dental college, Department occupational therapy in pediatrics, Chaudhary Charan Singh University, Meerut, Uttar Pradesh³

Introduction :

Health care has become one of Kerala's largest sectors both in terms of revenue and employment. Health care comprises cooperative hospitals, medical devices, clinical trials, outsourcing, telemedicine, and medical tourism, and health, insurance and medical equipment. In 2016, the Indian health care division became the fifth largest employer, both in terms of direct as well as indirect employment, with direct employment of people. Kerala cooperative hospitals are expected to rank amongst the top three healthcare markets in terms of incremental growth by 2023. The Kerala Kattappana cooperative hospital health care sector is growing at a brisk pace due to its strengthening coverage, services and increasing expenditure by public as well as private players. In every cooperative hospital, clients and members. For any customer, for that sake even for clients, rating the service quality on the basis of perceptions, expectations and performance is their primary duty. Service quality is a comparison of what clients feel a cooperative hospital as a service provider should offer (i.e. their prospect) with how it actually performs.

Service quality is a measure of how well the services delivered match clients' expectations and members' perceptions. The availing of services offered by the cooperative hospital is made mostly on clients' perception of service quality. Therefore there is no option for the cooperative hospitals in the world except to start the service quality initiation to retain the breathing clients' potential and also to ensure that more and more new clients start believing in their services. Consumers' perceptions on service quality result from a comparison of their expectations before they receive service with their actual experience of the service. The quality of a service or product is not just determined by the clients' reaction to it. It also depends on the clients' expectations.

Kattappana Cooperative hospital members discerning :

Cooperative hospital Kattappana was set up in 2017 with an aim to provide better medical and surgical care for high range areas in Idukki district. In a span of 5 years the hospital has become one of the major healthcare providers in Kattappana, and has taken care of nearly 1 lakh patients and performed more than 2000 major surgeries. The spectrum of care involves all the major medical and surgical specialties from the pediatric age group to adult patients.

Health care is a patient oriented service cooperative hospital where the patient or the service user is in focus and patient service is the differentiated factor. Success and survival of health care organization depends upon the effectiveness and efficiency of the services rendered to its patients. Patients' satisfaction is the key to secure patients retention or loyalty and to generate superior and long-term performance or optimize long-term value. This members perception is based on their expectations and perceived attitude on the services offered by health care

Aim :

The aim of the study is to determine Service quality in health care system, member's perception and satisfaction in Kattappana cooperative hospital.

Objectives :

1. To determine the average gap score (between members' perceptions and expectations) for each service attribute.
2. To assess a cooperative hospital service quality along each of the five SERVQUAL dimensions.
3. To track members' expectations and perceptions (on individual service attributes and/or on the SERVQUAL dimensions) over time.
4. To compare a cooperative hospital 's SERVQUAL scores against those of competitors. To identify and examine customer segments that differs significantly in their assessments of a cooperative hospital 's service performance.
5. To assess internal service quality (that is, the quality of service rendered by one department or division of a cooperative hospital to others within the hospital). Despite all well-documented criticism, it is still widely used as there are no other well established alternatives.

Hypothesis :

Null Hypothesis :

There are no significant Service quality in health care system, member's perception and satisfaction in Kattappana cooperative hospital.

Alternative Hypothesis :

There is significant Service quality in health care system, member's perception and satisfaction in Kattappana cooperative hospital.

Review of Literature:

Curry (2002) in their study focused on to test the hypothesis as to the applicability of the Servqual model to the public sector. Investigate was undertaken using the model to assess the quality of three dissimilar types of physiotherapy service provision in Dundee, Scotland. The findings indicate that the armed forces were much appreciated by patients in spite of the perceptions-minus-expectations scores being slightly negative. Information relating to patients' conditions could be improved and, as has been found in previous similar healthcare investigate, the dimensions of assurance and empathy were highlighted as important. A critique of the Servqual model pinpoints and confirms certain weaknesses that need to be addressed but the study nonetheless confirms the potential usefulness and relevance of Servqual in the public sector context to settle on consumer priorities and measure service perceptives.

Muhammad Shafiq (2017) in their study focused on hospitals varies from one another in terms of their specialty, services offered, and resource availability. Their services are widely considered with scales that gauge patients' perspective. Therefore, there is a need for research to develop a scale that method hospital service quality in Asian hospitals, regardless of their nature or ownership. To concentrate on this research need, this study adapted the SERVQUAL instrument to develop a service quality measurement scale. Data were collected from in IP and OP at 9 different hospitals, and the scale was developed using structural equation modeling. The developed scale was then validated by identifying service quality gaps and ranking the areas that require managerial effort. The findings indicated that all 5 dimensions of SERVQUAL are valid in Asian countries such as Pakistan, with 13 items retained. Reliability, tangibility, responsiveness, empathy, and assurance were ranked first, second, third, fourth, and fifth, respectively, in terms of the size of the quality gap.

Stefane M Kabene (2006) in their study focused on the health care system from a global viewpoint and the importance of human resources management (HRM) in improving overall patient health outcomes and delivery of health care services. We explore the published literature and collected data through secondary sources. Various key success factors emerge that clearly affect health care practices and human resources management. This paper will reveal how human resources management is indispensable to any health care system and how it can improve health care models. Challenges in the health care systems

in Canada, the United States of America and various developing countries are examined, with suggestions for ways to overcome these problems through the proper implementation of human resources management practices. Comparing and contrasting selected countries allowed a deeper understanding of the practical and crucial role of human resources management in health care.

Mohana Pillai (2019) this part of a set addresses the role of Human Resource Management in improving the staff performance thereby indirectly improving client satisfaction and delivering better healthcare service. The main aim of quality healthcare should be protected, Patient centre, opportune, well-organized & equitable. The HRM should promote training, motivate, retain, implement new strategies, methodical planning for optimal consumption of the available sources. In the current scenario, inadequate training and lack of mastering the competencies are prevailing among wide range of Healthcare employees. Patient centred care has become a critical component in delivery of safe healthcare.

Kemal M. Surji (2020) They conducted a study was illustrates that HRM functions in healthcare have a robust effect on facilitating optimal healthcare services and workforce performance, leading to heightening organizational performance. The study recommends that it is imperative to implement effective human resource management plans to achieve higher performance in providing superior healthcare amenities and further enhancement of healthcare organization.

Emel Yarimoglu (2022) They conducted a study was illustrates that measuring service quality in hospitals has become crucial topic, since the increasing importance of healthcare sector. The aim of the study was to show the differences in patients' service quality perceptions based on hospital ownership and demographics in Turkey. Service quality was measured by SERVPERF scale, and the survey was conducted with 715 patients, chosen by convenience sampling in Izmir City, Turkey, using face-to-face survey technique. Between-subject factorial ANOVA designs were used in data analysis. In findings, main effects for hospital ownership were found to be significant in all models .The study recommends that it is imperative to implement effective human resource management plans to achieve higher performance in providing superior healthcare amenities and further enhancement of healthcare organization.

Methodology :

The aim of this study was to assess the Service quality in health care system, member's perception and satisfaction in Kattappana cooperative hospital

■ **Research design:**

The research design is a non-experimental and was a survey based study.

■ **Population:**

Accessible population was adapted in this study.

■ **Sampling size:**

70 subjects are included in this study.

■ **Sample techniques:**

Convenient sampling technique was adapted.

■ **Study place:**

The subjects were selected from Kattappana cooperative hospital, Idukki.

■ **Inclusion criteria:**

- Both genders were included.
- Subjects between childhood to adulthood were only included.
- Kattappana cooperative hospital subjects were only included.

■ **Exclusion criteria:**

The participants were excluded if they had any other hospital subjects

■ **Duration of the period:**

Total duration of the study was 1 months.

Procedure of Study:

A sample size of 70 subjects was included in this study. Initially, permission for doing research was received from the subjects by getting consent form.

Then details such as name, age, sex, service quality, record of perception and satisfaction was taken by using assessment form and the procedure was explained to the subjects.

The service quality, record of perception and satisfaction was measured using SERVQUAL scale.

The collected data was divided on the basis of presence of perception and satisfaction. The divided values were used to calculate mean, standard deviation and p value by using manual statistical principles. Finally correlation was calculated for with and with perception based on cooperative hospital. That calculation was done by using Karl Pearson's correlation method.

Formulae such as,

$$r = \frac{\sum xy}{\sqrt{N \sigma_x \sigma_y}}$$

Here,

r is correlation coefficient

σ_x is standard deviation of series x

σ_y is standard deviation of series y

Correlation was found for analysing the relationship between perception and satisfaction.

Data Analysis and Results:

Table 1: Comparison Service quality Tangibility male and female in health care system, in Kattappana cooperative hospital

Category	Mean value	SD	P value	r value
SERVQUAL- Tangibility male	25.69	3.683	0.0074	-0.7537
SERVQUAL -Tangibility female	40.18	6.047		

Graph 1:

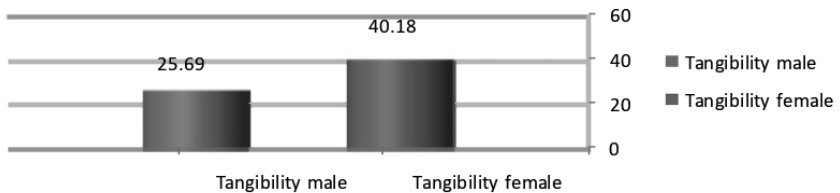


Table: 1 and Graph: 1 is showing comparison Service quality Tangibility male and female in health care system, in Kattappana cooperative hospital, where mean values are 25.69 and 40.18 respectively, where the r value is -0.7537 and p value is 0.0074 which shows it is statistically significant.

Table 2: Comparison of Service quality responsiveness male and female in health care system, in Kattappana cooperative hospital

Category	Mean value	SD	P value	r value
SERVQUAL Responsiveness male	23.54	4.274	0.9568	-0.0185
SERVQUAL Responsiveness female	37.82	5.250		

Graph: 2

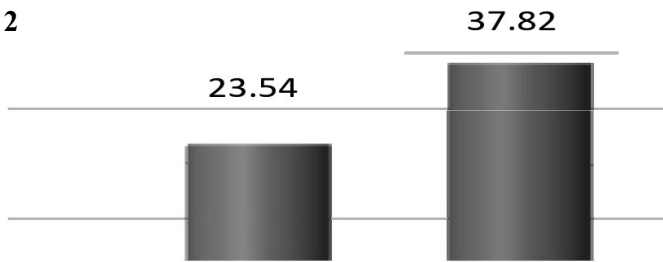


Table: 2 and Graph: 2 is showing comparison of Service quality responsiveness male and female in health care system, in Kattappana cooperative hospital, where mean values are 23.54 and 37.82 respectively, where the r value is -0.0185 and p value is 0.9568 which shows It's statistically not significant

Table 3: Comparison Service quality empathy male and female in health care system, in Kattappana cooperative hospital

Category	Mean value	SD	P value	r value
SERVQUAL Empathy male	22.37	5.911	0.0454	-0.4909
SERVQUAL Empathy female	27.76	6.969		

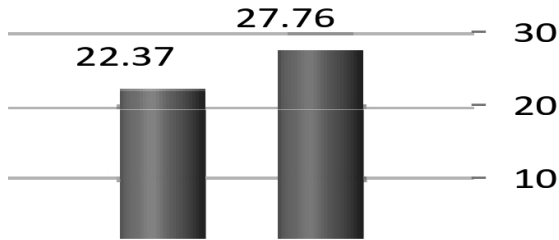
Graph 3:

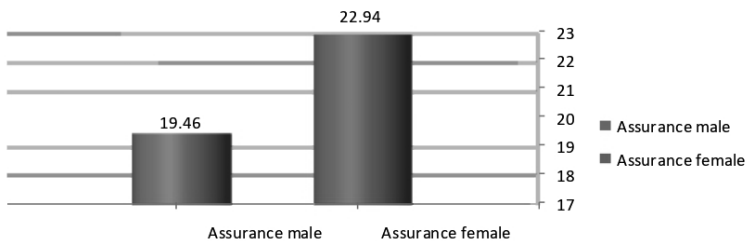
Table: 3 and Graph: 3 is showing comparison of Service quality empathy male and female in health care system, in Kattappana cooperative hospital, where mean values are 22.37 and 27.76 respectively, where the r value is -0.4909 and p value is 0.0454 which shows it is statistically significant.

Table 4: Comparison Service quality Assurance male and female in health care system, in Kattappana cooperative hospital

Category	Mean value	SD	P value	r value
SERVQUAL Assurance male	19.46	5.564	0.0411	-0.4997
SERVQUAL Assurance female	22.94	5.847		

Graph 4:

Table: 4 and Graph: 4 is showing comparison of Service quality Assurance male and female in health care system, in Kattappana cooperative hospital, where mean values are 19.46 and 22.94 respectively, where the r value is -0.4997 and p value is 0.0411 which shows it is statistically significant.



Discussion:

The purpose of this study was to assess the relationship between Service quality the in male and female, due to the impact of quality services for cooperative hospital.

The aim of the study was to identify the impact of Service quality on cooperative hospital.

In this study, the subjects were chosen from Kattappana cooperative hospital, Idukki based on the inclusion criteria. The data collection was done by using SERVQUAL scale. The collected data were calculated by using statistical principles. Finally, the correlation was done by using Karl Pearson's correlation coefficient.

Conclusion:

Understanding patients' needs and providing expected services are essential for which cooperative hospital administrators should focus on different market segments, in order to improve service quality which is an important determinant of overall patient satisfaction. Quality health care delivery system is needed in cooperative hospitals. Outdated methods and old practices should be totally uprooted from every cooperative hospital. Old equipment should be discarded. Highly trained Surgeons and medical doctors should insist on the use of - advanced technologies consisting of computer and internet based on learning and satellite broadcasts. The kattappana cooperative hospital members should be established to evaluate the quality of patients care, to define and respond to problems in the delivery of good care. The committee should report on the results of studies and related recommendations and functions largely as an advisory committee.

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10

Cooperatives Connecting People for Vibrant Rural Economy – A Case Study of Senjerimalayadipalayam Primary Agricultural Cooperative Credit Society Ltd in Coimbatore District

Dr. K. Dhevan and B. Baskar*

Abstract:

Indian cooperative movement begins with the introduction of credit cooperatives to safeguard the farmers from the moneylenders. The cooperatives are playing a vital role in the nation's rural economy by extending their services. The Primary Agricultural Cooperative Credit Societies are the successful cooperative institutions in the Indian cooperative movement. Still there are many problems and challenges are faced by the PACS, some PACSs are functioning as a model for others. The Senjerimalayadipalayam PACS is selected for this study with an aim to analyse the services rendered by the society and financial health of the society. It is a case method study, both primary and secondary data collected from the sample society.

Hence the study is addressing the financial health of the sample PACCS and whether the particular PACCS is connecting all kind of people within its jurisdiction? and expected needed services of the members of the PACCS as a Multi Service Centre.

Key words: PACCS, Rural Economy and Multi Service Centre

Introduction:

The Indian cooperative sector completed 118 years of its existence in 2022. It was born during the latter part of the colonial era' predominantly as a

Assistant Professor, Department of Cooperation, The Gandhigram Rural Institute-Deemed to be University, Gandhigram, Tamil Nadu

Assistant Professor, Department of Cooperation, The Gandhigram Rural Institute-Deemed to be University, Gandhigram, Tamil Nadu

Government initiative to address the twin issues of farmers' indebtedness and poverty. This initiative was formalized in a legislation enacted in 1904 entitled the "Cooperative Credit Societies Act, 1904" was the first effort made by the Government in the country to institutionalize rural credit by promoting the cooperatives in a corporate form (Ravichandran K: 2000, p.15).

In 1892 the Madras Government sent Sir Frederick Nicholson to European countries for studying the possibilities of the setting up of agriculture and other land banks in our country. He submitted his report in 1899 and highlighted the weakness of non-institutional sources of credit and advocated the setting up of cooperative societies on Raiffeisen lines in different parts of the country. The Government of India appointed a Committee under the Chairmanship of Sir Edward Law to study the question of starting such cooperative societies in India in 1901. This committee also recommended the establishment of cooperative credit societies on the Raiffeisen model (Dhevan, K. 2012).

The table 1 indicates that the total contribution by cooperative sector in our national economy clearly in average 30 percent of contribution made from cooperatives alone in major sectors of the economy. Especially the sugar production in our country is nearly 30 per cent contributed by cooperatives.

Table No. 1: Share of Cooperatives in Indian Economy

Sl.No.	Outreach of Cooperatives	Percentage of contribution
1	Rural Network covered	98% Coverage
2	Agricultural Credit dispersed	19.13
3	Fertilizer disbursed	35
4	Sugar Production	30.60
5	Wheat Procurement	13.3
6	Retail Fair Price Shops	20.3
7	Handlooms Cooperatives	54
8	Fishermen in Cooperatives	20.5
9	Milk procurement	9.5
10	Direct employment generated	13.30

Source: Indian Cooperative Movement – A Statistical Profile, 2018, National Cooperative Union of India

The Meglalan Committee 1914 envisaged a three tier Cooperative Credit Structure with Primary Agriculture Credit Societies (PACS) at the grassroots level, Central Cooperative Banks at District level (DCCB) and State Cooperative Banks (SCB) at State level.

The Structure of Cooperative Credit in India, in general, consists of two main types viz., (i) agricultural credit and (ii) non-agricultural credit. In the case of agricultural credit, two separate structures exist-one for short-term and medium-term credit and the other for long-term credit unitedly referred to as Cooperative Credit Structure or Cooperative Credit Delivery System. The structure of the cooperative credit institutions includes both Short-Term Rural Cooperative Credit Structure (STCCS) and the Long-Term Cooperative Credit Structure (LTCCS). The STCCS providing short-and medium-term credit is highly relevant for financial inclusion of the rural people. At present, there are approximately 97,961 village level Primary Agriculture Credit Societies (PACs), 371 District Central Cooperative Banks (DCCBs) with 13,151 branches and 33 State Cooperative Banks (SCBs) with 988 branches providing primarily short and medium-term agriculture credit to people in the rural areas. The long-term cooperative structure consists of 13 State Cooperative Agriculture and Rural Cooperative Banks (SCARDBs), with 2,495 operational units as on 31st March, 2018 comprising 866 branches and 601 Primary Cooperative Agriculture and Rural Cooperative Banks (PCARDBs) with 1,723 branches. As such, there is one PACS for every six villages and the total membership of more than 12 crore rural people makes it one of the largest rural financial systems in the world. Though, the network of commercial banks and RRBs too, has spread rapidly and they now have nearly 50,000 branches, their reach in the countryside both in terms of the number of clients and accessibility to the small and marginal farmers and other poorer segments is far less than that of cooperatives. In terms of number of agricultural credit accounts, the STCCS has 50% more accounts than the commercial banks and RRBs put together. Directly or indirectly, it covers nearly half of India's total population (NCUI, 2018).

The below table indicates that the performance of cooperative bank during the year 1950-51, it disbursed the total credit by cooperative sector alone the tune of Rs.24.2 crore. During the year 2010-11 the ground level credit disbursed by cooperative sector is Rs.70,105.2crore. The quantum has increased but percentage has reduced to 16.9 per cent.

Table No.2: Performance of Cooperative Banks in Rural Credit

Year	Coop. Banks (in crore)	CBs & RRBs (in crore)	% Share of Coops.	Total Ground level credit (in crore)
1950-51	24.2	0	100	24.2
1960-61	214.4	0	100	214.4
1970-71	678.8	206.4	76.0	885.2
1980-81	2,126.3	1,262.9	62.7	3,389.2
1990-91	5,439.7	7,181.1	43.1	12,620.8
2000-01	18,260.0	27,905.0	39.5	46,165.0
2010-11	70,105.2	3,76,674.6	18.7	4,46,779.8
2020-21	1,50,242.0	8,86,771.0	16.9	11,79,428 (p)

Source: Indian Cooperative Movement-A Statistical Profile, 1993 & 2009 and 2018, NABARD, Annual Report, 2020-21.

Statement of the problem:

The cooperative movement was started in Indian primarily as an alternative credit source of the village money lenders of which Primary Agricultural Cooperative Credit Society (PACCS) is considered to be the major source for providing the short and medium-term cooperative credit to the poor farmers in India. They provide a vital link between the small scattered village people and the central cooperative bank at the district level. However, over the successive more than hundred years of its existence considerable expansion and diversification took place and the cooperatives now cover the entire spectrum of activities in the rural areas. The cooperatives are doing its services to all kinds of people in their area of operation without any discrimination. The services of PACCS are to the members as well as non-members including senior citizens, SHG members, and other minority people. This micro level study is addressing the financial health of the PACCS and whether the particular PACCS is connecting all kind of people within its jurisdiction? And need any more services required by the members to act as PACCS as Multi Service Centre.

Objectives of the study:

The following are the objectives of the study.

- To assess the financial health of the Senjerimalayadipalayam PACCS
- To study the services rendered to members and non-members by the PACCS
- To offer suggestions for effective functioning of society.

Methodology:

Case study method was adopted for the present study. The Senjerimalayadipalayam Primary Agricultural Cooperative Credit Society in Coimbatore District was purposively selected for the study. Data were gathered from the Audit reports, Annual reports and various records maintained by the society. Data related to origin, objectives, membership coverage, sources of funds (share capital, deposits), uses of finance, net business results of the society etc., were collected.

Profile of the PACCS:

The society selected for the study was registered in the year 1956 under the name of Senjerimalayadipalayam Farmers Agricultural Bank. Subsequently it was renamed in the year 1977 as the Senjerimalayadipalayam Farmers Service Cooperative Society Ltd., and in 2015 it was once again renamed as Senjerimalayadipalayam Primary Agricultural Cooperative Credit Society Ltd. (Society) At present it is running in the 66th year.

It is working to cater the needs of farmers of rural areas in Sulur Taluk of Coimbatore District which is the most backward area and 90% of the population belongs to agriculture. Six revenue villages and 26 small villages are the hamlets in the service area.

Major Findings of the Study:

Connecting People:

It is observed from the table 3 that a wide spectrum of people living within the area of operation of the society are covered. They include farmers as A class members, villagers who utilise the services of the society as associate members, socially excluded SC/ST community people, minorities community people, people with disability, self-help groups as members and joint liability groups.

Table No. 3: Membership Coverage of the PACCS

Year	A Class Members	Associate Members	SC /ST Members	Minorities	Disabled	SHGs	JLGs
2017-18	8,900	15,167	1,409	12	5	28	386
2018-19	9,021	15,251	1,413	14	5	32	401
2019-20	9,103	15,292	1,429	14	6	35	423
2020-21	9,239	15,343	1,437	15	7	47	465
2021-22	9,312	15,358	1,439	15	10	56	523
CGR in %	0.91	0.25	0.42	4.56	14.87	14.87	6.26

Source: Compiled from Audit Reports

The membership position under A class viz., farmers of the society is increased from 8.900 in the year 2017-18 with annual marginal increase and stood at 9,312. The trend in Aclass member shows an increasing trend starting from the first year to last year under study and registering 0.91 per cent compound annual growth rate. This shows that the society has been making pertinent steps to include the excluded farmers under the cooperative fold.

The villagers who make use of the services especially availing loan by pledging their valuables forms part of the associate members. Their position in the society is comparatively double than that of the A class members in the society. Their strength is 15,167 in 2017-18 which has been increased year after year and stood at 15,358 in the last year under study. A gradual increase in associate membership year after year shows an increasing trend and it is registered with a compound annual growth rate of 0.25 per cent. This implies that the society is in a position to admit a sizeable number of associate members throughout the study period.

The composition of scheduled cast / scheduled tribes in the membership of the society for the period under study is on an average 1,425. The number of members under SC/ST category is on the increasing trend registered with a compound annual growth rate of 0.42 per cent. The increase of SC/ST members year after year, however, is meagre in toto. This implies that the society is taking steps to admit members under the socially excluded SC/ST to bring under included category.

As far as religiously excluded minorities are concerned, the society admitted them as members. The number of members has been increased from 12 in 2018-18 to 15 in 2021-22. Trend in admission of minorities is an increase year after year that too a meagre in number and registered with 4.5 compound annual growth rate.

In the society, the physically excluded people named as disabled are also found to be having membership. The society admits the disabled persons under the cooperative fold and extend the services to them also. The number of persons admitted during the period under study has been increased from five in 2017-18 to 10 in 2021-22 with an increasing trend and registered with the compound annual growth rate of 14.8 per cent. This indicates that the society is in a position to admit physically excluded persons of the community under the cooperative fold.

The un-official new generation cooperatives popularly called as Self-Help Groups (SHGs) formed in the hamlets and villages covered under the society are admitted as members of the society. The number of SHGs admitted by the society has been showing an increasing trend i.e., it is 28 during 2017-18 which has been increased year after year and stood at 56 at the end of the years under study. The compound annual growth rate is registered with 14.87 per cent. The gender wise so far excluded women have been included under the main stream as SHGs in the society.

A Joint Liability Group (JLG) is an informal group comprising of 4-10 individuals coming together for the purpose of availing bank loan on individual basis or through group mechanism against mutual guarantee. The society encourages the villagers to form JLG and avail group loans. The major benefit of granting loan to JLG is ensuring 100 per cent recovery of it. The position of the number of members under JLG admitted by the society shows an increasing trend i.e., from 386 in 2017-18 which has been increased year after year and stood at 523 in 2021-22 registered with a compound annual growth rate of 6.26 per cent. This infers that the society is actively performing in terms of encouraging, admitting, and extending credit facilities to the members of JLGs.

Thus, the membership position of the society reveals that the society is in a position to cover almost all sections of the villagers like farmers, people belonging to SC/ST, minorities, disability, women and economically

deprived people with little means. The trend in the membership position reveals that an increasing trend throughout the period under study in terms of all sections of the people as member which implies that the society is performing effectively in admitting the members.

The rural economy is not only purely relying on agriculture production. It depends on a variety of operations. They include animal husbandry, postharvest operations, micro enterprise activities, common services and so on. All these operations require adequate financial support. It is presumed that being the grassroots level people's organisation, the society has to provide adequate finance and other services to the people who live within the areas of operation of the society. It is essential factor to fulfil the requirements of all the sections of the people in the rural area and to serve them effectively, the society needs to have strong financial position. The financial condition of the society can be assessed in the areas of owned fund and borrowed fund. The owned funds components are share capital and reserve fund. The borrowed fund consists of deposits and borrowing funds. It is also inevitable to undertake suitable agriculture and other services for better delivery and there by enhance the economic conditions of the people at the grassroots. An assessment in terms of financial position, lending and recovery and other services of the society will reveal the performance of the society in attaining the vibrant rural economy.

Financial Health of the Society:

The financial health of the society consists of the position of owned funds and borrowed funds. The owned funds consist of share capital and reserve fund. The deposits and borrowings are the two major components of borrowed funds.

The society is in a position to get subscription of share capital from the members to the tune of Rs.131.50 lakhs in 2017-18 which has been increased year after year under the study period and stood at Rs.216.58 lakhs in 2021-22 which is registered with a compound annual growth rate of 10.49 per cent.

The reserve funds position of the society is depicting an increasing trend throughout the period under study with Rs.517.21 lakhs in 2017-18 has been increased to Rs.1,202.92 lakhs in 2021-22 with a compound annual growth rate of 18.39 per cent.

Table No.4: Financial Health of the society

(Rs.in lakhs)

Year	Share Capital	Reserve Fund	Deposits	Borrowings
2017-18	131.50	517.21	2,168.28	708.80
2018-19	145.39	822.50	1,946.46	900.55
2019-20	165.52	914.62	1,722.36	1,119.35
2020-21	196.27	1,062.50	1,918.81	541.33
2021-22	216.58	1,202.92	1,997.14	1,103.74
Average	171.05	903.95	1,950.61	874.75
CGR in %	10.49	18.39	-1.63	9.26

Source: Compiled from Audit Reports

The borrowings position of the society reveals that from 708.80 lakhs in 2017-18 the borrowings has been increased to Rs.1,103.74 lakhs in 2021-22 with an increasing trend except the year 2020-21 wherein the amount has been reduced to Rs.541.33 lakhs.

The society is in a position to mobilize on an average Rs.1950.61 lakhs for the period under study. A marginal difference could be found in terms of collection of deposits in all the years when compared to the average collection of deposits.

The society borrows funds from it federation viz., District Central Cooperative Bank. On an average, the society borrowed funds to the tune of Rs.874.75 lakhs from DCCB. The trend in borrowings shows that an increasing trend i.e., from Rs.708.80 lakhs in 2017-18 increased to Rs.1103.74 lakhs in 2021022 with a compound annual growth rate of 9.26 per cent. However, it is noted that in 2020-21 the borrowings touched the lowest of Rs.541.33 lakhs when all other years are considered.

Lending Operation:

The society extend loan facilities to its members for undertaking agricultural operations. Vehicle loans like four-wheeler loans, two-wheeler

loans and heavy vehicle loans are issued to the members. Salary loan, Consumer Loan, Housing Loans are also issued to Members. All these loans are grouped under agricultural loan, non-agricultural loan, jewel loan, medium term loan and other types of loans.

Table No.5: Loans issued position of the society (Rs.in lakhs)

Year	Agricultural loan	Non-agricultural loan	Jewel loan	MT Loan	Others	Total Loan
2017-18	778.83	193.33	918.12	185.39	46.55	2122.22
2018-19	939.22	138.17	806.30	276.94	83.79	2244.42
2019-20	783.69	228.07	1092.78	88.49	29.33	2222.36
2020-21	987.79	146.53	1578.71	106.82	48.30	2868.15
2021-22	1139.92	122.67	1033.48	254.01	99.69	2649.77
average	925.89	165.75	1,085.88	182.33	61.53	2,421.38
CGR in %	7.92	-8.70	2.40	6.50	16.45	4.54

Source: Compiled from Audit Report

It is observed that the loan under jewel loan constitute second position in terms of the quantum of loan followed by agricultural loan, MT loan, non-agriculture loan and other types of loans. All types of loans extended by the society shows a mixed trend of ups and downs. However, the compound annual growth rate reveals that the growth rate is the highest under other types of loans (16.45 per cent) followed by agricultural loan (7.92 per cent), MT loan (6.50 per cent) and jewel loan (2.40 per cent). The non-agricultural loan shows a negative compound annual growth rate of 8.70 per cent). The total loan provided by the society to its members shows that in the beginning three years it is below the average and last two years it is above average total loan of Rs.2,421.38 lakhs registered with compound annual growth rate of 4.54 per cent during the period under study. Thus, it is revealed that among the loan portfolio, jewel loan constitutes higher proportion but with lowed compound growth rate. It is followed by agricultural loan, MT loan, non-agricultural loan and other types of loan.

Loan Recovery:**TableNo.6: Loan recovery Performance of the society**

(Rs in lakhs)

Year	Agricultural loan	Non-agricultural loan	Jewel loan	MT loan	others	Total Recovery
2017-18	647.79	137.56	1088.37	86.94	123.12	2083.78
2018-19	682.33	129.92	1050.78	34.32	156.17	2053.52
2019-20	933.73	253.67	1251.73	99.57	25.86	2564.56
2020-21	1784.03	197.90	1088.37	64.10	42.19	3176.59
2021-22	154.12	117.79	1194.32	182.58	97.90	1746.71
Average	840.40	167.37	1,134.71	93.50	89.05	,325.03
CGR in %	-24.96	-3.06	1.88	16.00	-4.48	-3.47

Source: compiled from Audit Report

The average recovery of loan from its borrowers for the years under study is Rs.2,325.03 lakhs. Of which, the major chunk is from jewel loan followed by agricultural loan, non-agricultural loan, MT loan and other types of loans. The compound annual growth rate is registered with -3.47 per cent even with a marginal increase in total collection of loan during the first four years of study. The performance in terms of recovery of loan in last year under study is declining. This is due to poor performance under recovery of agricultural loan which has registered a compound annual growth rate of -24.96 per cent for the years under study.

The trend in recovery of agricultural loan is an increasing trend i.e., from Rs.647.79 lakhs in 2017-18 to Rs.1784.03 lakhs in 2020-21 and in the next year it reduced drastically and stood at only Rs.154.12 lakhs which is only around nine percent of the previous year recovery.

A better performance is found in MT loan recovery which is registered with 16 per cent compound annual growth rate during the period under study.

Thus, the recovery performance is poor in agricultural loan when compared to other types of loan. Therefore, the society needs to take steps to recover the agricultural loan.

Other services offered by the society:

The society offers a variety of services to its members. They include running agri clinic, agro-service centre, Solar Dryer with Heat Exchanger, insurance, public distribution system, petrol bunk, and common service centre.

Services of PACCS: Agri Clinic:

The society opened an “**Agri Clinic**” from 17.10.2008 and also given suggestions to farmers about the Agricultural development. The Soil test laboratory is operated in the Agri Clinic. In the laboratory on an average about 150 Samples are tested per month.

Table No 7: Details on Agri Clinic Service

Year	No. of Members Benefitted	Income (Rs)
2017-18	2568	77040
2018-19	2322	69660
2019-20	5451	163530
2020-21	2131	85240
2021-22	2649	105970
Total	15121	501440
Average	3024	100288

The average number of members befitted under agri clinic is 3024 and in toto the total number of members benefited is 15,121 during the years under review. It is also observed that an average income of Rs.1,00,288 was generated during the years under study.

Services of PACCS- Agro - Service Centre:

The society also have a “**Agro Service Centre**” running from 27.03.2010.

Table No 8: Performance details on Agro Service Centre

Year	No. of Members Benefitted	Income (Rs.)
2017-18	1	50
2018-19	6	2000
2019-20	4	500
2020-21	2	1100
2021-22	0	0

The society is able to render services to the farmers through agro-service centre. Since most of the farmers are owning agricultural implements, the number of farmers who availed the services are ranged between 1 and 6 during the assessment period.

Services of PACCS- Solar Dryer with Heat Exchanger:

The society started offering a “**Solar Dryer with Heat Exchanger**” for the benefits exclusively for the Coconut farmers. It was started from 07.01.2011. This Copra unit (Solar Dryer with Heat Exchanger) installed in 25 cent land at a cost of Rs.5 Lakhs.

Table No 9: Details on Solar Dryer with Heat Exchanger

Year	No. of Members Benefitted	Income
2017-18	12	0.12
2018-19	9	0.09
2019-20	8	0.08
2020-21	4	0.04
2021-22	5	0.05

On an average 8 coconut farmers got benefited out of solar dryer with heat exchanger facility offered by the society. The society is taking steps to include all the coconut farmers for making use of this facility.

Services of PACCS- IFFCO Tokio Insurance:

The Society also has been an agent of the **IFFCO - TOKIO** General insurance company and we servicing for the customers insurance needs.

Table No 10: Details on IFFCO-TOKIO General Insurance

Year	No. of Members Benefitted
2017-18	984
2018-19	1021
2019-20	1083
2020-21	1197
2021-22	1244
Total	5529
Average	1106

The number of beneficiaries under IFFCO-TOKIO general insurance are 5529 for the period under study with an average beneficiaries of 1106. The trend in the number of beneficiaries has been on increasing trend i.e., from 984 during 2017-18 to 1244 during 2021-22. This shows the society is in a position of cover more number of members every year and the scope is also to improve it.

Services of PACCS- Public Distribution System:

The society caters to the needs of general public through Public Distribution to entire area of operation through 13 outlets. (8 Main shops & 5 part time shops with a 7,325 ration Cards).

Services of PACCS- Petrol Bunk:

The society is a dealer of the Indian Oil Corporation and runs a Petrol Bunk through which the society serves the hamlets around the society. The society has been awarded state level best Oil Sales in the year of 2010-2011 and super seller award.

TableNo 11: Details on Petrol Bunk

Year	Avg. Per day No. of Members Benefitted	Income (Rs. In Lakhs)
2017-18	1430	18.21
2018-19	1310	16.05
2019-20	1230	14.20
2020-21	960	9.10
2021-22	780	7.05

The number of members benefited through the service of petrol bunk showed a decreasing trend i.e., from 1430 in 2017-18, it has been reduced year after year and at the end of the period under review it stood at 780 members. The similar trend is also noticed in terms of income generated through this service.

Services of PACCS-Common Service Centre:

The society also servicing through “**Common Service Centre**” to the members and the general public who live in the area of operation of the society. This service is starting from 27.03.2010.

Table No.12: Details on Common Service Centre

Year	No. of Members Benefitted	Income
2017-18	39575	760008
2018-19	37126	798005
2019-20	76827	750764
2020-21	32625	687044
2021-22	36230	769836

The total number of members served under common service centre ranged between 32,635 and 76,827 during the years under study. There is a fluctuating trend found in respect of members benefitted under common service centre during the period under review i.e., the members benefitted are showing decreasing trend in all years except 2019-20 wherein the number is almost doubled from that of previous year.

Table No 13: Details on Net Results and Audit Classification of the society

Year	Net profit (Rs.in Lakhs)	Audit classification
2017-18	78.91	A
2018-19	94.43	A
2019-20	112.73	A
2020-21	106.23	A
2021-22	124.35 Tentative	A

Source: Compiled from Audit Report

The society is earning net profit through the period under study. It is also to noted that it earns continuously profit for the past 25 years that is from 1996-97. The society declares dividend to its members at the rate of 14 per cent continuously for the past 25 years. It is also to be noted that the growth in the net profit earned by the society is in the increasing trend i.e., from Rs.78.91 lakhs in 2017-18 to Rs.123.35 lakhs in 2021-22. The audit classification also reflect that it is under A class throughout the period under study.

The society received state awards in 2010-2011, 2013-2014, 2015-2016, 2017-2018, 2018-2019, 2020-2021 and 2021-22 for best working society and receiving District awards in every year of the Coimbatore District.

The total number of employees consists of 25. The percentage of Establishment Charges to Working Capital 1.80% for the current year.

Future Plans of the Society:

The society plans to serve not only to its members but also to the general public. Therefore it proposes to

- Establish Coconut Oil Mill
- take Dealership for Indane Gas Supply for Members and Publics
- establish Shopping Complex
- Manufacturing and Sales of Masala Products at Minimum Price
- Undertake Dealership with Aavin

Suggestions:

The society can establish micro ATM, Photo copy machine, Renewable Energy and to increase active membership ratio so that all kind of people will be get connected for active participation of the members.

Conclusion:

From the foregoing analysis it is understood that the society has been very successful in almost all respects of its functioning, namely in the admission of members from various categories of members, doing all other services like Agri clinic, Common Service Center, Solar Drier, Insurance and so on. The society is good enough to earn profit for last 25 years continuously under able leaders with female secretary. This society is well connected with various kinds of members/people in its jurisdiction. So, it can be concluded that this society's financial health is strong and can able to work as Multi Service Centre.

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An Analysis of Factors for Overdue of Primary Agricultural Credit Societies in Maharashtra State

Dipak Y. Chacharkar*

Abstract:

PACS are working for farmer, by the farmer. PACS are providing crop loan which are to be recovered out of the sale proceeds of harvested crop against which the loans are given. But there has been a tendency among the farmers not to repay their loans, thereby, increasing overdue year after year. As a result of mounting, overdue the flow of agricultural credit to the farmers from PACS is likely to be adversely affected, because, overdue as a percentage of total loan recoverable acts as a constraint on the efficiency of lending institutions. This ultimately dries up the channel of funds and retards the economic development of the area.

The current study tried to find the solution to the overdues. It covered the socio-economic profile of borrowers on overdue of crop loan, repayment schedule of loan, stress repayment, improving follow-up methods, influence of outside agencies and default, problems of repayment of crop loans and the causes for such overdue. Because of time and resource constraints Wardha district have been selected for a detailed study. For collecting primary data from the sample respondents, two interview was scheduled i.e., for the society secretaries and for the farmer borrowers. The collected data was classified and tabulated. Tables and statistical results were derived through SPSS and Excel. To analyse and interpret data collected for the study from different sources, mathematical and statistical tools such as Percentages, Averages, have been used. Statistical tools like 't' test, 'z' test, 'ANOVA' and 'CLUSTER' analysis was also suitably employed.

Keywords: Co-operative credit Societies, PACS, short- and medium-term loans, crop loans, non- repayment of loan, overdue, planners/ policy

*Professor and Head, Department of Business Administration and Management, S.G.B. Amravati University, Amravati

makers, repayment of crop loans, causes for such overdue, socio-economic characteristics, Maharashtra state.

Introduction:

The first Primary agricultural Credit Society (PACS) was formed in 1904. Since then, these societies have been playing a significant role in providing short-term and medium-term credit to the farmers. Till early seventies, this was the only institutional credit agency available to the people in rural areas. The PACS functioning at the base of the co-operative banking system constitute the major retail outlets of short term and medium-term credit to the rural sector. PACS is a basic unit and smallest co-operative credit institution in India. It works on the grassroots level (gram panchayat and village level). Prime Minister Narendra Modi launched a new Central Sector Scheme of financing facility under the Agriculture Infrastructure Fund of Rs. 1 Lakh Crore. The scheme will support farmers, PACS, Agri-entrepreneurs, etc. in building community farming assets and post-harvest agriculture infrastructure. PACS have the network. PACS generally meet out only the short-term credit requirements of its members. Presently, large number of PACS are rather small, to be viable. Problems of infrastructural weaknesses, operational inefficiencies etc. Therefore, need to re-orient PACS which will make them sustainable and inspire confidence in their existing and potential members. The PACS are passing through a long phase of re-organization” which was formally started in early 1960’s, following the recommendation of the Committee on Co-operative Credit (1960).

Borrowing And Over-Dues In The PACS:

In the judgement of the Banking Commission, which still holds good, in most cases, one or more of the following reasons are responsible for the low borrowing membership: Defaults of members in loan repayment and inability of societies to raise resources, Inability of the members to provide the prescribed security, Ineligibility of certain purposes for loans, Inadequacy of credit limits prescribed, and Onerous conditions prescribed such as share capital contribution at 10 or 20 per cent of loans outstanding and compulsory thrift deposits.

Large over-dues have become a big problem for the PACS. They check the circulation of loanable funds, reduce the borrowing as well as lending power of societies, and give them the bad image of the societies of

defaulting debtors are willful. Bigger landowners take undue advantage of their relatively stronger position in villages in both appropriating cheaper cooperative credit and not paying back their loans in time.

According to the Banking Commission, in most states, over-dues are due to: Indifferent management or mismanagement of societies; Unsound lending policies leading to over financing, or financing unrelated to actual needs, diversion of loans for other purposes; Vested interests and group politics in societies and willful defaults; Lack of adequate supervision over the use of loans by the borrowers and poor recovery effort; Lack of appropriate link between credit and marketing institutions; Failure to take prompt action against willful defaulters.

Review of Literature:

The study conducted by the Programme Evaluation Organisation, Planning Commission* has revealed that 23 per cent of the short term and 35 per cent of the medium-term credit were diverted to purposes other than those for which credit was advanced.

Overdue Committee appointed by RBI* reported that overdues of PACS which amounted to Rs. 377 crores, outstripped the total internal resources of the societies consisting of their owned funds of Rs. 292.20 crores and deposits of Rs. 74.80 crores in 1971-72.

Mohanani* A detailed study on relative position of overdues among small, medium and large categories of farmers in Maharashtra pointed out that overall position of overdues had gone up from 30.7 per cent in 1967 to 52.3 per cent in 1971. It has increased by 13.8 and 26 percent per defaulter in medium and big farmers respectively.

Mariyanathan A.A.* found that the main reasons for the accumulation of overdues were defective loaning policies, inadequate supervision and weakness of internal management.

Kher and Jha* in their study, noticed that lack of proper supervision and follow up action were responsible for misutilisation and suggested that the supervisory staff should have a regular check on sanction of credit and its proper utilisation.

Similar observations have also been made by **Dadhich C.L., Sanderatne*** found that the defaults in repayment were due to defective agrarian structure and variability in income.

Octavio* concluded that the loan repayment was directly related to the age of the farmers, farm size, yield of crops on the farm etc.

Avadhani* found that the repayment performance of large farmers was poorer than that of marginal farmers, implying thereby that part of their funds could have been used for unauthorised purposes.

Joshi* reported that farm borrowers in dry and irrigated areas of Pune, Nasik and Sholapur districts, attributed low farm income, settlement of other debts, increase in domestic expenditure and support of local political people to their default of bank loans.

In a case study, **Talukdar et al.*** have observed that in East Jorhat Development Block, Assam, diversion of crop loans to consumption was found in the case of all the four categories of farmers and it was the highest in the case of marginal farmers.

Nature and scope of the Study:

The present study makes efforts to remove the aforesaid deficiency and is an attempt to make a comprehensive analysis of the overdues of PACS on the basis of available secondary and primary data. Though the study is confined to Wardha, it obviously has relevance and significance to the working of PACS in other states of India.

Objectives of the study:

1. To study the performance of PACS relating to the provision of agricultural credit.
2. To examine the factors of preparation of repayment schedule and stress repayment.
3. To examine the factor for default in crop loan and efficacy of follow up measures taken by
4. To make recommendations on the basis of the findings of the study.

Hypotheses:

The following hypotheses have been formulated to test their validity.

1. There is no association between socio-economic factors, viz; literacy, landholding, occupation, annual income, etc. on the one hand and crop loan overdue on the other.
2. The main basis of preparation of repayment schedule is harvesting or marketing of crops.
3. The steps to improve follow up measures of PACS are not effective.
4. There is no external influence in lending loan to the farmers.
5. The factor i.e., diversion of loan amount is a factor for default in crop loan.
6. Loan Case Number, Amount Disburse and amount overdue are statistically significant.

Methodology:

Data Base: The data collected from both secondary and primary sources. For primary data from the sample respondents, two interview schedules were developed and pre-tested, Interview schedule of 21 society secretaries and 26 borrowers (farmer) were collected

Analytical Procedure: Tables and statistical results have been derived through SPSS. Statistical techniques like 't' test, 'z' test, 'ANOVA' test 'CLUSTER' analysis have employed.

Limitations of the study: The study is confined only to the crop loan activities. Also, short term loans for purposes other than agriculture is not included in the study. Again, excludes other allied activities like dairy, fishing, poultry, horticulture etc.

Analysis and Interpretation of Data: Educational Status and Overdues. It is a well-known fact that education is an important variable having a bearing on many things including the accessibility to credit and repayment of loans. Table reveals that, the higher the literacy rate, the lower is the proportion of overdues in the sample districts.

Table 1- Educational status of defaulters and overdues

Sr. no.	Educational status	N	Avg. amount of overdue.	S.D.
1.	Illiterate	3	34.18	15.91
2.	Primary education	9	36.35	18.23
3.	High school education	6	38.53	16.52
4.	College education	1	32.52	18.55

Source: Primary Data

The ‘t’ test has been applied and it shows that in Wardha district the difference is found to be statistically not significant between any of the groups accept null hypothesis that there is no association between viz; literacy on the one hand and crop loan overdue on the other.

Operational Size of Landholdings and Overdues :

Table 2 Operational size of landholdings and overdues - values of ‘t’

Sr. no.	Size of Landholdings (in acres)	‘t’ values
1.	0.50 to 1.00 & 1 to 2.50	0.462
2.	0.50 to 1.00 & above 2.50	0.231
3.	1.00 to 2.50 & above 2.50	0.077

Source: Primary Data

So, should accept null hypothesis that there is no association between socio-economic factors, viz; operational size of landholding on the one hand and crop loan overdue on the other.

Occupation and Overdues:

Table 3 Main occupation and overdues

Sr. No.	Occupation	No.	Overdurs	S.D.	‘t’Values
1.	Agriculturists	13	34.18	15.91	0.439
2.	Businessmen	4	36.35	18.23	0.197
3.	Salaried employees	2	38.53	16.52	0.341

Source: Primary Data

Thus, we accept null hypothesis that there is no association between socio-economic factors, viz; occupational status on the one hand and crop loan overdue on the other.

Annual Income And Overdues:

Table 4 Annual income and overdues of the borrowers

Sr. no.	Annual income (in Rs.)	N	Average Po.	S.D.	't' values
1.	Below 10,000	9	40.52	14.84	1.071
2.	10,000- 25,000	4	34.10	17.37	1.886
3.	25,000- 50,000	2	31.98	8.61	0.590
4.	Above 50,000	4	28.54	17.28	1.238

Source: Primary Data

We accept the null hypothesis that there is no association between socio-economic factors, viz; annual income on the one hand and crop loan overdue on the other.

Opinion of PACS Regarding Repayment Schedule:

Table 5 Opinion of PACS regarding repayment schedule

Sr. No.	Opinion	Number of PACS	Percentage
1	Maintain a repayment schedule	13	61.90%
2	Do not maintain a repayment schedule	8	38.09%
	TOTAL	21	100%

Table 5.1 Basis for the preparation of repayment schedule

Sr. No.	Basis	Mean Score	SD	Rank
1	Considering the time of harvesting	1.16	0.59	I
2	Repayment capacity of the farmers	2.53	0.82	II
3	By considering the purpose	2.64	0.91	III
4	Income from agriculture	3.50	0.84	IV

Source: Primary Data

Thus, the hypothesis is rejected and null hypothesis is accepted that crop loans given out of the own funds of the society, the main basis for the preparation of repayment schedule is not the harvesting or marketing of the crops. Majority of the societies (57.14 %) reported that they have no scheme to insist on repayment. Only one society has marketing arrangement and at same time, 28.57 % of societies conduct field visit to insist on repayment according to schedule.

Steps To Improve the Follow-Up:

It is the duty of the society to adopt proper system of follow up of loans. The societies should be well-equipped with sufficient field staff to contact the farmers. Suggestions were sought from secretaries of societies about the steps, to be taken for improving the follow up.

About 52.38 % of the PACS suggested that more staff be appointed, while 14.28 % suggested the introduction of computers and the rest were in favour of giving incentive to existing staff. Thus, from given data alternative hypothesis is accepted. So, the data have revealed that PACS have been neglecting the post disbursement follow up and supervision, which if strengthened, can go a long way in improving the loan recovery significantly.

Influence Of Outside Agencies In Lending:

Outside agencies influence the secretaries and staff to a certain extent. Officials get a number of recommendations, particularly from politicians in the selection of borrowers.

Table 6. Opinion of staff from PACS about influence of outside agencies in lending

Sr. No.	Opinion of staff	Number of PACS	Percentage
1	Influenced in lending loan	13	61.90%
2	Not influenced in lending loan	8	38.09%
	TOTAL	21	100%

Source: Primary data ‘Z’ test value 3.9449, significant at 5% level

On enquiry about the influence of outside agencies, 38.09 per cent of PACS reported that there was no influence. While 61.90 per cent admitted the influence of outside agencies, such as, local politicians, panchayat members etc. However, the null hypothesis is accepted that there is no considerable amount of external influence in lending loan to the farmers.

Diversion of Credit:

The term ‘utilisation’ means, use of funds fully or partly for the purpose for which it was originally given.

Table 7. Diversion of loan amount is a factor for default.

Sr. No.	Diversion of loan amount a factor for default	Number of PACS	%
1	Agree	11	52.38%
2	Disagree	8	38.09%
3	No Opinion	2	9.52%
	TOTAL	21	100%

Source: Primary data

‘Z’ test value 6.8237, significant at 5% level

Thus, we accept our hypothesis which stated that diversion of loan amount is a factor for default in crop loan.

Number of Loan Cases, Amount Disburse and Amount Due:**Cluster Analysis:**

21 societies visited. Member number varies from 100 to 2000. On an average there are roughly 582 members. K Means cluster analysis is used for classifying respondents on the basis of Number of Loan cases, Loan amount disburse and loan amount due.

Table 8. Number of Cases in Cluster

Number of Cases in each Cluster		
Cluster	1	7.000
	2	11.000
	3	3.000
Valid		21.000
Missing		.000

Table 9. Final cluster centers

Final Cluster Centers			
	Cluster		
	1	2	3
Loan Case Number	451.86	288.09	1312.00
Loan Amt Disburse	18245285.71	7798209.09	30000000.00
Loan Amt overdue	3200000.00	1204636.36	2956666.67

Values of Cluster 1 (**BIG FAT BORROWERS’ SOCIETY**): Cluster Centre in terms of Loan cases is 451, Amount disburse is 182 lacs, and amount overdue is 32 lacs (17.85 %). Average loan amount Rs. 41000. Cluster 2 (**MEDIUM BORROWERS’ SOCIETY**): Cluster Centre in terms of Loan cases is 288, Amount disburse is 77 lacs, and amount overdue is 12 lacs (15.58 %). Average loan amount Rs. 26000. Cluster 3 (**SMALL BORROWERS’ SOCIETY**): Cluster Centre in terms of Loan cases is 1312, Amount disburse is 300 lacs, and amount overdue is 29 lacs (9.66 %). Average loan amount Rs. 21000.

One Way Anova:

Researcher further used One Way ANOVA to test the significance of the classification using K Means Clustering. One Way ANOVA is used to test level of significance in classifying the societies based on these three parameters. The results of the same are as depicted in the table below

Table 10. Classifying the societies based on loan case number, amount disburses overdue

ANOVA						
	Cluster		Error		F	Sig.
	Mean Square	Df	Mean Square	df		
Loan Case Num	1242826.593	2	76336.209	18	16.281	.000
Loan Amt Disburse	656473147157359.000	2	10662319735425.723	18	61.569	.000
Loan Amt overdue	9740814870129.867	2	9412552956228.955	18	1.035	.375

Based on the 5 % significance level Loan Case Number and Amount Disburse are statistically significant in classifying the societies in different group as these values are .00 which are less than .05. Loan Amount Overdue

is not statistically significant in classifying the societies in different group as these values is .375 which is greater than .05. thus, we conclude that hypothesis is accepted in relation to loan case number and amount disburse, but we reject alternative hypothesis and accept null hypothesis that loan amount overdue is not statistically significant in classifying the societies.

Conclusion:

The soundness of any lending agency depends to a large extent on prompt recovery of loans. But these lending agencies are facing great problem of overdue in agricultural loans which resulted in an inadequate supply of credit, even to the genuine producers. Now, the time has come to adopt corrective measures, so as to increase the efficiency in agricultural credit management. PACS helps in fulfilling the financial requirements of its members, so their work should not be stopped due to the unavailability of the finances. The loan requirements of farmers helping them in growing their business. The resource-mobilisation 'Capacity of the PACS will improve substantially if, through reorganization and related measures, they are converted into strong and viable units. Due to that, they should be able to appeal both more deposits and more loans from bigger financing agencies.

Suggestions:

In the light of the inferences drawn from the analysis, the following suggestions may be worth considering:

1. Updating of the Land Register maintained by the PACS on a regular basis.
2. Revision of Individual Maximum Borrowing Power (IMBP) on a realistic basis.
3. Rationalisation of scale of finance, with reference to the cost of cultivation and repaying capacity of borrowers.
4. The crop loan system should be properly implemented by ensuring that no 'ghost acreages' are financed and that the borrowers get timely and adequate credit.
5. The decision whether to disburse this component in kind or otherwise may be left to the discretion of the PACS.
6. The PACS should strictly monitor the utilisation of the loans.
7. Majority of the sample farmers reported 'no surplus agricultural income' as the main reason for overdues. Hence, to raise the income level and

repayment capacity of the borrowers, the following steps are recommended: Multiple cropping, Measures for improvement in crop intensity and crop yields are also necessary to enhance the repaying capacity of farmers.

8. Steps should be taken to increase the income of the farmers by aiding start subsidiary enterprises like dairy, poultry, cottage industries etc., Farmers should be ensured of remunerative prices for their produce and adequate supply of agricultural inputs at reasonable prices.
9. Rescheduling of loan instalments and/or converting the crop loans into medium term loans in deserving cases should be considered. As far as possible PACS should try to recover the dues without resorting to legal steps.

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A Study of Connect with farmers through Primary Agricultural Cooperative Credit Societies in Dindigul District at Tamil Nadu

¹B. Punniyan, ²Dr. C. Pitchai

Abstract:

Agriculture is the backbone of the Indian economy. It is the bedrock and foundation of all efforts for economic development and planning in India. Primary Agricultural Cooperative Credit Societies (PACS) are an important constituent in the field of agriculture. Primary Agricultural Cooperative Credit Societies is at the root of the cooperative credit structure of the country. The objective of this study is to analyze the connection between Primary Agricultural Cooperative Credit Societies in providing services and members' perception of their quality. The necessary information was collected both from primary and secondary sources. Primary data was collected from the secretaries and the members of the PACS through a structured schedule. Besides this, personal interviews were also conducted with the presidents and secretaries of the PACS to know their opinions about the functioning of these societies. To assess the quality of service provided by the PACS, the opinion of the members were collected. For this purpose, a sample of 50 members was selected from each of the PACS based on the land owned, amount of loan taken, type of services, level of education, etc. by using the random sampling technique. The findings of the study will help to identify the members' perceptions towards the services of PACS. The study also mentions some suggestions for the effective working of PACS in rendering more qualitative services for the members.

Keywords:

PACS, Agriculture, Credit, Loans, Borrowers, Members.

¹Research Scholar, Department of Cooperation, the Gandhigram Rural Institute (Deemed to be University), Tamil Nadu, India.

²Professor & Head, Department of Cooperation, the Gandhigram Rural Institute (Deemed to be University), Gandhigram, Tamil Nadu

Introduction:

"In the village itself no form of credit organization will be suitable except the Cooperative society, Cooperation failed, but Cooperation must succeed". - All India Rural Credit Survey.

As agriculture is the backbone of the Indian economy, its development largely depends on the prosperity of the agriculture sector. Its growth and success have snow-balling effects over the entire economy. It is the most important sector for the survival of the nation by supplying food, basic materials, and industrial investments providing employment opportunities, raising foreign earnings, etc. Primary Agricultural Cooperative credit societies are an important constituent in the field of agriculture. They provide short-term and medium-term loans to rural people to meet their financial requirements. But, the rural people still depend on unorganized sources such as money lenders in the village, man dies, traders, etc. So, various measures are taken by Government to reduce the unorganized sources through the establishment of PACS in rural areas. To know the role of PACS in agricultural development in India the study has been undertaken. The major objectives of the primary agricultural credit service societies are to supply agricultural credit to meet the requirements of funds for agricultural production, the distribution of essential consumer commodities, the provision of storage and marketing facilities, and for light agricultural implements and machinery. Hence, it is pertinent to examine how far these societies are rendering the services and their adequacy to the expected level of the farming members of these societies. An attempt is made to analyze the role of Primary Agricultural Cooperative Credit Societies (PACS) in providing the services and members' perceptions about their quality. At the end of this analysis, suggestions are also offered for the effective working of these societies in providing better services.

Objectives of the Paper:

- ❖ To analyze the services of PACS in providing credit and non-credit services to members.
- ❖ To know the member's perception of the selected PACS on the quality of service provided
- ❖ To suggest measures for effective working to provide better services to members.

Methodology of the Study:

A study has been conducted in Dindigul district of Tamil Nadu and analyzed the services of PACS in providing to members. The Study examined the functioning of these PACS and the quality of services provided by PACS to its members. Through Sampling Thadikombu PACS, Kannivadi PACS, Athoor PACS, Sirukudi PACS and Anaipatty PACS were analyzed by using random sampling technique. To assess the quality of services provided by PACS, members' perceptions on services were collected. For this purpose, a total sample of 50 members' i.e., 10 members from each PACS was selected.

Necessary information was collected from primary and secondary sources. Primary data was collected through schedules from secretaries and members of PACS. Apart from this, personal interviews were also conducted with the presidents and secretaries of PACS to get their views on the activities of this society. The study used secondary data. Secondary data were collected from the records and newspapers, State and District Cooperative Institutions documents, orders, and circulars issued by the Registrar of Cooperative Societies.

Analysis of the Study:

The structure, working of PACS and credit & non-credit services rendered and the perception of members about the quality of services of the selected PACS in the Dindigul District is discussed. All figures in the tables are in percentages.

Table 1: Composition of Membership in the Selected PACS of Dindigul District

(in percentage)

Type of Member	Years				
	2017	2018	2019	2020	2021
1. Big and medium farmers	08.94	09.09	08.21	09.38	07.12
2. Small and marginal farmers	25.18	25.89	22.55	22.82	25.09
3. Rural artisans	08.09	08.58	08.67	08.99	08.91
4. Landless laborers	51.65	52.32	56.43	51.15	52.23
5. Others	05.33	04.12	04.14	07.66	06.65
Total	100.00	100.00	100.00	100.00	100.00

Source: Compiled data from the different Annual Reports.

The composition of membership in the selected PACS during the period of study is shown in Table 1. It can be observed from the data that landless laborers are more than half of the total membership followed by small and

marginal farmers who constitute one-fourth of the members. While the remaining part is shared by big and medium farmers, rural artisans, and others. Thus, the proportion of non-loanee members is more than double the number of loanee members. If the reasons are examined on the excessive share of landless laborers in the total membership of these PACS, it is heartening to note that a majority of the landless laborers do not become members of PACS on their initiative but are motivated by the candidates contesting in the society elections.

This indicates that the management of the societies is not elected by the real users of the services of the PACS which is against the principles of cooperatives. This is due to the meager amount of membership fee which makes it very easy for the contesting candidates to make many people to become members of the society to get votes in their favor.

Table 2: Number of members who availed different types of credit in the selected PACS of Dindigul District (Table in percentages)

Type of Credit	Years				
	2017	2018	2019	2020	2021
1. Short-term	81.86	81.89	81.21	82.69	81.73
2. Medium-term	08.49	08.51	08.85	08.69	08.69
3. Long-term	09.65	09.60	09.94	08.62	09.58
Total	100.00	100.00	100.00	100.00	100.00

Source: Compiled from the annual reports of the selected societies

Table 2 shows the number of members who availed themselves of different types of credit from the selected PACS of the study. The data indicates that more than 80 percent of the members have availed of short-term credit. The remaining 20 percent of members have medium and long-term loans. The percentage of borrowers of short-term credit is very high, where crop loans are very much required for every farmer for meeting the expenditure of the crops. The percentage of borrowers of medium-term credit is very less because these loans are arranged for the purchase of cattle bullock carts, etc., which very few farmers use. The percentage of borrowers of long-term credit is also less, as it is usually taken by the big farmers whose share in the total membership is quite less.

Table 3: Percentage distribution of long-term credit (purpose-wise) of the selected PACS during the period 2017-2021 (Table in percentages)

Purposes of Long-Term Credit					
	Tractors	Pump sets and Bore wells	Land Development	Others	Total
Average	30.29	55.50	10.02	04.19	100.00

Source: Compiled data from Annual Reports of the selected societies.

Table 3 presents the percentage distribution of long-term credit (purpose-wise) in the selected PACS during the period 2017-2021. It can be seen from the data that out of the total long-term credit advanced by the PACS, about 30.29 percent is advanced for purchasing tractors; about half of it is given for minor irrigation, about 10.02 percent for land development, and the remaining for other purposes. The Sirukudi PACS in the upland areas has sanctioned most of its long-term credit for minor irrigation. While the Anaipatty PACS in the irrigated zone has advanced most of its long-term credit for purchasing tractors.

Table 4: Percentage distribution of short-term loans (crop-wise) by the selected PACS during the period 2017-2021 (Table in percentages)

Crops-wise						
	Paddy	Millets and Other Cereals	Pulses	Cotton (BL)	Oil seeds	Total
Average amount of short-term loan	29.00	27.00	17.00	16.00	11.00	100.00

Source: Compiled data from the Annual Reports of the selected PACS.

Table 4 presents the percentage distribution of short-term loans (crop-wise) during the period of study in the selected PACS of the district. It can be seen from the data that about 29 percent of the short-term credit is advanced for Paddy, 27 percent for Millets and Other Cereals, 17 percent for Pulses, 16 percent for Cotton (BL), and 11 percent for Oil seeds. Thus, more than 40 percent of the short-term credit is granted for Paddy and Millets and Other Cereals crops, as it is the major crop in the district.

Table 5: Category-wise percentage of borrowers of agricultural credit of the selected PACS during the period 2017-21(Table in percentages)

Category-wise			
	Small & Marginal Farmers	Big & Medium Farmers	Total No. of Farmers
Average	75.63	24.37	100.00

Source: Compiled from the annual reports of the selected PACS.

Table 5 shows the data on the percentage of different categories of borrowers. The data revealed that the percentage of small and marginal farmers who availed themselves of agricultural credit from the PACS is around 75.63 percent, while the percentage of big and medium farmers who availed themselves of agricultural credit from the PACS is around 24.37 percent. Therefore, the small and marginal farmers were the maximum beneficiaries of the credit services of the PACS. The low percentage of big and medium farmers who have taken credit from PACS may be due to their capacity to get loans from commercial banks with less rate of interest by providing their properties as security which, however, is not possible in the case of small and marginal farmers. Besides, many of the small and marginal farmers do not borrow from commercial banks either because of illiteracy or ignorance in following the cumbersome procedures for bank loans.

Table 6: The sources of agricultural credit and the percentage of borrowers of the selected PACS during the period 2017-21(Table in percentages)

Sources of Borrowing					
	PACS	Commercial Banks	Money Lenders	Friends & Relatives	Total
Average	52.00	34.00	11.00	03.00	100

Source: Compiled from the annual reports of the selected PACS.

Table 6 presents the data on the sources of borrowing agricultural credit and the percentage of borrowers in the selected PACS during the period of study. It can be seen from the table that among the borrowers of agricultural credit from the PACS, 41 percent of them are borrowing from money lenders; while 47 percent of them approach commercial banks and

4 percent of them seek help from their friends and relatives, in addition to PACS. This shows that PACS are not giving sufficient agricultural credit for meeting their total requirements and hence, they are forced to search for other financing agencies.

Table 7: Proportion of credit and non-credit business activities in the total business of the selected PACS during the period 2017-21 (Table in percentages)

	Credit Activities	Non-Credit Activities	Total Activities
Average	81.64	18.36	100.00

Source: Compiled from the annual reports of the selected PACS.

Table 7 shows the data on the proportion of credit and non-credit activities in the total business of the selected PACS. It can be said from the data that the aggregate percentage of credit business in the total business of the PACS is about 81.64 percent whereas; the proportion of non-credit business is only 18.36 percent. This indicates that the PACS are doing more credit business and very less non-credit business. Though societies are supposed to render all types of agricultural services, in practice they are giving less importance to non-credit activities.

Member's Perception towards the Services of PACS:

It is observed from the survey that the majority of the members borrowed from the PACS due to the easiness of obtaining credit. It is also found that a majority of the members compared the interest rates charged by PACS with that of money lenders and feel that the interest rate of PACS is reasonable. On the other hand, they expressed that the agricultural credit given by the PACS is not sufficient for their agricultural activities.

Besides PACS, they are also taking loans from commercial banks against mortgages of gold and from private money lenders against promissory notes and mortgaging their properties.

It is also observed that most of the farmers were prompt in repaying the loans taken from the PACS except in times of natural calamities and crop failures. Further, it is found that the small and marginal farmers were most prompt, while medium farmers were prompt and the big farmers delayed

repayment. Of the members who purchased their agricultural inputs from the PACS, two-thirds of them preferred to buy their agri-inputs from PACS because of the quality of the products and reasonable prices.

Whereas, the rest of the members prefer to purchase their agri-inputs from private traders because of the availability of credit. As credit sales are not permitted by the PACS, the farmers approached the private dealers where they need not pay cash immediately. For the quality of agricultural inputs sold by the PACS, more than two-thirds of the members felt that the agricultural inputs are qualitative. The survey further revealed that all the PACS were supplying qualitative and unadulterated fertilizers and pesticides. However, some of the PACS were found to be selling inferior quality seeds sometimes, which do not germinate.

The study also revealed that the members are giving some tips, based on the amount of loan taken, as a formality to the employees to motivate them to behave politely and help every member of the PACS. With rampant underselling of fertilizers with varying seasonal and market conditions by private traders, it is very difficult for the PACS to compete.

This problem is compounded by the pronounced brand and product preferences of the farmers for specific grades of fertilizers and other unfair trade practices indulged by private traders.

Suggestions:

The following suggestions are made for the effective working of PACS in rendering more qualitative services for the members:

The membership fee must be enhanced to discourage the contestants for the posts of President and Directors from joining their friends and relatives as members of the PACS just before the elections so that the PACS would be governed by the real beneficiaries.

The PACS should link credit with the marketing of products which will go a long way towards better recovery of loans and advances, which in turn, will surely improve the financial soundness of PACS.

The PACS must arrange loans to the farmers against the hypothecation of agricultural produce stored by farmers in their premises or rural godowns or warehouses. This will help the farmers to wait until they get a remunerative price for their produce.

The PACS must increase the distribution of agricultural inputs such as fertilizers, pesticides, seeds, etc. considerably. To avert the members from

purchasing agricultural inputs from Private Traders, the PACS must supply the agricultural inputs to the members on credit.

The PACS must have a good business mix like disbursement of agricultural credit, non-agricultural credit, supply of consumer goods of all types, distribution of fertilizers of required varieties, including supply of other agricultural inputs, hiring of agricultural equipment, storage, processing, and marketing facilities. All these activities help the members in increasing their earnings through productivity improvement, reduction in cost, and remunerative prices by value-added activities.

In addition to credit and non-credit activities, the PACS should also arrange other services for members, like farm guidance, extension service, education and training, and technical consultancy for the transfer of technology. All these will help to create a strong base for PACS business integrating it with members and thus, becoming a real institution of rural development.

The management and staff of the PACS must create awareness among the members about the different types of services available and help them in availing these services. The government must also sponsor cooperative education and training programs regularly for creating awareness among the members and also among the managing committee members and employees of the PACS to increase their professional skills.

The development of any organization is mainly based on the quality of people who are working in it and it is, therefore, important for the PACS to recruit people with higher potential and better quality. As a manager with a well-knit team of workers produces better results, people who are selected for their PACS should be provided with good working conditions, freedom of work, etc.

Conclusion:

The study captures the member's perception of the services of PACS. It is observed from the survey that the majority of the members borrowed from the PACS due to the easiness of obtaining credit. On the other hand, they expressed that the agricultural credit given by the PACS is not sufficient for their agricultural activities. The study also revealed that with rampant underselling of fertilizers with varying seasonal and market conditions by private traders, it is very difficult for the PACS to compete. Therefore, the management and staff of the PACS must create awareness among the members about the different types of services available and help them in

availing these services. The government must also sponsor cooperative education and training programs regularly for creating awareness among the members and also among the managing committee members and employees of the PACS to increase their professional skills. The PACS should also arrange other services for members, like farm guidance, extension service, education and training, and technical consultancy for the transfer of technology. All these will help to create a strong base for PACS business integrating it with members and thus, becoming a real institution of rural development.

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A Study of the Employee Satisfaction of Malappuram District Co-operative Bank Ltd.

¹Naila, ²G. Veerakumaran

Abstract:

Employee satisfaction is an integral part of the human resources management process. Only satisfied employees contribute more to the Bank's growth and progress in terms of quantity and quality. The present study analyses the level of job satisfaction among the employees of MDCB. To analyze the level of employee satisfaction in MDCB, a sample of 60 employees was chosen from among the employees. The survey was conducted among the 40 employees of Malappuram district co-operative bank head office and 20 employees from its two branches. It is evident that the employees are satisfied with almost all aspects of job satisfaction. However special attention may be given to aspects like Ability utilization, Advancement, Recognition, and Variety enjoyed by the employee. Age, gender, and religion, social class, education, income, length of service do not have any significant influence on the level of job satisfaction. But designation and marital status have a significant influence on the level of job satisfaction.

Introduction:

Employee satisfaction describes how employees are satisfied or content with aspects pertaining to their job, experience as an employee, work environment, and the organization they work for. The degree to which an organization's employees are satisfied is one key metric that can provide insight into the health of an organization, which is why many organizations conduct regular surveys to monitor employee satisfaction trends over time. The satisfaction level indicates how happy an employee is with his or her

¹College of Co-operation, Banking, and Management Kerala Agricultural University, Thrissur, 680656, Kerala, India

²Professor and Head, Department of Co-operative Management College of Co-operation, Banking, and Management, Kerala Agricultural University, Thrissur, 680656, Kerala, India

employer. In general, high levels of employee satisfaction are indicative of a favourable work environment.

A satisfied employee approaches their work positively. A Proactive, productive, and dedicated employee strives to achieve the organization's objective. Enhancing employee happiness increases revenues, lowers employee turnover, and improves overall productivity and performance. To a certain extent, employee satisfaction is crucial to employee retention. To achieve long-term growth and guaranteed success, organizations need to retain talented and deserving employees. Organizations that have high employee satisfaction levels are better able to retain and engage employees.

The job satisfaction of an individual is influenced by two types of variables, namely organization variables, and individual variables. An organization can increase job satisfaction by organizing and managing the organizational factors effectively. Several organizational factors affect employee satisfaction, such as wages, job content, working conditions, and promotions. Additionally, personal determinants play a critical role in enhancing the motivation and personal factors of employees so they are motivated and able to work effectively and efficiently. Thus, many personal factors influence employee job satisfaction, such as personality, age, education, etc.

This paper examines employee satisfaction at MDCB, 60 employees were chosen for this study using a simple random sampling method. Depending on their cadre, all respondents were classified into three levels: top-level, middle-level, and lower-level. The study included a top-level employee, 14 middle-level employees, and 45 lower-level employees.

Review of literature:

Yalamarathi (2018), in his paper “A Study on Employees Job Satisfaction in District Co-operative Banks” analyze the factors that contribute to employee job satisfaction. It was determined that the majority of employees are satisfied with their jobs 80-100%, and 7 dimensions and 55 factors were identified as contributing to job satisfaction. Based on scale values, the perceptions of the employees regarding the factors contributing to job satisfaction have been obtained. The study suggests that work environments should be cultivated with positive fundamentals and qualifications rooted in diversity, free of bias, and recognizing meritocracy and commitment.

Anusha et al (2019), analysed Job Satisfaction among the Employees of Co-operative Societies: A Study with Reference to Udupi Town based on

primary and secondary data. The researcher concentrated on the relationship between employee performance and work happiness in this study. Job satisfaction ratings fluctuate as determinants change. Employee retention is influenced by a variety of factors, including organizational commitment. Organizations must maximize work satisfaction to ensure organizational commitment. Many organizations provide poor working, career development, and professional progression opportunities. According to the surveys, Employee work satisfaction in Co-operative societies, while not as great as it may be, is still satisfactory, however, there are still a few areas where things may be better. The organization should take every feasible measure to improve employee satisfaction to have satisfied employees, since its employees are satisfied, then its consumers will be satisfied as well.

Yalavatti (2019), conducted "a study on job satisfaction of employees in urban Co-operative Banks in Koppal District, Karnataka". Almost all employees at urban Co-operative Banks are satisfied with their jobs. Few employees are more satisfied with a few factors. There is certainly a noticeable difference between this higher satisfaction of a few employees in the job and the satisfaction of the majority of employees in urban Co-operative Banks. In light of the findings, it is evident that employees are just satisfied with monetary benefits on average. It is important to raise the present pay scale and compensation system to make employees most satisfied. Urban Co-operative Banks should improve their recreation facilities and communication system to make employees most satisfied. It is suggested that several changes need to be made in its current training system, refresher courses, and performance appraisal system. To increase employee job satisfaction and organizational performance, they need to reduce employee workload for them to be happy at the workplace and adopt better transfer systems.

Babitha and Murugesan (2020), attempted to examine the relationship between emotional intelligence and job satisfaction of workers in Co-operative Banks in Calicut. The Likert scale data was analysed using Karl Pearson's correlation. Furthermore, the study measures employees' general job satisfaction level as well as their ability to deal with emotions. According to the findings, there is a significant relationship between emotional intelligence and job satisfaction among Co-operative Bank employees. This implies that the staff of these banks were aware of their emotions and can handle them. Employees must be psychologically healthy for an organization to prosper. Emotionally intelligent employees are self-motivated and

can propel the firm ahead. As a result of this survey, it is clear that overall employee job satisfaction in Co-operative Banks is very high. Therefore, the bank should maintain this current work environment to maintain employee satisfaction. Thus, it can be concluded that employee satisfaction is very high in Co-operative Banks, due to their high emotionally intelligent employees.

As the review of literature above illustrates, employee satisfaction are important in the banking industry as well as other sectors. The works of this line, particularly the Minnesota satisfaction questionnaire are limited, so this effort will find a wide audience and may prove useful in Malappuram District Co-operative Bank.

Background and Justification:

Central Co-operative Banks is a union of all types of Co-operatives that operate in their area of operation, with the primary goal of arranging the supply of finance to their constituents. In the current stage of development of the Co-operative structure, where primary societies are not always strong enough to meet the credit needs of their members, Central Co-operative Banks play an important role by arranging a steady flow of credit to primary societies.

As on March 2019, in Kerala, there were 14 District Central Co-operative banks and the Kerala State Co-operative Bank acts as the apex bank. On November 29, 2019, all DCCBs except Malappuram District Co-operative Bank merged with Kerala State Co-operative Bank. After its formation, Kerala Bank establishes branches throughout the state. Their area of operation is spread throughout Kerala, whereas MDCB gives more priority to the Malappuram District.

Job satisfaction is an integral part of the human resources management process. Only satisfied employees contribute more to the Bank's growth and progress in terms of quantity and quality. It is critical for the Bank to ensure that its employees are satisfied in all aspects of their jobs. Hence, the present study was a humble attempt to measure the level of job satisfaction of employees of Malappuram District Co-operative Bank Ltd.

Objective and Methodology:

The objective of the study was to find the level of job satisfaction among the employees of the Malappuram District Co-operative Bank Ltd.

Primary data was collected through an interview schedule which was designed by using a standardized Minnesota satisfaction questionnaire (MSQ). The Secondary data was collected from annual reports, byelaws of the Bank, published research papers, journals, books, websites, and articles. A sample of 60 employees were selected by adopting a simple random sampling method. The survey was conducted among the 40 employees of the head office of Malappuram District Co-operative Bank and 20 employees from its two branches. Primary data were analyzed using statistical tools such as percentages, averages, and satisfaction indexes. The frequency distribution and percentages were used to analyze the respondents' socio-economic characteristics.

The questions were graded on a five-point Likert scale to determine the level of satisfaction. To generate a total score, item responses are summed or averaged. The analysis of the association of Socio-economic variables on the level of job satisfaction was done using the chi-square test. The following formula was used to find the degree of association between the level of job satisfaction and socio-economic characteristics.

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

Where, O = observed frequencies

E= expected frequencies

Minnesota Satisfaction Questionnaire (MSQ):

The MSQ is a questionnaire designed by the University of Minnesota, Minneapolis, USA, and was developed to assess an employee's job satisfaction. This MSQ was the result of the Work Adjustment Project that was conducted at the University of Minnesota. The philosophy behind this inventory assumes that work fit is determined by a correspondence between an individual's abilities and the existing working environment (Weiss, Dawis, England, & Lofquist 1967).

The MSQ is divided into two types - short form and long-form. The present study employs a short-form MSQ with 20 statements. Each statement refers to a reinforcer in the work. The respondents indicate their level of satisfaction with the reinforcer at their current job. MSQ comprises two distinct components, intrinsic and extrinsic job satisfaction components. Extrinsic satisfaction refers to environmental conditions (how people feel about features of the job that are external to the work), while intrinsic satisfaction refers to occupational conditions (how people feel about the nature of the job's tasks). For each statement, five response alternatives were presented: "very satisfied, dissatisfied, neither satisfied (dissatisfied nor satisfied), satisfied, and very satisfied". To generate a total score, item responses are summed or averaged. The level of job satisfaction is determined based on that score. The weightage of responses is assigned as follows:

RESPONSES	SCORE
Very dissatisfied	1
Dissatisfied	2
Neither	3
Satisfied	4
Very satisfied	5

Profile of the Institution:

Malappuram District Co-operative Bank Ltd (MDCB), which was established on March 16, 1970 had four branches and 163 member societies at the beginning now has 54 branches, 305 member societies, and seven ATMs (at the end of the financial year 2020-2021) respectively.. Initially, the bank had a share capital of Rs. 32.40 lakhs, a deposit of Rs. 58.91 lakhs, and loans and advances of Rs. 201.55 lakhs. As on 31 March 2021 the share capital, deposits and loans, and advances have increased to Rs. 14956.82 lakhs, Rs. 415841.29 lakhs and Rs. 350074.18 lakhs.

The operational area encompasses the entire Malappuram revenue district. The Bank has 54 branches spread across six Talukas: Eranad, Perithalmanna, Kondotty, Tirur, Nilambur, and Ponnani. The organizational functions have been divided into 2 heads: head office operations and branch-level operations. General Manager, Deputy General Manager, Inspectors of branches/executive offices, Section superintendents are responsible for head office

functions while The Branch Manager is in charge of the branch's operations. MDCB has seven departments that work on various activities which include Personnel and general department, Accounts and finance, internal audit, Loan department, Inspection department, Planning and development, Recovery and collection department. The MDCB consists of 4 types of members: A class member includes every Primary Agriculture Co-operative Credit Society and Urban Co-operative Banks functioning within the area of operation. B class members include Kerala State Co-operative Bank and Government of Kerala. C Class membership shall be allotted to individuals, residing or owning land within the area of operation. Any other society registered under the provisions of Kerala Co-operative Societies Act, 1969 other than the Primary Agriculture Co-operative Credit Society/ Banks and Urban Co-operative Banks may be included in D Class members. Presently there are 135 members in the bank. Since the PACS and urban co-operative banks were not started during the study period, the A-class membership position has shown stagnant growth.

Table 1: Performance indicators of MDCB

Year	Share capital (₹ in crore)	Reserves (₹ in crore)	Deposits (₹ crore)	Loans and advances (₹ crore)	Borrowings (₹ crore)	Net profit (₹ crore)
2011-12	6.62	83.77	1466.36	1071.23	163.16	1.64
2012-13	29.01	107.38	1644.99	1440.10	286.11	3.99
2013-14	53.85	139.10	2369.22	1722.58	51.53	4.28
2014-15	77.75	142.26	2915.66	1919.70	81.34	8.59
2015-16	92.29	151.07	3628.35	2188.20	75.34	8.55
2016-17	114.38	162.73	3698.09	2806.87	283.31	9.18
2017-18	124.92	195.11	3518.60	3317.78	649.08	15.93
2018-19	148.48	205.59	3627.89	3496.58	646.72	11.20
2019-20	150.20	244.78	3431.60	3501.74	589.31	3.15
2020-21	149.57	268.04	4158.41	3500.74	435.36	3.26
CAGR	36.59	12.33	10.99	12.57	10.31	7.11

Source: Compiled from the Annual Reports of MDCB from 2011-12 to 2020-21

Table 1 illustrates the major performance indicators of MDCB from 2011 to 2021. There is an increasing trend in share capital except for the final year with a CAGR of 36.59%. This is because individual members contributed less capital than the previous year. During the year 2016-17, the bank has permitted individuals as C class members, and hence there was a jump in the Share capital position of MDCB. The reserves of the bank showed a steady increase during the reference period with a CAGR of 12.33%. The bank has maintained additional reserves and funds each year. Deposits of MDCB show a fluctuating trend with a CAGR of 10.99%. In 2020-21 the bank has the highest deposit of Rs. 4158.41 during study period. The increase in deposits demonstrates the bank's efficiency in mobilizing deposits and confidence of the people through various schemes. This indicates that bank mobilizes deposits from individuals and co-operative societies. In the case of borrowings, it is fluctuating over the years. Initial years of study show an increasing trend in borrowing. In 2013-14, it shows a sudden fall since borrowings from NCDC ceased altogether, and RBI contributions had decreased. The maximum value of loans and advances was in the year 2019-20 and the minimum value was in 2011-12. The net profit of MDCB shows a fluctuating trend. In 2017-18 net profit recorded its highest then started declining.

Profile of the Respondents:

The socio-economic profile of the employees was collected for the study, which includes Gender, Age, Educational Qualification, Annual Income, income from employment, Designation, and Length of service. The majority of the employees fall under the age category 41-50, which accounts for 40%. About 62% of employees of MDCB are male and the rest 38% were female. The majority of the respondents were Hindus i.e. 56%. 25 respondents out of 60 were Muslims which accounts for 42%, and only 2% belonged to Christians. 78% of the respondents belong to the OBC category. 12 respondents were from the SC category. The remaining 10% were from the GENERAL category. 95% of the employees in MDCB are married and 3% are unmarried. Only 2% comes under the divorced category and no one is under the widowed category. 28% of the respondents have degree-level qualifications. 25% of employees are Postgraduates and mainly work in middle and lower-level management. Only 10% of the employees completed a Professional degree. 22% and 15% of employees have higher secondary and SSLC level qualifications respectively and they are working in lower-level management. The majority of the employee's (37%) monthly income ranges from Rs. 50,000 to 1, 00,000. Most of the employees (38%)

have 10 to 20 years of working experience in the MDCB. 20% of employees constitute with an experience between 5 to 10 years.

Contribution of individual factors to total employee satisfaction:

An attempt was made to find the overall employee satisfaction index by combining all of the inferences drawn from the analysis of employee satisfaction for each factor.

Table 2: Contribution of individual factors to total employee satisfaction

Sl. No	Type	Factor	Total score	Composite index	Level of satisfaction
1	Intrinsic Factors	Activity	236	79	Good
2		Ability utilization	231	77	Good
3		Achievement	243	81	Excellent
4		Authority	233	78	Good
5		Creativity	243	81	Excellent
6		Independence	246	82	Excellent
7		Moral values	236	79	Good
8		Responsibility	242	81	Excellent
9		Security	241	80	Excellent
10		Social service	244	81	Excellent
11		Social status	249	83	Excellent
12		Variety	227	76	Good
13	Extrinsic Factors	Advancement	224	75	Good
14		Company policies & practices	235	78	Good
15		Compensation	240	80	Excellent
16		Co-workers	257	86	Excellent
17		Recognition	228	76	Good
18		Supervision- human relation	255	85	Excellent
19		Supervision- technical	249	83	Excellent
20		Working condition	251	84	Excellent

Source: Compiled from primary survey 2022

Overall employee satisfaction index = 80

The overall employee satisfaction index was 80 percent. This shows an excellent level of overall satisfaction. While considering the satisfaction level of each factor, Achievement, Creativity, Independence, Responsibility, Security, Social Service, Social Status, Compensation, Co-Workers, Supervision- Human Relation, Supervision-Technical, Working Condition have an excellent level of satisfaction and Activity, Ability utilization, Authority, Moral values, Variety, Advancement, company policies & practices, recognition have a good level of satisfaction

Analysis of degree of association of the level of job satisfaction and socio-economic characteristics.

Table 3: Degree of association of level of job satisfaction and socio-economic characteristics.

Characteristics	Pearson's chi-square	P-value
Age	2.815	0.832
Gender	0.185	0.912
Designation	57.727*	0.04
Religion	1.076	0.898
Social class	7.125	0.129
Marital status	16.359*	0.03
Education	4.652	0.794
Income	5.893	0.435
Length of service	4.782	0.572

Source: Compiled from the primary data 2022

Table 3 depicts the degree of association between the level of job satisfaction and socio-economic characteristics. It can be seen that age, gender, religion, social class, education, income, and length of service do not have any significant influence on the level of job satisfaction. But designation and marital status have a significant influence on the level of job satisfaction. The significance of designation on job satisfaction implies that as the level of responsibilities increases, the employer will offer a higher salary. This reflects in the higher level of satisfaction.

Measures for the improvement:

Table 4: Suggestions

Sl.no	Problems	Suggestions
1.	‘Advancement’ variable of employee satisfaction shows an index of 75 percent, which is the lowest among all the factors.	Promotions should be available based on years of experience, qualifications, and meritorious service.
2.	27% of employees responded that there is a shortage of employees	The bank should recruit suitably qualified employees through the public service commission.
3.	28% of respondents say that there is a lack of a system to assess the performance of the employee	The bank should bring a suitable system to appraise the performance of the employees

Conclusions:

The purpose of the study was to analyse employee satisfaction at MDCB. The analysis will assist management in identifying any shortcomings, as well as improving the work environment, work content, and other determinants that enhance employee job satisfaction. From the analysis, it is clear that the employees of the bank are highly satisfied with almost all variables of job satisfaction. The study was conducted among 60 employees for the collection of primary data. MSQ- short form is used for measuring the satisfaction level of employees.

The overall satisfaction level shows an index of 80 percent. This shows an excellent level of job satisfaction. Out of 20 variables, 11 variables show an excellent level of satisfaction index, while 9 show a good level of satisfaction index. No factors showed a poor level of satisfaction. Among these variables, a higher level of satisfaction index was shown for the variable co-workers, i.e., 86%. This shows that the employees are getting along with each other in their work environment. The overall satisfaction index for the variable supervision Human Relation was 85 percent, and for the variable working condition was 84 percent, which shows an excellent level of satisfaction. Employees were satisfied with the working hours, nature of work, superiors, colleagues, salary, etc.

The degree of association between level of job satisfaction and socio-economic characteristic depict that age, gender, and religion, social class, education, income, length of service do not have any significant influence on the level of job satisfaction. But designation and marital status have a significant influence on the level of job satisfaction.

From the analysis, it is evident that the employees are satisfied with almost all aspects of job satisfaction. Special attention should be given to aspects like Ability utilization, Advancement, Recognition, and Variety enjoyed by the employee, as these are the areas in which the employees are comparatively least satisfied.

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A Study on the Financial Performance of Dindigul District Central Cooperative Bank Ltd.

**¹Dr.B.Baskar, ²T. Lakshmi Prabha, ²S. Thowfick Mohideen
²M. Solamon Infant Perbethuva valan**

Abstract:

The Dindigul District Central Cooperative Bank (DCCB) is started to tap the required finance from the members, higher financing institutions, and financial institutions, in order to fulfill the credit needs of the affiliated societies. The DCCB being at the middle order of a threetier structure in the Tamil Nadu State has been playing an important role in promoting agricultural and allied activities by providing credit facilities through primary cooperatives. This study aims at analyzing the financial performance of the DCCB by using trend analysis. The data for the study is mainly from the annual reports. The performance in terms of membership, sources of funds, lending, and recovery are analyzed and it is observed that the bank's performance is satisfactory in the above aspects.

Keywords: DCCB, Assessment, Financial Performance, Trend Analysis

1. Introduction:

Cooperatives are the organizations of the members, for the members, and by the members. They are organized in all walks of life. Most of the cooperatives are having their federation and confederation. The effectiveness in rendering the services to its members, irrespective of the status i.e., primary, federation, and confederation, it has to function financially strong. The district central cooperative banks are the federations of primary cooperatives functioning within the district. Their main functions are mainly focusing on raising funds, distributing funds to its members,

¹Assistant Professor, Department of Cooperation, Gandhigram Rural Institute, Gandhigram – 624 302, Tamil Nadu

²Final Year Students, M.Com Cooperative Management, Department of Cooperation, Gandhigram Rural Institute, Gandhigram – 624 302, Tamil Nadu

and recovering of same from members. The satisfactory performance in the above areas is the key indicator for assessing the effective service delivery to the members. This study is focusing on assessing the performance of the district-level cooperative bank in terms of fundraising, lending, and recovery.

2. Review of Related Studies:

Sreekala S. (Jan. 2010) carried out “A Study on Asset and Liability Management in Salem Cooperative Bank” with the objective of examining the effectiveness and performance of the Bank. The study used ratio analysis as tool for the study. The study revealed that according to the least square method the Net Profit is expected to increase next five year.

Anil Kumar Soni (Oct. 2012) carried out study on “Financial Performance of District Central Cooperative Bank Limited Rajnandgaon: Growth Rate Analysis” The objective of study is to examine the financial position based on Growth rate analysis with 2000 as base year. The study revealed that all the parameters exhibit positive and significant growth. The highest

Growth Rate was observed with respect to Investments (1229.87%) followed by Funds (866.00%), Deposits (424.41%), Working Capital (404.10%), Share Capital (403.35%) Borrowing (252.22%), Loan and Advances (226.00%), Management Expenses (176.70%) and Establishment Expenses (165.00%).

Selvaraj N and Balaji Kumar P. (Jan. 2015) carried out “A Study on the Deposit Mobilization Pattern of the Dindigul District Central Cooperative Bank Limited” with the objective to examine the trend in various deposits of the study unit during 1995-2010. The study revealed that the total deposits collected showed a positive trend.

Selvaraj N. (March 2015) carried out a study on “Financial evaluation of the Dindigul District Central Cooperative Bank Limited” with the objective of evaluation of the financial performance during 1995-08. The researcher found that the financial position was not highly encouraging especially the liquidity position of the bank which is not enough to meet its obligations.

Aruljothi C. and Vigneshwaran M. (Sep. 2017) carried out “A study on Assets and Liabilities Management in Dindigul District Central Cooperative Bank of Natham branch” with the objective to know the financial position in the light of ratios during 2011 to 2015. It is revealed from the study that the overall financial position was improving in the last two years. It also suggested necessary steps improve liquidity by increasing current

assets. Invest a portion of its profit in current assets to improve its liquidity position and there by improve the operational flexibility in the future.

Ajai Kather Mohideen M. (Feb. 2019) carried out “A Study on Financial Performance of Dindigul Urban Co-operative Bank” with the objectives of analyzing the performance in mobilization and deployment of resources, level of efficiency in NPA and operations management using during 2006-07 to 2015-16. The study revealed that the bank mobilizes more through high cost of deposits and gives less importance for low cost of deposit. The results shows that this bank failed to deploy medium-term, long-term loans and the CD ratio is more than 80 per cent which reflects the increase of Gross NPA is more than 10 per cent. This ultimately affects the profitability and to earn interest income.

Alagu Pandian V. (July 2022) carried out “A study of Income and Expenditure Analysis of Madurai District Central Cooperative Bank” with the objective of analysing the income, expenditure, and profits during 2004-2018. The study revealed that the share of interest income to the total income was more than 90 percent in all the years under the study period.

Alagu Pandian V. (July 2022) carried out a study on “Performance Evaluation Through Z –Score: A Case Study of District Central Cooperative Bank, Dindigul” with the object to analyse the financial performance during 1995-96 and 2009-10 using Z-Score technique. The analysis shows that though the financial position is healthy at present, the study unit is likely to become financially sick within the next few years.

The literature reviews shows that most of the studies carried out in the district level cooperatives banks focused on some of the aspects of the performance that too using descriptive statistics, ratios and sophisticated statistical tools. A comprehensive analysis using trend analysis is will yield good perspective.

3. Statement of the problem:

A cooperative bank or society is a financial entity which belongs to its members, who are at the same time the owners and the customers of their bank. Cooperative banks are often created by persons belonging to the same local or professional community or sharing a common interest. Cooperative banks generally provide their members with a wide range of banking and financial services (loans, deposits, banking accounts etc.). The cooperatives banks are having their own structure i.e., at the grassroots level primary cooperative banks and they are federated into district level cooperative bank and in turn all the district level banks are federated into

state level confederation. The main role of the federation and confederation is to support and assist their members in managing the cooperative in an effective way. The district level federation of primary cooperative banks in India is known as District Central Cooperative Bank. The District Central Cooperative Banks's main functions are collects share capital from its member cooperative societies, raise funds from its federation viz., state cooperative bank and from other sources, issue short term and medium-term loan to its members through its branches, and recovery of the loan issued. The effective utilization of all the resources will yield the beneficial financial position in the long run. The continual performance in the areas of share capital, deposits, funds from other sources, issue and recovery of loan are the major areas wherein an assessment is needed. Hence the study.

4. Research Methodology:

This study adopts descriptive research methods. Data required for the study are drawn from the financial statements and annual reports of a DCCB apart from the focus group discussion with the officials of the DCCB.

The study utilized simple statistical tools such as percentage and trend analysis. Since the trend analysis enables taking the time dimension into account, the examination of whether the financial position of a firm is improving or deteriorating over the years is possible and therefore trend analysis is employed in the study.

The period of the study is the recent five years from 2016-17 to 2020-21.

5. Objectives of the Study:

The study is with twin objectives. They are:

- To appraise the current financial position of the select DCCB; and
- To analyze the financial performance of the select DCCB in the light of trend analysis

6. Scope of the study:

The study is attempted to assess the financial performance of Dindigul District Central Cooperative Bank (DCCB). The study would therefore reflect the financial performance of the bank with special reference to sources of funds (purpose-wise) and applications of funds (issue, recovery, and due). The inferences drawn from the study may also help in indicating the financial soundness of the bank in future to certain extent.

7. Results and Discussion:

7.1 Profile of Dindigul District Central Cooperative Bank :

The Dindigul Central Cooperative Bank was started its functions from 01.06.1991. Its area of operation consists of 8 taluks and 14 blocks in Dindigul district.

DCCB functions from the head office at Dindigul and through its branches. The branches are located in 33 places in the Dindigul district.

The funds of the DCCB consist of share capital, reserve fund, deposits from member cooperatives, loans and overdrafts from state cooperative bank.

Table 1
Financial Position of the DCCB

(Rs.in lakhs)

Years	Membership (nos.)	share capital	Reserve funds	Institutional Deposits	Government and commercial banks loans	Working capital	Investment
2016-2017	628	4,402	12,230	87,501	1,057	1,31,420	32,000
2017-2018	628	4,622	11,985	88,969	1,105	1,37,167	25,694
2018-2019	628	5,246	11,787	96,941	1,164	1,54,286	25,693
2019-2020	642	6,071	12,152	99,711	1,390	1,75,436	26,446
2020-2021	642	8,007	17,363	1,05,775	1,818	1,76,922	27,442

(Sources: Compiled from the annual reports of the DCCB)

The above table 1 shows that there is an increasing trend in overall funds of DCCB during the study period i.e., it is raised from Rs.1,31,420 lakhs in 2016-17 to Rs.1,76,922 lakhs in 2020-21. Besides, it is also to be noted that there is an increasing trend in share capital, reserves, and institutional deposits during the study period i.e., 2016-17 to 2020-21.

It is evident that the share capital position of the DCCB during the year 2016-17 was Rs.4,402 lakhs which was increased to Rs.8,007 lakhs during the year 2020-21.

It is also observed from the table that the reserves of DCCB was Rs.12,230 lakhs during the year 2016-17 which was increased to Rs.17,363 in lakhs in 2020-21.

The table also indicates that the deposits collected by DCCB during the

year 2016-17 was Rs. 87,501 lakhs in 2016-17 which was also increased to Rs.1,05,775 in lakhs in 2020-21.

7.2 Borrowings Position of the DCCB:

Table 2 : Borrowings Position of the DCCB

(Rs.in lakhs)

Years	Short term agricultural	Short term non agricultural	Medium term agricultural	Medium term non agricultural	Other	Total borrowing from SCB/ NABARD
2016-2017	16,900	1,569	1,179	0	1,645	21,293
2017-2018	19,700	5,181	301	0	1,203	26,385
2018-2019	23,300	9,100	158	0	2,427	34,985
2019-2020	25,000	11,376	309	9,000	3,572	49,257
2020-2021	9,600	20,589	137	4,700	4,350	39,376

(Source: Compiled from the annual report of the selected DCCB)

In the case of borrowing funds, the DCCB borrows fund from its federation viz., Tamilnadu State Apex Bank and from NABARD under various purposes. The purposes are for agricultural and non-agricultural purposes. Among the purposes, agricultural purpose constitutes higher proportion compared to non-agricultural purposes. In the initial periods under study, the trend in the amount of loan issued for agricultural purposes is increasing year after year and in the last year under study it has reduced to a drastic level. However, the trend in loans and advances issued for the non-agricultural purposes shows an increasing trend.

The period of loans are short term and medium term. The loans issued in short term constitutes higher proportion when compared to medium-term.

It is observed from the table 2 that as far as the total borrowings is concerned there is an increasing trend from 2016-17 up to 2019-20 and in the last year under study it is decreasing.

7.3 Loan and Advance issue Position of DCCB:

Table 3 : Loan and Advance issue Position of DCCB

(Rs.in lakhs)

Years	Short term agricultural	Short term non agricultural	Medium term agricultural	Medium term non agricultural	Total Loan Issued
2016-2017	21,296	18,023	665	66,619	1,06,603
2017-2018	31,559	18,339	981	69,268	1,20,147
2018-2019	41,861	19,856	1,472	71,691	1,34,880
2019-2020	49,768	23,634	2,333	73,286	1,49,021
2020-2021	49,229	30,519	1,359	1,27,327	2,08,434

(Source: Compiled from the annual report of the selected DCCB)

Above table 3 shows loans and advances issue position. It is observed from the table that there is an increasing trend in overall Loan issued short term agriculture & non agriculture & Medium term non-agricultural of DCCB during the study period.

A steady increase of short-term agricultural loan issued is noticed throughout the period under study. A similar trend is also observed on the issue of short-term loan for non-agricultural purposes but with comparatively lesser amount to that of short-term loan for agricultural purposes.

There is a decreasing trend in medium term agricultural of DCCB during the study period i.e., 2016-17 to 2020-21. However, there is a steady increase in issue of medium-term loan for non-agricultural purposes throughout the period under study except for the last year wherein nearly double the amount of loan issued when compared to the first year under study.

7.4 Loans Outstanding Position of the DCCB:

Table 4 - Loans Outstanding Position of the DCCB

(Rs.in lakhs)

Years	Short term agricultural	Short term non agricultural	Medium term agricultural	Medium term non agricultural	Total Loan Outstanding
2016-2017	22,657	12,426	3,895	88,881	1,27,859
2017-2018	30,409	12,955	2,701	56,822	1,02,887
2018-2019	40,019	12,779	3,566	62,708	1,19,072
2019-2020	45,739	15,580	4,293	68,409	1,34,021
2020-2021	1,350	22,780	26,715	82,192	1,33,037

(Source: Compiled from the annual report of the selected DCCB)

Table 4 shows the loans outstanding position of the DCCB. It is observed that there is an increasing trend i.e., a gradual increase in all the years under review in overall Loan outstanding.

A similar trend is observed in short term non agriculture loan outstanding.

It is also observed that there is an increasing trend found in short term agricultural loan outstanding in the initial four years under study and in the last year under study it showed a decreasing trend.

7.5 Loan Collection Position of the DCCB:

Table 5 - Loan Collection Position of the DCCB

(Rs.in lakhs)

Years	Short term agricultural	Short term non agricultural	Medium term agricultural	Medium term non agricultural	Total Collection
2016-2017	22,203	20,317	1711	9,318	53,549
2017-2018	23,506	17,790	446	15,929	57,671
2018-2019	31,812	20,827	542	15,167	68,348
2019-2020	42,437	20,842	1,036	18,095	82,410
2020-2021	91,099	23,635	782	44,316	1,59,822

(Source: Compiled from the annual report of the selected DCCB)

Table 5 shows that there is an increasing trend i.e., a gradual increase in the first four years under study and a sudden peak in the last year under study in all types of recovery of loans except medium term agricultural loan.

The total loan collection is showing an increasing trend that is from 53,549 lakhs in 2016-17 to Rs.1,59,822 in 2020-21 registering almost four times increase when compared to first year under study. The similar trend is also observed in short term agricultural loan collection and medium-term non-agricultural loan collection.

Collection under short term non-agricultural loan shows a fluctuating trend i.e., a marginal decrease in the initial years and a marginal increase in the rest of the years in the collection of loan is found.

As far as the medium-term agricultural loan collection is concerned, the trend is fluctuating trend i.e., the amount of collection is drastically from the first year Rs.1711 lakhs in 2016-17 to Rs.446 lakhs in 2017-18 and in the next two year is showed an increasing trend and stood at Rs.1036 lakhs in 2019-20 and in the last year under study it again decreased to Rs.782 lakhs.

7.6 Over dues Position of the DCCB:

Table 6 - Over dues Position of the DCCB

(Rs.in lakhs)

Years	Short term agricultural	Short term non agricultural	Medium term agricultural	Medium term non agricultural	Total Over dues
2016-2017	1,611	1,216	479	2,283	5,589
2017-2018	218	933	478	3,092	4,721
2018-2019	117	707	540	3,247	4,611
2019-2020	193	735	586	3,455	4,969
2020-2021	129	1,532	840	5,318	7,819

(Source: Compiled from the annual report of the selected DCCB)

The details of overdue position of the DCCB presented in Table 6. It is observed from the table that there is a decreasing trend found under short term agricultural loan overdue i.e., from Rs.1,611 lakhs in 2016-17 and decreased drastically year after year and stood at Rs.129 lakhs. As far as the overdue position under short term non-agricultural credit is concerned trend is decreasing in the initial years and sudden raise at the last year under study i.e., from Rs.1,216 lakhs in 2016-17 it has been decreasing year after year and stood at Rs.735 lakhs in 2019-20 and in the next year it has been increased to Rs.1,532 lakhs.

The trend in the overdue position of the DCCB in terms of medium-term loans both under agricultural and non-agricultural purses shows an increasing trend year after year and almost doubled the amount than that of the first year under study. The similar trend is observed in total overdue position i.e., from Rs.5,589 lakhs it has been increased year after year and stood at Rs.7,819 lakhs in the last year under study.

7.7 Trend Analysis of Loans Position of DCCB:

Table 7 - Trend Analysis of Loans Position of DCCB

(Rs.in lakhs)

Years	Total Loan Issued		Total Collection		Total Over dues	
	Rs. In Lakhs	Annual Trend in %	Rs. In Lakhs	Annual Trend in %	Rs. In Lakhs	Annual Trend in %
2016-2017	1,06,603	100	53,549	100	5,589	100
2017-2018	1,20,147	113	57,671	108	4,721	84
2018-2019	1,34,880	112	68,348	119	4,611	98
2019-2020	1,49,021	110	82,410	121	4,969	108
2020-2021	2,08,434	140	1,59,822	194	7,819	157

(Source: Compiled from the annual report of the selected DCCB)

The table 7 presents the amount and trend in loan issue, outstanding, collection and overdue positing of the DCCB.

The trend in total loan issued by the DCCB shows an increasing trend i.e., from Rs.106603 lakhs in 2016-17 with an increase year after year and stood

at Rs.208434 lakhs in 2020-21 which is twice that of the first year's loan issued. The annual trend percentage shows that the increasing percentage is meagre starting from the second year to fourth year under study and at the end of the year it is found that 40 per cent increase over the period year. This infers that the DCCB performs better in issuing loan in the last year under study. Therefore, it is suggested that the DCCB has to take steps to issue more loans particularly in short term agricultural purposes.

The trend in collection of the loan issued by the DCCB shows an increasing trend i.e., from Rs.53,549 lakhs in 2016-17 with an increase year after year and stood at Rs.1,59,822 lakhs in 2020-21 which is four times that of the first year's collection. The annual trend shows that in the first half years of the study, it is marginal. Whereas, the fourth and fifth year under study have registered a drastic increase over the previous years. It is to be noted that at the fifth year under study the annual trend percentage is 94 per cent increase than that of the previous year. Thus, it is infer that the DCCB performs better in terms of collection of loan from its members during the last two years under study. Therefore, it is suggested that the DCCB has to maintain the same trend in collection of dues as it performed in the last two years under study.

The DCCBs performance in terms of overdue position during the years under study shows that the overdue amount has been reduced from Rs.5589 lakhs in 2016-17 and stood at Rs.4611 lakhs in 2018-19 and thereafter it started increase and at the end of the year it stood at Rs.7819. The annual trend percentage reveals that except second year wherein the reduction in the percentage change is 16 when compared to previous year and in the rest of the years it is on raise. The highest proportion of change is noticed in the last year wherein more than fifty per cent (57 per cent) increase in overdue position when compared to the previous year. Thus, it is inferred that DCCBs position in maintain the overdue has been on the increasing in the later period under study. Therefore, it is suggested that the DCCB has to maintain the overdue at a minimal level by adopting suitable strategies in the areas of issue of more loans and collection of loans especially when it becomes due.

8. Findings of the Study:

The Dindigul Central Cooperative Bank was started its functions from

01.06.1991. Its area of operation consists of 8 taluks and 14 blocks in Dindigul district. It functions from the head office at Dindigul and through its 33 branches.

Funds: The funds of the DCCB consist of share capital, reserve fund, deposits from member cooperatives, loans and overdrafts from state cooperative bank. There is an increasing trend in overall funds of DCCB during the study period i.e., it is raised from Rs.1,31,420 lakhs in 2016-17 to Rs.1,76,922 lakhs in 2020-21. The share capital position of the DCCB during the year 2016-17 was Rs.4,402 lakhs which was increased to Rs.8,007 lakhs during the year 2020-21. The reserves of DCCB was Rs.12,230 lakhs during the year 2016-17 which was increased to Rs.17,363 in lakhs in 2020-21. The deposits collected by DCCB during the year 2016-17 was Rs.87,501 lakhs in 2016-17 which was also increased to Rs.1,05,775 in lakhs in 2020-21. In the case of borrowing fund, the DCCB borrows fund from its federation viz., Tamilnadu State Apex Bank and from NABARD under various purposes. The purposes are for agricultural and non-agricultural purposes. Among the purposes, agricultural purpose constitutes higher proportion compared to non-agricultural purposes. In the initial periods under study the trend in the amount of loan issued for agricultural purposes is increasing year after year and in the last year under study it has reduced to a drastic level. However, the trend in loans and advances issued for the non-agricultural purposes shows an increasing trend.

Issue of loans: A steady increase of short-term agricultural loan issued is noticed throughout the period under study. A similar trend is also observed on the issue of short-term loan for non-agricultural purposes but with comparatively lesser amount to that of short-term loan for agricultural purposes.

There is a decreasing trend in medium term agricultural of DCCB during the study period i.e., 2016-17 to 2020-21. However, there is a steady increase in issue of medium-term loan for non-agricultural purposes throughout the period under study except for the last year wherein nearly double the amount of loan issued when compared to the first year under study.

The trend in total loan issued by the DCCB shows an increasing trend i.e., from Rs.106603 lakhs in 2016-17 with an increase year after year and stood at Rs.208434 lakhs in 2020-21 which is twice that of the first year's loan issued.

The annual trend percentage shows that the increasing percentage is meagre starting from the second year to fourth year under study and at the end of the year it is found that 40 per cent increase over the period year. This infers that the DCCB performs better in issuing loan in the last year under study.

Loan Outstanding: There is an increasing trend i.e., a gradual increase in all the years under review in overall Loan outstanding. A similar trend is observed in short term non agriculture loan outstanding.

There is an increasing trend found in short term agricultural loan outstanding in the initial four years under study and in the last year under study it showed a decreasing trend.

There is an increasing trend i.e., a gradual increase in the first four years under study and a sudden peak in the last year under study in all types of recovery of loans except medium term agricultural loan.

Recovery of Loan: The total loan collection is showing an increasing trend that is from 53,549 lakhs in 2016-17 to Rs.1,59,822 in 2020-21 registering almost four times increase when compared to first year under study. The similar trend is also observed in short term agricultural loan collection and medium-term non-agricultural loan collection.

Collection under short term non-agricultural loan shows a fluctuating trend i.e., a marginal decrease in the initial years and a marginal increase in the rest of the years in the collection of loan is found.

As far as the medium-term agricultural loan collection is concerned, the trend is fluctuating trend i.e., the amount of collection is drastically from the first year Rs.1711 lakhs in 2016-17 to Rs.446 lakhs in 2017-18 and in the next two year is showed an increasing trend and stood at Rs.1036 lakhs in 2019-20 and in the last year under study it again decreased to Rs.782 lakhs.

The annual trend in the total collection shows that in the first half years of the study, it is marginal. Whereas, the fourth and fifth year under study have registered a drastic increase over the previous years. It is to be noted that at the fifth year under study the annual trend percentage is 94 per cent increase than that of the previous year. Thus, it is infer that the DCCB performs better in terms of collection of loan from its members during the last two years under study.

Overdue: There is a decreasing trend found under short term agricultural loan overdue i.e., from Rs.1,611 laksh in 2016-17 and decreased drastically year after year and stood at Rs.129 lakhs. As far as the overdue position under short term non-agricultural credit is concerned trend is decreasing in the initial years and sudden raise at the last year under study i.e., from Rs.1,216 lakhs in 2016-17 it has been decreasing year after year and stood at Rs.735 lakhs in 2019-20 and in the next year it has been increased to Rs.1,532 lakhs.

The trend in the overdue position of the DCCB in terms of medium-term loans both under agricultural and non-agricultural purses shows an increasing trend year after year and almost doubled the amount than that of the first year under study.

The DCCBs performance in terms of overdue position during the years under study shows that the overdue amount has been reduced from Rs.5589 lakhs in 2016-17 and stood at Rs.4611 lakhs in 2018-19 and thereafter it started increase and at the end of the year it stood at Rs.7819. The annual trend percentage reveals that except second year wherein the reduction in the percentage change is 16 when compared to previous year and in the rest of the years it is on raise. The highest proportion of change is noticed in the last year wherein more than fifty per cent (57 per cent) increase in overdue position when compared to the previous year. Thus, it is inferred that DCCBs position in maintain the overdue has been on the increasing in the later period under study.

9. Suggestions:

Based on the findings of the study in the areas of lending, recovery and overdue, the following suggestions are made.

The DCCB has to take steps to issue more loans particularly in short term agricultural purposes.

The DCCB has to maintain the same trend in collection of dues as it performed in the last two years under study.

The DCCB has to maintain the overdue at a minimal level by adopting suitable strategies in the areas of issue of more loans and collection of loans especially when it becomes due.

10. Conclusions :

The study on the financial performance of the dindigul district central

cooperative bank in the light of trend analysis revealed that the DCCBs performance is satisfactory in the areas of raising of funds, lending and recovery. For the better performance the DCCB has to concentrate on issuing more loans under short term agricultural purposes wherein the recovery is very good. The bank need to maintain the overdue position at minimal level for which it has to device appropriate strategies in the areas of issuing more loans and their collection.

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A Study of the Financial Performance of The District Central Cooperative Banks in India

¹M. Hari Priya, ²G. Aashika

Abstract:

Indian cooperative movement is the largest cooperative movement in the world. Here DCCB function at the district level to serve the needs of the affiliated PACS and the other societies. The financial health of DCCB depends on the recovery of loans. DCCB plays a pivotal role in the growth of farm and allied sectors. Sound financial management of DCCB always depends upon its well-developed mechanism for mobilization and deployment of resources by adopting the norms of statutory bodies. This study analyzed the financial performance of DCCB in India.

Keywords: DCCB, Financial management, Resources.

1. Introduction:

The District Central Cooperative Bank (DCCB) occupies a position of cardinal importance in the three-tier Cooperative Credit Structure in India. They came into existence to facilitate Primary Agriculture Cooperative Credit Societies (PACS) to mobilise the required resources for the development of village community and to strengthen their function. Hence the DCCBs started to tap the required financial resources from the members, higher financing institutions, and individuals, to fulfil the credit needs of the affiliated primary societies. The Cooperative Societies Act of 1912 paved the way for the registration of DCCBs. The policy of organizing a DCCB for each District originated from a recommendation of

¹I.I.M.COM (cooperative management) Department of cooperation, Gandhigram rural institute (Deemed to be university).

²I.I.M.com (cooperative management) Department of cooperation, Gandhigram rural institute (Deemed to be university).

the Maclagan Committee on Cooperation in India in 1915. Thus, the origin of DCCBs took place during the period between 1906 and 1918 in various parts of the country. As of 31.3.2022, there are 352 DCCBs in India (*www.nabard.org Annual Report 2021-2022, p. 68*). The PACS supply short term and medium-term credit to the members. These Societies mobilise their funds from Entrance Fees, Share Capital, Deposits and Borrowings from DCCB. Under this systems the DCCB serve as a link between the PACS and money market. DCCB plays a pivotal role in the growth of farm and allied sectors. Sound financial management of DCCB always depends upon its well-developed mechanism for mobilization and deployment of resources by adopting the norms of statutory bodies. This study analyzed the financial performance of DCCB in India.

2. Review of Literature:

A number of studies have been conducted world over on the functioning of cooperative banks at various levels. Some of the related literatures available in the areas are reviewed hereunder. These shows the trend and progress of cooperative banking during the past. The review also provides the scope for the present study.

The study conducted by **Kavitha A. (2011)** on the Growth of Deposits of Selected DCCBs in Tamil Nadu identified that the growth rates of selected DCCBs have shown a mixed trend in terms of deposits. Hence, there is a need for revolutionary and practical reforms related to restrictive provisions, professionalism and operational efficiency.

Uma Devi, (2012) found that the agricultural loans DCCB, Kakinada has probably facilitated the adoption of new technology in East Godavari District.

Jai Kishan Chandel (2012) conducted a study on financial performance of DCCBs in Haryana. This study found that the reasons behind weak performance of DCCBs in Panchkula and Jind were financial mismanagement, underutilization of resources, improper investments, improper capital structure, inadequate cash availability and lack of innovative products.

Soni. A and Kand Kapre. A., (2012) studied the economic viability of DCCB, Rajnandgaon. This study suggested that the banks should strengthen the existing loan policies and adopt scientific method to speed up recovery of loans.

Vasantrao.A.S, (2012), examined the progress of DCCBs in Maharashtra

and revealed that DCCBs are showing an healthy trends in all the financial parameters.

Arndhekar .N.D.(2016) evaluated the financial position of DCCB in Vijaypur District of Karnataka. This study found that credit disbursement and recovery status have been increased after 2012-13. This study also suggested that the bank should provide banking services like, internet banking, ATM-cum-Debit card, credit card, and other customer services.

Murugaboopathy, M. (2018) analyzed the financial performance of Virudhunagar DCCB and Madurai DCCB. The study suggested to improve the profitability and overall performance of these DCCBs.

Damayanti Reuel Premier (2018) in a study the financial performance of Thane DCCB in terms of profitability, liquidity, and solvency were good. The study conducted by Nitin Saxena (2018) showed that financial performance of the DCCBs of Uttar Pradesh, have an insignificant relation with the asset quality and credit deposit ratio.

In a study conducted by **Ankita Chaturvedi and M. S. Kanchan Sanjuwan (2019)** found that healthy financial position of Rajasthan DCCBs depends on the recovery of loans.

Anshuja Tiwari, Amit Kumar Maheshwari (2021) found that poor monsoon and consequent impact on agriculture affected the loan recovery and increased the NPAs.

Mahesh Kumar, U Daru, and Urvi G. Amin (AN) in their study analyzed the profitability of the Surat DCCB with the help of profitability ratios and concluded that the overall profitability position of the Surat DCCB was good. From the above studies it has been found that NPA and recovery of loans, deposits and working capital, Net Profit were the factors contributed for the financial position of DCCB. In this background the present study analyzed the financial performance of DCCB in India.

3. Statement of Problem:

The DCCB are the kernel of the Indian Financial System in terms of position, objectives and functions. Functions of the DCCBs have been changed over a period of time and expanded according to members requirements and needs due to liberalization, privatization and globalization. The measurement of operation efficiency of DCCBs mostly remained with their financial dimension and focus on financial stability. DCCBs play an important role as financial intermediaries between PACS

and State Apex Cooperative Banks in three tier structure. While there has been an improvement in the financial performance of the DCCBs in recent times, the higher level of Non-Performing Assets (NPA) continues to pose a threat to the financial health and viability of certain DCCBs. Recovery performance of DCCB has been very poor in the recent years. The increasing trend in NPA is the result of non-recovery of loans and advances. Managing NPA, i.e., proper identification of NPA, safeguarding the securities, recovery of loans and advances, proper appropriation of the recovery, etc., are essential for the DCCBs. This inspired the researchers to study the financial performance of DCCBs.

4. Objectives of the study:

The primary objective of study is to analyse the financial performance of DCC Bank in India during the period 2011-2021. More specifically objective of this present study are:

- 1) to study the origin and growth of DCCBS in India,
- 2) to evaluate the financial performance of DCCB in India, and
- 3) to analyze the factors contributing to the financial performance of the DCCB.

5. Methodology and sources of data:

This study is descriptive study and adopted case study method. The present study is based on secondary data. Data relating to DCCB such as number of offices with head offices, membership, share capital, deposits, working capital, loans and advances, loans outstanding, profit and loss, non-performing assets, etc were collected from the publications of The National Federation of State Cooperative Banks (NAFSCOB). The data collected were analyzed and presented in the form of tables, graphical representations, statistical tools such as percentage of change and correlation, were used to analyze and interpret the data for better understanding.

✓ Percentage Of Change:

The percentage change between two values in a time series is calculated by finding the difference between those two values then dividing that difference by the starting value and multiplying by 100.

$$\text{Percentage of Change} = \frac{\text{Current year} - \text{Present year}}{\text{Present year}} \times 100 - 100$$

✓ **Pearson's Correlation:**

The Pearson correlation measures the strength of the linear relationship between two variables. It has a value between -1 to 1, with a value of -1 representing a perfect negative relationship, and +1 results in a perfect positive relationship. 0 indicate no correlation.

$$r = \frac{\Sigma(x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\Sigma(x_i - \bar{x})^2 \Sigma(y_i - \bar{y})^2}}$$

r = correlation coefficient

x_i = values of the x – variable in a sample

\bar{x} = mean of the values of the x – variable

y_i = values of the y – variable in a sample

\bar{y} = mean of the values of the y – variable

6. Period of study:

The study covered a period of ten years from 2011-2021.

7. Limitations of the study:

This study is not far from limitations. Time is the basic limitation of the study. Within a short period of time data about DCCB was collected from various sources. The study is based only on the secondary sources of data collected. However, this limitation has not affected the objectives of the study and its logical presentation.

8. Analysis and Interpretation

Table-I

YEAR	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
NO.OF.OFFICES WITH H.O (Figures in numbers)	13495	13655	13811	14060	14241	14252	14293	14647	14012	13992
MEMBERSHIP (Figures in numbers)	3659385	3915657	3563497	30488765	3208720	3233864	3042226	4401390	5082082	5479395
SHARE CAPITAL (Rs in lakhs)	818892	891461	977448	1340976	1287675	1469594	1590723	1759718	1722632	1896955
WORKING CAPITAL (Rs in crore)	25730623	28802124	31865124	37709816	40609293	45521345	48321027	51715807	48846782	53012638
DEPOSITS (Rs in crore)	176711	195726	215662	251116	282609	311858	340738	366960	325895	359744
LOANS AND ADVANCES (Rs in crore)	16255432	20937088	21794084	23242126	24937596	25328240	24205851	26532444	24051636	27631055
LOANS OUTSTANDING (Rs in crore)	14476115	17151279	18314394	20720549	22790186	24444587	26019789	28085412	26070848	28281169
BANKS IN PROFIT(+) (in lakhs)	(+116080)	(+197385)	(+169145)	(+182424)	(+212607)	(+189723)	(+187091)	(+208259)	(+254028)	(+299787)
BANKS IN LOSS(-) (Rs in thousands)	(-49205)	(-94481)	(-78953)	(-91868)	(-68846)	(-106000)	(-154230)	(-168824)	(-116659)	(-97720)
NPA (Rs in crore)	1678096.17	1735964.54	2082557.06	2306015.25	2240604.43	2295249.91	2679048.93	3097804.07	3079448.72	3202881.1

(Source: Compiled from the annual report of the DCCB)

Even though there has been structural changes in the STCCS in some states during the study period. It was found that there has been increase in the number of offices of DCCB at rate of 3.68%.

It was found that the total number of members of DCCB in India was 3659385 during (2011-2012) the number of membership has been increased to 5479395 (2020-2021). It shows that there has been an increase in a number of society at primary and secondary level.

The loan operation of central cooperative bank consist of the loan provided to members and customers through schemes of government of India, and state government and online lending to primaries.

It was found that the loan operations of DCCB has been increased from 16258432 to 27631055 consecutively. There has been an increase in the loan outstanding position. To find out correlation between loan issue and outstanding from the above formula and result of correlation revealed below.

TABLE-II

YEAR	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
NO.OF.OFFICES WITH H.O	(-)	1.2	3.01	1.8	1.2	0.07	0.2	2.4.	-4.3	-0.15
MEMBERSHIP	(-)	7.0	-8.9	-14.4	5.2	0.7	-5.9	44.6	15.4	7.8
SHARE CAPITAL	(-)	8.8	9.6	37.19	-3.97	14.12	8.24	10.62	-2.10	10.11
DEPOSIT	(-)	10.7	10.1	16.4	12.5	10.3	9.2	7.6	11.1	-98.8
WORKING CAPITAL	(-)	11.9	10.6	18.3	7.6	12.09	6.1	7.02	-6.1	9.1
LOANS AND ADVANCES	(-)	28.8	4.09	6.64	7.29	1.56	4.43	9.61	-9.35	14.8
LOANS OUTSTANDING	(-)	18.47	6.78	13.13	9.98	7.25	6.44	7.93	-7.17	8.47
BANKS IN PROFIT	(-)	70.04	-14.3	7.8	16.5	-10.7	1.3	11.3	21.9	18.01
BANKS IN LOSS	(-)	92.0	-16.4	16.3	-25.05	53.9	45.5	9.4	-30.8	-16.2
NPA	(-)	3.4	19.9	10.7	-2.8	2.4	16.7	15.6	-0.5	4.0

(Source: Compiled from the annual report of the DCCB)

It was founded that there is an increasing trend in membership, total share capital, working capital, deposits, total loans and advances, total loans outstanding, banks in profit, and NPA DCCB during the study period

Table II shows that there is a percentage of change of 25.05 in the study period 2015-16 and an increase in the percentage of change of 53.9 during the study period 2016-2017. Besides, there is decreasing in Banks in loss of District Central Cooperative Banks during the study period i.e., 2016-17 to 2020-21.

TABLE-III

YEAR	MEMBERSHIP	LOANS & ADVANCES
2011-2012	3659385	16255432
2012-2013	3915657	20937088
2013-2014	3563497	21794084
2014-2015	30488765	23242126
2015-2016	3208720	24937596
2016-2017	3233864	25328240
2017-2018	3042226	24205851
2018-2019	4401390	26532444
2019-2020	5082082	24051636
2020-2021	5479395	27631055
PEARSON CORRELATION = 0.333195144		
34.7%		

(Source: Compiled from the annual report of the DCCB)

It was found that there is an increase in overall Membership of DCCB India during the study period. Besides, there is an increasing Membership, Loans, and advances of District Central Cooperative Banks in India during the study period i.e., 2011-2012 to 2020-2021.

The Membership of DCCB in India during the year 2011-12 to 2020-21 was Rs. 38635092 and loans and advance of DCCB in India During the year 2011-12 to 2020-2021 was Rs.234915552 in cores. It is also observed that the PEARSON CORRELATION = 0.333195144 during the year 2011-12 to 2020-21 for share Capital and loans & advances

It was found that there is an increase in the overall Share capital of DCCB India during the study period. Besides, there is an increasing share capital, Loans, and Advance of District Central Cooperative Banks in India during the study period i.e. 2011-2012 to 2020-2021.

TABLE-IV

YEAR	SHARE CAPITAL	LOANS AND ADVANCES
2011-2012	818892	16255432
2012-2013	891461	20937088
2013-2014	977448	21794084
2014-2015	1340976	23242126
2015-2016	1287675	24937596
2016-2017	1469594	25328240
2017-2018	1590723	24205851
2018-2019	1759718	26532444
2019-2020	1722632	24051636
2020-2021	1896955	27631055
PEARSON CORRELATION = 0.870152148		
00.1%		

(Source: Compiled from the annual report of the DCCB)

It is evident that the share capital is of DCCB in India during the year 2011-12 to 2020-21 was Rs. 13756074 and loans and advances of DCCB in India During the year 2011-12 to 2020-2021 Rs. 24397670 in cores. It is also observed that the PEARSON CORRELATION = 0.870152148 during the year 2011-12 to 2020-21 for share Capital and loans & advances.

TABLE-V

YEAR	LOANS & ADVANCES	NPA
2011-2012	16255432	1678096
2012-2013	20937088	1735965
2013-2014	21794084	2082557
2014-2015	23242126	2306015
2015-2016	24937596	2240604
2016-2017	25328240	2295250
2017-2018	24205851	2679049
2018-2019	26532444	3097804
2019-2020	24051636	3079449
2020-2021	27631055	3202881
PEARSON CORRELATION = 0.809714821		
00.5%		

(Source: Compiled from the annual report of the DCCB)

It was found that there is an increase in overall Loans and advances of DCCB India during the study period. Besides, there is an increasing Loans and Advance and NPA of District Central Cooperative Banks in India during the study period i.e., 2011-2012 to 2020-2021

It is evident that the Loans and advances of DCCB in India during the year 2011-12to 2020-21 was Rs. 234915552 and the NPA of DCCB in India During the year 2011-12to 2020-2021 was Rs.24397670in cores. It is also observed that the PEARSON CORRELATION = 0.809714821 during the year 2011-12to 2020-21 for share Capital and loans & advances

TABLE-VI

YEAR	MEMBERSHIP	NPA
2011-2012	3659385	1678096
2012-2013	3915657	1735965
2013-2014	3563497	2082557
2014-2015	30488765	2306015
2015-2016	3208720	2240604
2016-2017	3233864	2295250
2017-2018	3042226	2679049
2018-2019	4401390	3097804
2019-2020	5082082	3079449
2020-2021	5479395	3202881
PEARSON CORRELATION = 0.634418716		
00.5%		

(Source: Compiled from the annual report of the DCCB)

It was found that there is an increase in overall Membership of DCCB India during the study period. Besides, there is an increasing Membership and NPA of District Central Cooperative Banks in India during the study period i.e. 2011-2012 to 2020-2021

It is evident that the Membership of DCCB in India during the year 2011-12to 2020-21 was Rs. 38635092 and the NPA of DCCB in India During the year 2011-12to 2020-2021 was Rs.24397670in cores. It is also observed that the PEARSON CORRELATION = 0.634418716 during the year 2011-12to 2020-21 for share Capital and loans & advances

TABLE-VII

YEAR	SHARE CAPITAL	NPA
2011-2012	818892	1678096
2012-2013	891461	1735965
2013-2014	977448	2082557
2014-2015	1340976	2306015
2015-2016	1287675	2240604
2016-2017	1469594	2295250
2017-2018	1590723	2679049
2018-2019	1759718	3097804
2019-2020	1722632	3079449
2020-2021	1896955	3202881
PEARSON CORRELATION = 0.968125784		
00.1%		

(Source: Compiled from the annual report of the DCCB)

It was found that there is an increase in the overall Share capital of DCCB India during the study period. Besides, there is an increasing Share capital and NPA of District Central Cooperative Banks in India during the study period i.e., 2011-2012 to 2020-2021

The Share capital of DCCB in India during the year 2011-12 to 2020-21 was Rs. 13756074 and the NPA of DCCB in India During the year 2011-12 to 2020-2021 was Rs.24397670 in cores. It is also observed that the PEARSON CORRELATION = 0.634418716 during the year 2011-12 to 2020-21 for share Capital and loans & advances.

Findings:

- Table III represents a relationship between Membership and Loans & Advances is a weak significant correlation. Most of the members are literate but lack of knowledge and training and they are not willing to actively participate in meetings and all members are not buying loans from DCCB.
- Table IV represents a relationship between Share Capital and Loans & Advances is a perfectly significant correlation. When the share capital amount increases loans and advances also increase.
- Table, V represents a relationship between Loans & Advances, and

NPA is a perfectly significant correlation. Member gets the loan but cannot be able to repay the loan amount. If the NPA provision concept is based on some classification format to be reduced the bank's economic growth so, the struggle for getting funds from higher institutions. Generally, the members believe the loan will be waived after changing the new state political party. So they, are not ready to repay the loan.

- Table VI represents a relationship between Membership and NPA is a partially significant correlation. Besides the increasing Membership share in DCCB in India during the study period 2011-2012 to 2020-2021. At the same time, the NPA value also increasing in during the study period from 2011-12 to 2020-21.
- Table, VII represents the relationship between Share capital and NPA is a perfectly significant correlation. Besides the increasing the share capital percentage value from 8.8% to 10.11% in the 2011-12 to 2020-21 period study in DCCB in India.

Suggestions:

- ✓ DCCB should conduct regular meetings and give some responsibilities to their members. Solead the members to actively participate.
- ✓ Loans cannot be given to all the members it should follow certain norms to verify the debtor's document clearly and avoid liberalization among loan distribution.
- ✓ It should conduct orientation and skill development programs for all the members and make them participate.
- ✓ DCCB must follow modern banking technology and marketing strategy for increasing their economic growth level
- ✓ DCCB should extend its facilities for its members.
- ✓ It must have a good communication channel and notification with its members so it could avoid the debtor's outstanding loans and its property.

Conclusions:

The overall study of the financial performance of the District Central Cooperative Bank leads to the conclusion that the financial performance and for further development. The percentage of change and graphical representation of their level of growth during the financial years of 2011-12 to 2020-21 as to be given in table format. Pearson coefficient of correlation finds significant or insignificant relation between Membership, loans,

advances, Share capital, and NPA.DCCB in India we find the problems and rectify is given in the suggestion

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Lending practices of loan and satisfaction level of entrepreneurs towards the goa state cooperative bank ltd.

Namita Haldankar*

Abstract:

The core objective of this study is to know the lending practices of a loan and the satisfaction level of an entrepreneur towards the Goa State Cooperative Bank Ltd. The Goa State Cooperative Bank Ltd. is an Apex bank of Goa state, having 55 branches within the state of Goa. However, since their CRAR (Capital to Risk Assets Ratio) needs to be set up correctly, this bank needs to have net and mobile banking facilities.

The data was collected by interviewing general managers, managers & two entrepreneurs who had taken loans from the bank in the past and are now known as successful entrepreneurs/ businessmen through an unstructured questionnaire. The study highlights that the bank provides only one type of loan, which includes MT (medium-term) business loans and CCC (clean cash credit) for entrepreneurs. The loan may be for new businesses or old businesses. The study concludes that both entrepreneurs are satisfied with the services the Goa State Cooperative Bank Ltd. has given to them.

Keywords: *Lending practices, cooperative banks, entrepreneurs and loans.*

1. Introduction:

1.1 Cooperative banks:

Currently, in India, many cooperative banks perform multipurpose functions such as financial, supervisory, advisor, cooperative credit society development and expansion. Therefore, the cooperative banks must act like a philosopher, guides and friends. (Banerjee, Cole, Duffo, 2003).

*Student, M.Com. Part II, Post-Graduate Department of Commerce
Government College of Arts, Science & Commerce Khandola, Marcela – Goa.

Between the private sector and governmental organisations, cooperative banking in the Indian economy plays a golden means. Cooperative banking is more minor than commercial banking but is a significant segment of the Indian Banking System. They have an extensive network to reach out to people in remote areas. They have traditionally played an essential role in creating banking habits among people by depositing small amounts in the bank as savings (Menezes, 2016).

The cooperative sector is a combination of private organisations and government organisations. The cooperative banking sector is divided into main sub-categories that is the cooperative central banks, state cooperative banks, the primary cooperative credit society, the primary agriculture development banks, the land development banks, the primary land development banks, urban cooperative banks, rural cooperative credit institution and state land development banks.

1.2. Lending practices:

The amount borrowed by one person from another person is termed a loan. The act of giving money, property or other material goods to another party in exchange for future principal repayment along with interest or additional finance charges. The amount paid in the loan to the borrower is said to be lending from the point of view of the bank (Haralayya, 2021).

1.3. Entrepreneurs:

According to the European Commission, entrepreneurship can be defined as a particular mindset and process associated with individuals, showing a set of competencies, for example, creativity, risk-taking etc., by turning a business idea into success.

Traditionally, some entrepreneurs and small businesses have faced difficulties competing with established firms to explore the global market. Entrepreneurs even face problems like name recognition to achieve the aim per the market strategies in a broad audience (Yrle, Hartman, Walsh, 2004). The number of entrepreneurs has grown tremendously in recent years.

1.4. The Goa State Co-operative Bank Ltd.:

The Goa State Co-operative Bank Limited is located at “SAHAKAR SANKUL” Head office, EDC Complex, Patto, Panaji – Goa. It is a Scheduled

bank owned and managed by the state. This is an Apex Bank of the state of Goa. It is quoted that “Management of Resources through Co-operative and dedication can make Atmanirbhar Bharat”. The bank has 55 branches in Goa as per the annual report 2021-2022.

Since their CRAR (Capital to Risk Assets Ratio) needs to be set up correctly, this bank needs to have net and mobile banking facilities. However, the bank has ATM facilities that are sometimes not available properly in some other states. Therefore, the bank's mission is to provide mobile banking for micro-level financial assistance to weaker sections and ATM services in remote villages.

The bank provides financial support to its members through loans and advances, which may be for a short and extended period. In addition, the bank undertakes workshops for societies, self-help groups and camps to educate their customers in various fields of banking.

2. Literature review:

Gupta, and Jain (2012), examined the lending practices, measures, impact, types of loans, and satisfaction level of the customers and compared the efficiency of cooperative banks in India. The data collected was primary and secondary, where the respondents were bank customers. Kumar (2019), the study examined the lending practices to the customers in the cooperative bank in Himachal Pradesh. The study also focuses on measuring and comparing the impact of size and the appropriate measures to improve a bank's efficiency, the different types of loans preferred and the satisfaction level of the customers. The study's finding is that the financial position in cooperative banks has increased, but they can do it better by including some suggestions. Liang et al. (2017) examined the impact of SME lending and credit guarantee on bank efficiency in South Korean banks. The study's finding is that the cost efficiency of banks decreases because lack of equivalence of information. It was an empirical study, and the data was collected from secondary data and selected 14 banks based on the national and regional banks.

Bravo et al. (2012) examine granting and managing loans for micro-entrepreneurs. They focus on new developments and practical experiences through the methodology to grant and follow up credits for micro-entrepreneurs. The study's finding revealed two different datasets with loans ranging from 1 to 5 years in duration and the amount that varied between

EUR 175 and EUR 17500. Dziwornu, and Anagba (2018), studied the demand for Micro Finance Institute loans by women entrepreneurs in selected areas of a market in Ghana. By using a robust regression model on a sample of 300 women entrepreneurs. Take, Sodani (2016) analysed the facilities Mahila Urban Cooperative banks offered women entrepreneurs. The main objective is to identify the financial products and services provided, the factors banks consider in granting loans and the reasons for declining loans to women. The respondents were 6 banks with a close-ended questionnaire.

Matlay, M. (2009) study analysis the collaborative and competitive strategies in virtual teams of e-entrepreneurs from a pan-European perspective. The 24 core members of the virtual team were interviewed, and a simple coding technique was used. The study's conclusion is that consistently higher per capita turnover and profit levels have been recorded in each of the e-Businesses in the virtual team, and more enormous profits are primarily the result of significant scope, scale and cost advantages that can be directly attributed to team-wide collaborative strategies. Sakir (2020) examined establishing Malaysia as a regional e-commerce e-fulfilment hub and driving the export of Malaysian small and medium enterprises via e-commerce. Multiple regression analysis was used to analyse the data and to test the hypothesis. The findings are that competence, relatedness, and autonomy positively and significantly influenced entrepreneurs' motivation to adopt e-commerce.

Torre et al. (2010) examined bank involvement and relationship lending with SMEs. The data was collected from four sources: interviewing bank business & risk managers, a survey of eight developing countries, SMEs and a follow-up bank survey. The finding is the common wisdom that most banks avoid SMEs because their chronic opacity makes them substantially dependent on relationship lending. Hasan et al. (2021) investigated on capabilities of different types of banks to feed the financial needs of SMEs. The data was collected using a comprehensive dataset from emerging economies, including local banks' corrective programs information. The result indicates two main policy implications; they demonstrated that the survival of local banks still has more importance for SMEs, and it is better when multiple local banks operate within a local banking market from a SMEs perspective.

Jude, and Adamou (2018), focused on assessing the influence of entrepreneurs' behaviour on their decisions to apply for bank loans. The result of the study highlighted that both control aversion and the overconfidence behaviour of managers or owners significantly influence the decisions of SMEs

to apply for loans. Finally, Kollmann and Häsel (ND) study focuses on the collaborative and integrative approaches that enable firms to integrate online and offline business models without extending themselves beyond their means or competencies. The study concludes that it has been theorised that cross-channel cooperation processes represent dynamic capabilities that contribute to sustainable competitive advantage by integrating highly complementary external resources.

Ikram et al. (2016) explored the determinants of non-performing assets of the commercial bank against loans sanctioned to the small and medium enterprises sector. It was an empirical study, and the result revealed the various origins of NPLs (non-performing loans). It suggested that they had been motivated by the loan sanctioning procedure of the financial institutions. Oli (2021), the study investigated deprived sector lending on the non-performing loans of commercial banks in Nepal. By using secondary data from 27 commercial banks and observations. The result indicates that the remark of the commercial bank on the deprived sector lending policy of NRB needs to be validated.

Bellucci et al. (2010) investigated whether, in bank-firms relationships, gender matters or not. By collecting data as evidence from small business lending. The study finds that female officers are more risk-averse or less self-confident than male officers, as they tend to restrict credit availability to new and are not established borrowers more than their male counterparts. Barboni and Rossi (2019) studied the supportive role of local banks in the financial crisis. The study highlighted the importance of relationship lending in a particular period of the financial crisis, local banks which is more supportive and rely more on soft information than local bank. They concluded that soft information could lead local lenders to grant credit, whereas complex information suggests the opposite in some cases.

Kyando (2019) studied to determine the factors determining the repayment of the loan in Tanzania. The main objective was to assess the effect of lenders' factors on loan repayment, the extent to which borrowers' factors affect loan repayment and to establish the impact of loan factors on loan repayment. The study involved staff of CRDB bank at the Meru branch and its borrowers. Colak, Senol (2021) analyse banks' lending and ownership dynamics. The study concluded that public banks exhibit less consistent movement in their lending behaviour than private and foreign domestic banks during the overall business cycle. The data was collected by using a regression model.

3. Research gap:

As per the above literature reviews, a limited study has been done on lending practices of loans and the satisfaction level of entrepreneurs of the Goa State Cooperative Bank Ltd. Several authors have done most of the work on lending practices in different states and countries with various objectives such as the lending practices, measures, impact, types of loans, and satisfaction level of the customers and compared the efficiency of cooperative banks (Gupta, Jain, 2012), lending practices to the customers in the cooperative bank in Himachal Pradesh (Kumar, 2019), the impact of SMEs lending and credit guarantee on bank efficiency in South Korean banks (Liang et al., 2017), the dynamics of lending and ownership of banks (Colak, Senol, 2021), etc. A limited study was done in Goa on lending practices of loans and the satisfaction level of entrepreneurs of the Goa State Cooperative Bank Ltd.

4. Research problem:

The study on the Goa State Cooperative Bank Ltd. analysed that the loan given to the entrepreneurs comes under one type of loan, which may include other types of loans given to those businesses who are in the growth stage of a business so that they can be able to repay that loan amount. Then this will lead to the satisfaction level of entrepreneurs, which will include the success of a business and earning a good amount of profit after taking a loan from the Goa State Cooperative Bank Ltd. The study also explored the relationship between the bank and customers concerning loans and lending practices of Goa State Cooperative Bank Limited.

5. Research questions:

- i. What are the lending practices of Goa State Cooperative Bank Ltd.?
- ii. What is the satisfaction level of Goa State Cooperative Bank Ltd. entrepreneurs?

6. Objectives of the study:

The following are the objectives of the study-

- i. To study the lending practices of Goa State Cooperative Bank Ltd.
- ii. To study the satisfaction level of Goa State Cooperative Bank Ltd entrepreneurs.

7. Research Methodology:

The study included the universe as Goa, and the place was The Goa State Cooperative Bank Ltd. The period for the study was from mid-October to November. The respondents were general managers, managers of the bank and entrepreneurs who took loans from the said cooperative bank. The data was collected from both primary and secondary sources. The data was collected by interviewing the general managers, managers, and two entrepreneurs and referring annual 2021-2022.

8. Discussion:

8.1 Lending Practices:

The Goa State Cooperative Bank Ltd. provides one type of business loan under the MT non-form Priority Sector: MT (Medium Term) business loans and CCC (Clean Cash Credit) for purchasing raw materials, machinery construction of shed, etc. The documents required to get a loan are ID proof like an aadhar card, photos, a pan card copy of the loanee and two sureties, a business licence-if already in the business and if new, then a provisional certificate of registration, projection of income or salary certificate on obtaining a loan.

The customer approaches the branch for a loan and scrutinises all the documents submitted by the branch manager and high authority at the head office. Then a loan is given to the customer. However, the bank still needs to implement an online procedure to apply for a loan because their CRAR needs to be set up correctly.

The loans are provided to small marginal businesses already there in the industry, and the business has good scope to capture the market. The loan can be provided with a maximum amount of Rs. 2500000/-. The loan is also given to start-ups as well as old businesses. Based on the financial position of the customer/ business, the loan is given.

Case Study:

➤ **Pratab Agency:**

Pratab agency is a business run by Pratab Krishna Haldankar. The agency supplies building material supply and transportation services. He took a loan from Goa State Cooperative Bank Ltd. twice, one of which was Rs. 400000 and increased by Rs. 3500000 on cash credit. The interest paid on loan is

Rs. 30000 to Rs. 35000, sometimes to Rs. 28000 or Rs. 40,000. The interest is paid monthly and deducted directly from the account monthly on a cash-credit basis.

The primary purpose of taking a loan was to buy one shop, build raw materials like cement, sand, steel, etc., and sell them to customers at a reasonable price. He was selling blocks at the beginning of his business. Then he purchased trucks, but when mining stopped in Goa, he started selling blocks in large quantities to earn a good profit. Then he took agency of cement as a dealership of JKG & sub dealership of Ultratech.

First, he took a loan from another bank, which helped him greatly, especially during the covid time. Afterwards, he took a loan from the Goa State Cooperative Bank Ltd. This bank also helped him a lot. While taking the loan, he got lots of support from General Managers and other top officers of the bank with the branch manager.

He said that in a bank, the money is of the general public, as they deposit it in the form of Fixed deposits, savings, etc., and it is our responsibility to use that money properly. Therefore, we should repay the loan amount not for the bank's benefit but at least for theirs. As Pratab was disciplined and honest as a customer of the Goa State Cooperative Bank, and he had all the proper documents, with the support of higher authorities and without facing many problems, he got a loan of an enormous amount from the bank. To complete any significant work, you should have contact with considerable authority so that they can do your job quickly. However, here it was different; with proper procedure, he got a loan and adequately used it.

He used that loan for repayment of buying the cement bags. Based on some company schemes, he was purchasing the cement bags at a lower price, and that payment was made from a loan taken as it was cash credit. For example, if a person needs money and has sand in colossal quantity and he wants to sell that at a lesser price. In your account, if you have that much balance, you will buy the cement bags by making payment through a loan quickly. Even if he wanted to buy concrete for twenty-five trucks, he would use the loan to pay wholesalers or other sellers. He also purchased one JCP machine. If somebody wanted to dig somewhere, give that JCP machine on rent. Sometimes he also makes payments to his workers from the loan.

He is doing his work only through offline mode. He needs to gain trust online as in this type of business; most payments are made on a credit basis.

Therefore it takes work when it comes to the payment system. The online payment mode in this type of business could be more stable. For example, if he gets the order of concrete for twenty trucks and if that particular buyer wants to avoid buying from him after some time and the order gets cancelled, then material and time will be well-spent. However, it will also increase the cost of that material when someone else buys it; this may increase loss in business. Since this includes the massive cost of the amount and while making payment online, if the amount still needs to be received by the seller, it might create problems for the seller.

The challenge with this cooperative bank is that the branch manager has limited power, like nationalised branch managers, where the manager can pass the loan quickly. The branch manager has to follow the procedure sanctioned by the head office. The proper training needs to be given to branch managers or working staff members of a bank.

➤ **Shubham Enterprises:**

Shubham enterprises is a business run by Ulhas Sinari. He supplies coconuts, firecrackers, cashew and milk. He buys them wholesale and sells them to customers. He took only one loan of Rs. 2000000 from the Goa State Cooperative Bank Ltd. on a cash credit basis. All his documents were cleared, and someone from his side was working in that cooperative bank; he got a loan quickly.

The primary purpose of taking a loan was to do business selling firecrackers and dairy farming. In the cooperative sector, The Goa State Cooperative Bank is on top. That is the reason he took a loan from this bank. In others, many rules and regulations must be followed, but more documentation must be needed in cooperative banks. However, since all his documents were proper, he was okay with taking the loan.

The loan repayment is made whenever possible for him to make. For example, he will repay that amount immediately if the cashew season finishes. After that, he will directly go until that account becomes NPL. Then, as much as he can, he will make a payment.

As mentioned above, he took a loan to sell firecrackers and dairy products, but earlier, he had a business selling coconuts, dairy farming and cashew nuts.

He took a bank loan to increase that business and get more products to sell. He also started selling firecrackers in large quantities from that loan amount, earning more profit. In this business, the buying and selling are done through cash. He said if we have enough money in our hands, then however and whenever we want, we can start and increase the business.

After taking a loan from a bank, he needed help. However, because of some reason, he could not submit bills on time, so his account got stopped. As a result, the transactions were not able to go ahead. So that time, he had to make things correct.

When it comes to online selling, he needs to have trust in the online mode, especially in the payment system. He says it is risky, and he cannot understand it correctly. For example, if he sells something online, there is no guarantee that he will get paid for that sale. Even if the buyer said payment had been made already, the seller is still waiting to receive the payment made by the buyer.

The problem with the Goa State Cooperative bank is that the decision taken by higher authority/ in the head office needs to be transferred/circulated properly in branches of a bank, and they need to tell them to follow the steps taken. Because of these reasons, sometimes branches make rules to follow and proceed with the procedure. Therefore, the decisions in branches are changing day by day.

Regarding subsidies to some farmers, the bank is not paying subsidies on loans on which subsidy has to pay by the bank. At this time, the bank is not honest towards their customer. For example, if I took a loan to purchase thirty-five caws, then the subsidy which should get on those thirty-five caws would only get for some. Moreover, because of this, many farmers need help. These may lead to non-satisfaction levels for customers, especially for small farmers.

9. Findings:

The result of the study is that the bank provides only one type of loan, which includes MT (medium-term) business loans and CCC (clean cash credit) for entrepreneurs. The loan may be for new businesses or old businesses. Both entrepreneurs are satisfied with the services the Goa State Cooperative Bank Ltd. has given to them. Both businessmen have been okay with taking the

loan from the bank as all their documents were clear and in proper order. Even if they are facing any problem bank helps them to solve their problem.

10. Conclusion:

The study concluded that The Goa State Cooperative Bank Ltd. is the Apex bank of Goa State. The bank has 55 branches within the state of Goa. The Goa State Cooperative Bank Ltd. is helping small businesses by providing them with loans. However, the loan is given only one type: MT (medium-term) business loans and CCC (clean cash credit) for entrepreneurs. The loan can be given to Rs. 2500000 at once.

The study interviewed two entrepreneurs who had loans from the Goa State Cooperative Bank Ltd. of Marcel Branch. The entrepreneurs avoided any problems while taking the loan, which is common think in both cases. Since they had all documents correctly, they got the loan very quickly. One entrepreneur took twice; then another took only one. Both are running their businesses well, earning a good profit which shows that they are satisfied with the services the Goa State Cooperative Bank Ltd provides. However, the common point that got in this study was that the decisions taken by top managers need to be circulated to branches properly, which may create problems between the bank and customers.

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A Study of Sugarcane by-products and cost effectiveness in co-operative sugar factories in Maharashtra and Uttar Pradesh

A. M. Gurav*

Abstract:

The agro-processing co-operatives play an important role in the development of rural economy. The co-operative sector has been providing financial assistance to society for setting up agro processing units. However, cooperative sugar mills are facing several challenges as considering competition within and outside the sector, domestic as well as global market etc. Moreover, Maharashtra is the leading state in of co-operative sugar industries followed by Uttar Pradesh and it is found that some of the co-operative factories have been running very successfully with cost effective sugarcane product and byproducts. Hence, researcher designed research paper topic entitled as “Sugar cane by-products and cost effectiveness in co-operative sugar factories in Maharashtra and Uttar Pradesh”. This study has focused on comparison with the help of considered facts and figures and predetermined attributes such as sugar performance, financial scenario of the factory, types of byproducts production, fixed investment, production cost, sale of byproducts, raw material availability, availability of skilled human resource, shift of production, certification for byproducts production, marketing department for selling byproducts etc. It is found that almost all selected co-operative sugar factories could not be identified inter process cost and pricing of these byproducts during each step of production process. Financially, it is found that cost effective sugarcane product and byproducts are significantly contributed to selected co-operative sugar factories and it has untapped market potential.

Key Words:

Sugar Cane, By-products, cost effective, comparative study.

*Prof. (Dr.), Dept. of Comm. and Mgt., Shivaji University, Kolhapur-4, MS, India.

1. Introduction:

The agro-processing co-operatives play an important role in the development of rural economy and ensuring reasonable returns to the farmers and the development of rural industry and generation of employment. The co-operative sector has been providing financial assistance to society for setting up agro processing units. The cooperative sugar industry is one of the largest industries in the country and makes significant contribution to the economy of the country. However, cooperative sugar mills are facing several challenges as considering competition within and outside the sector, domestic as well as global market etc. Moreover, Maharashtra is the leading state in of co-operative sugar industries followed by Uttar Pradesh and it is found that some of the co-operative factories have been running very successfully with cost effective sugarcane product and byproducts. It is also seem that Maharashtra and Uttar Pradesh are the two largest sugar producers states in India considering statistics of sugarcane, where approx 62% of total sugarcane area in the country has cultivated in these two states only. Thus, researcher tried to understand the cost effectiveness of sugarcane product and byproducts in comparison with Maharashtra and Uttar Pradesh co-operative sugar mills, which have been playing a major role in the socio-economic development of rural areas in both states. Hence, researcher designed research topic entitled as *“Sugar cane by-products and cost effectiveness in co-operative sugar factories in Maharashtra and Uttar Pradesh”*.

2. Objectives:

- a. To study the sugarcane byproducts and cost effectiveness.
- b. To study the comparative study between Maharashtra and UP.

3. Research Methodology:

This research paper is based on field work, observation, past experience, Ph. D. research work, major research work, discussion with eminent personalities, experience, reading, listening, observation etc. regarding the sugar cane byproducts. It is experience based contribution therefore primary and secondary data has collected for analysis and interpretation. This paper has its own limitations and difference of opinions may occur with other researchers. This paper has based on Commerce and Management faculty which may or may not be applicable to other faculties.

4. Comparative Study of Byproducts between Maharashtra and UP:

The cooperative sugar industry in Maharashtra and UP is playing significant role in the rural economy and even the state's socio-political scenario. This research work is an attempt to find out cost effectiveness, considering the different aspects of cooperative sugar factory like sugar performance, financial scenario of the factory, types of byproducts product production, fixed investment, production cost, sale of byproducts, raw material availability, availability of skilled human resource, shift of production, certification for byproducts production, marketing department for selling byproducts, market channel, mechanism for byproducts production, net profit percentage from byproducts, employee training for effective production of byproducts, respondents view regarding byproducts production, cost sheet of sugar factories, problems in byproducts production and marketing, influencing factors on cost effectiveness of byproducts, initiatives for cost effectiveness of sugarcane byproducts etc. and tried to understand the cost effectiveness of sugarcane product and byproducts, which helps to increase profitability and operational efficiency of the sugar mills of both the states. This study also attempts to compare the working of the sugar mills of different regions of Uttar Pradesh and Maharashtra. Therefore, various statistical tools and techniques are used for analyzing the data related with cost effectiveness of sugarcane byproducts with reference of cooperative sugar mill, which emphasized on cost effectiveness of sugarcane byproducts in cooperative sugar factories.

Table No 1: Production Performance of Co-operative Sugar Factories:

Sr. No.	Particular	Maharashtra*			Uttar Pradesh*		
		Mean	SD	C.V	Mean	SD	C.V
1	Total days	168.14	16.99	10.11	127.48	32.10	25.18
2	S. Cane crushing M.T. (SY)	7.91	0.37	4.70	3.25	0.98	30.26
3	Ave. Crushing Per Day M.T. (in thousands)	4.68	0.39	8.34	2.41	0.24	9.93
4	Capacity Utilization Day Crushing / (Rated capacity) x 100	112.97	15.75	13.94	82.44	6.13	7.44
5	Sugar Production in (Lakh/Qtl)	9.38	0.39	4.11	2.57	0.60	23.26
6	Sugar Recovery (in %)	11.87	0.13	1.07	8.22	0.13	1.58
7	Price of S. Cane Per Tone Rs.	2280.71	162.44	7.12	2527.16	86.33	3.42

(Sources: Field Work. Note: * indicates number of selected sugar cooperative factories in both states as 23 and 12 respectively).

Table No. 1 depicted that production performance of co-operative sugar factories in Maharashtra and Uttar Pradesh state in comparison of facts and figures of both state. In Maharashtra total crushing days mean value was 168.14, SD 16.99 and C.V. 10.11 followed by in Uttar Pradesh total crushing days mean vale 127.48, SD 32.10 and C.V 25.18, which indicate operation period of sugar season was less of Uttar Pradesh co-operative sugar mills as compare to Maharashtra co-operative sugar factories, followed by in Maharashtra sugarcane crushing in metric tons during season mean value was 7.91, SD 0.37 and C.V. 4.70 and in case of Uttar Pradesh co-operative sugar mills mean value was 3.25, SD 0.98 and C.V. 30.26. It means sugar cane crushing metric tons in Maharashtra was high and there were less variation as compare to Uttar Pradesh selected co-operative sugar mills. Thus, average crushing per day in Maharashtra mean value was 4.68, SD 0.39 and C.V. 8.34 and at other hand in Uttar Pradesh mean value was 2.41,SD 0.24 and C.V. 9.93, which shows the significant different of variation in per day crushing of sugarcane. Its reason behind is that almost all co-operative sugar factories in Maharashtra have been running with full capacity or over capacity and Uttar Pradesh co-operative sugar mills have been running with under capacity i.e. mean vale was 112.97 and 82.44 from Maharashtra and Uttar Pradesh respectively. Therefore, the sugar production of Maharashtra was high with low variation as compare to Uttar Pradesh i.e. mean value of sugar production was 9.38, SD 0.39, C.V. 2.57 and in Uttar Pradesh mean value 2.57, SD 0.60 and C.V. 23.26 in Uttar Pradesh. Moreover, recovery of co-operative sugar mills mean value was 11.87 and 8.22 from Maharashtra and Uttar Pradesh respectively. Finally, it is found that in Maharashtra sugarcane price mean value, was 2280.71, SD 162.44 and C.V. 7.12 and in Uttar Pradesh sugarcane price mean vale 2527.16, SD 86.33 and C.V. 3.43, it is understood that sugarcane price was high with variation as compare to Maharashtra due to their SAP and political demand. From the above data it is understood that the significant difference in production performance of Maharashtra and Uttar Pradesh based sugar mills as mentioned below.

From the below comparative facts and figures it is found that Maharashtra co-operative sugar has good production performance as compare to Uttar Pradesh co-operative sugar mills.

Table No. 2: Reason of significant different in Production Performance

Sr. No.	Maharashtra (N=23)	Uttar Pradesh (N=12)
1	High Installed Capacity Co-operative Sugar Factories i.e. average capacity was 3800	Low Installed Capacity Co-operative Sugar Mills i.e. average capacity was 2790
2	Over Capacity Utilization i.e.112.97%	Under Capacity Utilization i.e. 82.44%
3	High Recovery i.e. 11.87	Low Recovery i.e. 8.22
4	Less other sector Sugar Factories e.g. Public and Private.	More other sectors Sugar Mills e.g. Public and Private.
5	Optimum Sugarcane Price in relation with SMP/FRP and recovery i.e. Rs. 2280.71/-.	High Sugarcane Price in relation with SMP/FRP and recovery i.e. i.e. Rs. 2527.16/- due to SAP and other reasons

(Sources: Field Work).

Table No. 3 Byproduct production

Sr. No.	Product and Byproducts	Maharashtra	Uttar Pradesh
1	Sugar	23	12
2	Molasses	23	12
3	Bagasses	23	12
4	Press Mud	23	12
5	Distillery unit (Spirit)	20	06
6	Ethanol unit	15	00
7	Co-generation unit	16	00
8	Paper mill	01	00
9	Particle Board / Corrugated Boxes	00	00
10	Filter Cake / Manure / De- compost	23	10
11	Potable Alcohol	01	00
12	Carbon Di-Oxide (CO ₂)	01	00
13	Wax	01	00
14	Cattle Feed	23	12
15	Other	12	09
16	Total Byproducts Activities	205	85

(Sources: Field Work).

Table No 3 revealed that the sugarcane byproducts with their main projects. It is found that Maharashtra and Uttar Pradesh base sugar co-operative sugar mills are traditionally engaged in sugarcane byproducts production such as bagasses, molasses, press mud and distillery units etc. However, in Maharashtra, almost all sugar factories have taken more efforts to produce more number of sugarcane byproducts and this positive initiatives form Government as well as factory, which results positive effect on sugarcane by-production i.e. 150 by-products projects are operated by cooperative sugar factories of which 28 from ethanol and 68 from distillery units are produced 26.46 corer liters and 79.50 lit., respectively in form of sprit, ethanol and industrial alcohol, ENA and CO₂ etc., followed by 51 bagasses based cogeneration units generates 1075 M. W. electricity, followed by press mud use for de-composting plant producing manure and fertilizers etc and one more mill bagasses use for producing pulp and paper etc. and it is found that all these byproducts activities significantly contribute in their main project. However, Uttar Pradesh based sugar mills unable to take positive efforts for the cost effective sugarcane byproducts, which was need to sustain co-operative sugar industry in competitive age.

From the above information it is understood that Uttar Pradesh and Maharashtra are leading states in sugarcane production and its result is high sugar production due to their geographical as well as social-economical-potential background but also there were no significant efforts taken by cooperative factories for the value added and innovative sugarcane byproduct considering the potential market due to some limitations. If cooperative sugar factories can produce value added and innovative sugarcane byproducts with their different byproduct units, it will be helpful to sustain cooperative sugar factories and can be competed globally through value added innovative byproducts.

Table No. 4: Production cost: (Figures are Rs. Lakh)

Sr. No.	Product and Byproducts	Maharashtra		Uttar Pradesh	
		Average	Average (%)	Average	Average (%)
1	Sugar	29720.59	86.82	8496.73	94.19
2	Distillery unit (Spirit)	1939.07	5.66	524.16	5.81
3	Ethanol unit	0.00	0.00	0.00	0.00
4	Co-generation unit	1793.22	5.24	0.00	0.00
5	Paper mill	687.43	2.01	0.00	0.00
6	Particle Board / Corrugated Boxes	0.00	0.00	0.00	0.00
7	Filter Cake / Manure / De- compost	62.58	0.18	0.00	0.00
8	Carbon Di-Oxide (CO ₂)	18.44	0.05	0.00	0.00
9	Alcohol	0.00	0.00	0.00	0.00
10	Cattle Feed	0.00	0.00	0.00	0.00
11	Wax	0.00	0.00	0.00	0.00
12	Other	0.00	0.00	0.00	0.00
13	Total	34233.83	100	9020.89	100

(Sources: Field Work)

Table No. 4 shows the cost of production of sugarcane product and byproducts of which the basic aim was to understand the cost of sugarcane product and byproducts and it is found that cost of sugar in Maharashtra was 86.82%, followed by 94.19% in Uttar Pradesh. Furthermore, cost of distillery production in Maharashtra 5.66% and 5.81% in Uttar Pradesh, beside in Maharashtra some co-operative sugar factories are engaged in production of paper mill, de-compost, manure, CO₂, etc and its cost of production 5.24% followed by 2.01%, 0.18%, 0.05% respectively.

From the above data it is interpreted that selected co-operative sugar factories have been processing sugarcane byproduct, which are known as byproducts or co-products and all these are traditional sugarcane byproducts, but almost all co-operative sugar factories are showing consolidated cost of production, instead of this, in Maharashtra it is found that some selected factories show that the cost of production is significant along with their principal product, beside cost of production in UP was high due to their pricing policy of cane and different influential factors. However, almost all co-operative

sugar factories ignored cost of inter-process, which significantly affected on byproducts cost. Moreover, it is noted that, the mill (process) cost is comparatively less than the farm (cultivation) cost, especially SAP is higher in all sugar producing states. Overall, India's cost of production is higher than the major sugar exporters in the world like Brazil and Australia whereas it is comparable to China and Thailand [Report of KPMG, 2006].

From the above discussion it is concluded that cost of production of sugar and byproducts were high due to inter process cost and pricing of these byproducts. It is almost all co-operative sugar have been facing hurdles to produce cost effective byproducts and cost of production includes sugarcane purchasing price, harvesting and transportation cost, beside factory cost, management cost, selling and distribution cost etc. Hence, all factual information and field work experience *it is realized that proposed statements were proved as “cost of production of byproducts is higher at present in all co-operative sugar factories” and also “co-operative sugar factories are not producing sugar cane byproducts effectively”*. Thus, it is need to introduce sugar cane: process cost should be 70:30 formulas for the cost effective sugarcane product and byproducts production, which was suggested by Dr. Rangrajan committee and it is need to allocate cost as per of correlation between input and output value of product and byproducts.

Table No. 5 reveals that the comparatives sale of sugarcane product and byproducts rupees is in lacks. The basic aim was to understand market feasibility of sugarcane byproducts. In Maharashtra, percentage of sugar sale was 83.14%, mean value 28,583.22, SD 4,966.77 and C.V. was 17.38, followed by in Uttar Pradesh percentage of sugar sale was 92.28, mean value 6,979.35, SD 2590.79 and C.V. 37.12 and in Uttar Pradesh high variations has found as compare to Maharashtra. In this way calculated sale of enlisted sugarcane byproducts, which indicated the percentage of share of sugarcane by products within aggregate sale value i.e. in Maharashtra distillery units 3.89%, co-generation 3.88%, molasses 3.84%, bagasses 1.91%, press mud 1.40%, other products 0.42%, ethanol units 0.37%, alcohol 0.32%, and manure 0.21% and on the other hand in Uttar Pradesh traditional sugarcane byproducts were contributed in sale value like molasses 5.15%, bagasses 1.13%, other 1.22% and manure 0.22% etc., this helps to understand market feasibility of sugarcane byproducts.

Table No. 5: Sale of By Products (Sales figures are in Rs. Lakh)

Sr. No.	Product and Byproducts	Maharashtra				Uttar Pradesh			
		Sale %	Mean	SD	C.V	Sale %	Mean	SD	C.V
1	Sugar	83.14	28583.22	4966.77	17.38	84.47	6979.35	2590.79	37.12
2	Molasses	3.84	1319.93	381.10	28.87	4.71	389.47	154.94	39.78
3	Bagasses	1.91	657.69	524.94	79.82	1.03	85.37	43.37	50.80
4	Press Mud	1.40	481.78	112.14	23.28	0.00	0.00	0.00	0.00
5	Distillery unit	3.89	1338.50	536.75	40.10	8.46	699.22	180.11	25.76
6	Ethanol unit	0.37	127.89	66.89	52.30	0.00	0.00	0.00	0.00
7	Co-generation	3.88	1334.86	860.00	64.43	0.00	0.00	0.00	0.00
8	Paper mill	0.03	10.71	4.30	40.16	0.00	0.00	0.00	0.00
9	Particle Board	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	Manure /De-compost	0.21	70.96	36.18	50.98	0.20	16.91	10.09	59.68
11	CO ₂	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Potable Alcohol	0.32	110.23	16.48	14.95	0.00	0.00	0.00	0.00
13	Cattle Feed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	Wax	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	Other	0.42	145.66	127.41	87.47	1.12	92.17	38.94	42.24
16	Total	100.00	34381.43	6606.38	19.21	100.00	7563.27	2801.27	37.04

(Sources: Field Work)

Hence, it is understood that sugarcane products have huge demand due to increased consumption year by year and sugarcane byproducts have more demand from different industries, due to its several uses, increased export potential of sugarcane byproducts.

The data reveals that the sale of sugar is higher than the other byproducts. Sugarcane byproducts sale has increased year by year and there is a high variation in the sales value of sugarcane byproducts. It is also found that due to viable sugarcane byproducts almost all co-operative sugar factories in Maharashtra should turn their investment in sugarcane byproducts, which supports to main project but also in Uttar Pradesh co-operative sugar mills are traditionally engaged in sugarcane production, where sugarcane byproducts have demand in local market such as molasses for spirit production and bagasses use for bricks making and paper mill industries, instead of this some

mills are taking manure and fertilizers production and its reason behind is that, in Uttar Pradesh there are low capacity mills and it has high competition with other private sector mills.

From the above analysis and interpretation it has understood that sugar production percentage is high but sales price of sugar is not high and other sugarcane byproducts demand is increasing due to several use and market potential and there is a high variation because of change in production, supply and demand as compare to main product but also all sugarcane byproducts have good sales value, which helps to generate revenue for the co-operative sugar factories. Thus, it is also found that the Indian sugar industry has crushed about 70-80 per cent of the sugarcane for sugar production and remaining cane accounted for the production of local sweeteners (khandsari and gur), seed, feed, cane juice, chewing and waste. In sugar mills there are some traditional byproducts, such as molasses, bagasses and press mud, which are produced in the first stage of processing of sugarcane. Moreover, it seems that the per capita consumption of sugar in India is lowest in the world and it is expected to be around 20 kgs per annum, by the year 2007-08, which has below the per capita consumption of Brazil, were has around 58 kgs per person per annum. Furthermore, India has export potential of sugarcane byproducts in form of value added products like co-generation, industrial alcohol, spirit, ethanol blending programme, bio-gas consumption, CNG gas etc., this shows the market feasibility of sugarcane products and byproducts at local, regional, national and international market. *Therefore it is need to turn the investment on viable sugarcane byproducts by co-operative sugar factories considering the market feasibility but also it is found that the Government policies are having significant impact on co-operative sugar factories byproduct production and their marketing decision because of the markets for these byproducts are tightly or rigidly regulated by the Government, so that their true market value has not realized by the sugar factories, it is leading to loss of potential revenue. Thus, majority of co-operative sugar factories are not framing sound marketing policies for their sugar cane byproducts and lack of linkage between byproducts production and its marketing, which is due to lack of efficient management in sugarcane byproducts production and its marketing.*

Table No. 6 shows that the availability of skilled employee and it is found that in Maharashtra, 30% and 22% (52%) respondents said partly available and not available skilled employees respectively and mostly (48%) said skilled employees are available and in Uttar Pradesh majority (58%) said available and remaining 34% and 8% (42%) said partly available and not available respectively.

Table No. 6: Availability of skilled Employee

Sr. No.	Particular	Maharashtra		Uttar Pradesh	
		N	%	N	%
1	Available	11	48	07	58
2	Partly Available	07	30	04	34
3	Not Available	05	22	01	08
4	Total	23	100	12	100
5	Mean		1.74		1.50
6	SD		0.81		0.67
7	Skew		0.53		1.07

(Sources: Field work)

From the above data and field work experience it is interpreted that almost all sugar mills are established at rural area considering resources and established aim was to generate employment in rural area. Therefore, almost all Maharashtra as well as Uttar Pradesh is based on co-operative sugar factories facing problem regarding availability of skilled employee. It is also found that Maharashtra and Uttar Pradesh co-operative sugar factories are established as per the State Co-operative Act and there is a different administrative structure and considering the administrative structure it is observed that there has a restriction on recruitment, compensation, promotion and development of skilled employee work force. It is noted that in Uttar Pradesh based co-operative sugar mills have fully controlled by Government in administration activities although there are active members' representatives in factory operation. Considering this in Uttar Pradesh based co-operative sugar mills facing shortage of skilled employee and on the other hand Maharashtra based co-operative sugar factories are facing excess employee force, those who have lack of proper skills and it is also found that, almost all sugar factories set up at rural area where it is difficult to hire technical and qualified staff. However, considering present need of co-operatives sugar factories it is need to concentrate on skill development activities at factory level as well as it is need to hire skilled staff as per project requirements, which will help for the effective production of sugarcane byproducts.

5. Conclusion:

From above comparison with the help of considered facts and figures and predetermined attributes such as sugar performance, financial scenario of the factory, types of byproducts production, fixed investment, production

cost, sale of byproducts, raw material availability, availability of skilled human resource, shift of production, certification for byproducts production, marketing department for selling byproducts etc. It is concluded that various types of byproducts contributing overall performance of co-operative sugar factories, where capital investment is high. Furthermore, it is found that almost all selected co-operative sugar factories could not be identified inter process cost and pricing of these byproducts during each step of production process. Financially, it is found that cost effective sugarcane product and byproducts are significantly contributed to selected co-operative sugar factories and it has untapped market potential. However, it is found that Government policy has considerable impact on byproduct production and marketing. It is need to take efforts for the best alternatives of sugarcane byproducts. Moreover, it is also realized that, the cost of production of byproducts is higher at present in all co-operative sugar factories because of co-operative sugar factories are not producing sugar cane byproducts effectively.

6. References:

1. Field Work.

A Study of Business Development Plans for PACCS in the Union Territory of Puducherry Connect with Members Participation

¹B. Kanimozhi and ²Dr. S. V. Akilandeewari

Abstract:

The cooperative sector in Puducherry has a significant role in the life of rural people as well as the urban population. It has a small surrounding area and limited population and also has many kinds of cooperative sectors showing noteworthiness. Among the various types of cooperatives, primary agricultural credit cooperatives are one of the oldest forms and are widespread all over India. In the Puducherry region, nearly 45 Primary Agricultural Cooperative Credit Societies are extending their services to the people including Karaikal, Mahe and Yanam. These agricultural credit cooperatives functioning under the two tier structure in the UT of Puducherry. It is providing finance to the members and paves the path to rural development also. In this competitive business environment, the existence and evolvement of PACCS is a real hardship among the other financial and banking institutions. The position of the banking business keeps changing with every new business entry into the real business world. Under this circumstance, the survival of primary agricultural credit cooperative societies is considered as real-time trouble, so this study analyses the financial position of the PACCS in connection member's perception on business development plans.

Keywords:

PACCS, Financial position, Business development plans, Members benefits.

¹Research Scholar, Department of Cooperation, The Gandhigram Rural Institute (Deemed to be University), Tamil Nadu

²Assistant Professor and Head, Department of Business Administration, Aathoor Cooperative Arts and Science College, Tamil Nadu

Introduction:

The cooperative sector in Puducherry has a significant role in the life of rural people as well as the urban population. It has a small surrounding area and limited population and has many kinds of cooperative sectors showing noteworthiness. Among those various types of cooperatives, primary agricultural credit cooperatives are one of the oldest forms and are widespread all over India having more numbers. In the Puducherry region, nearly 45 Primary Agricultural Cooperative Credit Society extending their service to the people including Karaikal, Mahe and Yanam, in connection with these agricultural credit cooperatives functioning under the two tier structure in the UT of Puducherry. It is providing finance to the members and paves the path to rural development also. In this competitive business environment, the existence and evolvement of PACCS is a real hardship among the other financial and banking institutions. The position of the banking business keeps changing with every new business entry into the real business world.

Statement of the Problem:

A primary agricultural cooperative credit society is a member-owned organization which has joined the business with the welfare of its shareholder and it should not face any problem of viability. Despite the widespread network and close relation with the members, credit recovery has come down over the years. Nowadays the climate of Puducherry is not favourable to the agriculture field; most of the PACCSs in the Puducherry region have completely stopped issuing agricultural loans to their members. Many studies conducted in this sector show the conditions of poor recovery performance, high mounting of NPAs, poor deposit mobilization among members and lack of product/service, improper management systems, low motivation among the employees, etc., are the reasons for the problem. Realising the significance of PACCS role in the growth of the rural economy, the Government of Puducherry has taken a few actions to reconstruct their functions and diversify their business plans. However, there are variations among the business plans followed by PACCS to increase their business turnover. In this context, it is necessary to discover answers to the following questions.

1. What are the business development plans adopted by the sample PACCSs in the Puducherry region?
2. What is the contribution of income generated through these business plans to the total income of the PACCSs?

3. What are the opinions of members on the business development plans of the sample PACCSs?
4. What are the further policy supports required by the sample PACCSs for the sustainability of business development plans?

Business development plan is the package of innovative ideas, new initiatives for better development of business activities and it helps business to be in better position for long run. It involves business growth, expansion, increasing profitability, generate revenue etc.

Objectives of the Study:

- To study the financial performance of the selected PACCS in Puducherry.
- To suggest business development plans for PACCS in connection with members' participation in the UT of Puducherry.

Methodology and Sampling:

This study adopts the diagnostic research study, collecting both primary and secondary data. The primary data were collected from the members of the society with a structured interview schedule and secondary data were collected from the financial statements of the selected PACCS in Puducherry. Therefore currently 45 Primary Agricultural Cooperative Credit Societies are functioning in all four regions in the union territory of Puducherry. Taking all 45 PACCSs into the account, two profit-making societies are purposively selected to analyse the financial position and also to suggest suitable development plans, as well as to infer appropriate benefits to its members.

Historical Profile of Agricultural Credit Cooperatives in India and Puducherry:

At the time of British rule in India Sir Frederick Nicholson, a British officer suggested and introduced the German Agricultural Credit Cooperative model to rural India; in connection with this, the first Cooperative Credit Societies Act of 1904 was enacted to the formation of agricultural credit cooperatives in India. Under this 1904 act cooperatives were get a legal direct entity, with sponsorship by the government. Further, the act was replaced by the form of, all types of cooperative societies act in 1912. From that point, rural India's agriculture has made significant progress in uplifting

the farming sector as well as the living standard of the farmers including common people. Especially the agricultural credit cooperatives started to spread their branches to reach every nook and corner of all villages in India, and now India has the largest network of credit cooperatives in the world and supports all kinds of credit needs to the people than other commercial banks. The agricultural cooperative credit societies provide strategic inputs to the farming community for the requirements at a concessional rate and help them to do better farming. When come to credit cooperative banking structure, the rural cooperative credit system has three-tier structures viz., short and medium term and long term. The short and medium-term credit cooperatives have a federal three-tier structure of a huge number of Primary Agricultural Cooperative Credit Societies (PACCS) at the grass root level, Central Cooperative Banks at the District level and State Cooperative Bank at the apex/state level.

The Union Territories and small states have two-tier structures with PACCS and State Cooperative Bank straight meeting with the credit requirements. Below table shows the performance of two tier Short Cooperative Credit Structure in the Union Territory of Puducherry.

Table 1: Progress of Pondicherry State Cooperative Bank (PSCB) and Primary Agricultural Cooperative Credit Societies (PACCS) in the Puducherry Region

(Rs. in Lakhs)

Performance Indicator	2016-2017		2017-2018		2018-2019		2019-2020		2020-2021	
	PSCB	PACCS	PSCB	PACCS	PSCB	PACCS	PSCB	PACCS	PSCB	PACCS
No.of.Societies*	1	53	1	53	1	53	1	53	1	53
Membership	124124	172	131313	137	137882	179	137882	172	280	190
Share Capital	2595	1224.61	2750	1226.33	2836	1253.5	2815	1431.84	2848	1257.37
Deposits	65301	13593.29	67730	14824.6	71101	15782	72765	17259.85	75352	19900.44
Borrowings	278	3082.17	62	3326.54	0	3937.52	0	4216.14	0	4917.3
Reserves	4876	1167.46	2041	1678.21	2076	1538.06	2115	1520.93	4774	1640.32
Working Capital	75805	19067.53	78371	21055.68	85497	22511.99	80198	24428.76	82323	28494.07
Total Loan Issued (ST+MT)	50423	49288.9	56126	40140.83	68733	7275.89	60707	4997.89	74914	2948.83

(Source: NAFSCOB) (* in numbers)

The history of the cooperative movement in the Union Territory of Puducherry

begins with the merger of the Union territory with India in 1954 because of French colonialism. Even though the movement was started late in the UT, it has made rapid growth in the all the sectors like credit, dairy, consumers, handloom, sugar, spinning, and housing etc., In the Union territory of Puducherry, there is a strong and vibrant co-operative set up and in every village, there is at least one co-operative society, be it agricultural credit or dairy cooperative. The cooperative movement in Puducherry has gained huge growth and progress over the years and this is proof from the table.

Table 2: Progress of All Cooperative Sectors in the Puducherry Region

Details	2001-02	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
No. of societies	482	524	520	516	516	508	507
Membership (No.)	3,93,256	5,97,103	5,77,097	6,60,960	6,21,780	6,24,010	6,33,540
Total working capital* (Rs.)	35,584.30	1,75,389.70	1,95,435.98	2,15,151.50	2,19,535.68	2,37,824.02	2,51,710.04
Share capital paid* (Rs.)	10,743.45	32,257.46	33,313.32	35,858.17	38,115.55	40,205.66	42,489.32
Population* (Nos.)	9.74	12.44	12.48	12.48	12.48	12.48	12.48
Average working capital*	3,657.17	14,098.85	15,659.93	17,239.70	17,591.00	19,056.41	20,169.07

(Source: Cooperation Department, Government of Puducherry)

Profile of the Selected PACCSs:

The Thalalakuppam Village Cooperative Agricultural Credit Society P.111 is the selected PACCS was registered on 23.01.1960 and started functioning on 27.01.1960. From that period they started to provide the time-based loan and fertilizers for their members to farm better and get high yields. To increase saving habits among the members the society is performing under the guidance of the Registrar of Cooperative Societies, Puducherry. The society was renamed the Thalalakuppam Primary Agricultural Cooperative Credit Society P.111 in May 1995. As per the plan, since then the society has been continuously doing banking business and has been making profits continuously since 2004-05.

Types of Loans provided by Thalalakuppam PACCS:

- Jewel loan (Agri.) at the minimum rate
- Self-Help Group loan
- Consumer loan (Government Employees)

And, the Kumareswaran Primary Agricultural Cooperative Credit Society

P.309 is the second selected PACCS was registered on 30.10.1974 and commenced its business on 21.11.1974. On 19.11.1999 the Kumareswaran PACCS celebrates its silver jubilee for its good performance. Since then Kumareswaran PACCS has been doing well by fully catering to the needs of the farming members.

Types of Loans provided by Kumareswaran PACCS:

- Crop loan (KCC)
- Jewel loan (Agri.) at the minimum rate
- Self-Help Group loan
- Consumer loan (Government Employees)
- Weaker Section loan
- Joint Liability Group loan (newly introduced)

Apart from this every Primary Agriculture Cooperative Credit Societies in the union territory of Puducherry providing 3 percent of interest rebate to the small and marginal farmers for prompt repayment of loan dues to the primary agricultural co-operative banks / primary agricultural co-operative bank/village co-operative agricultural credit societies/farmers service co-operative societies / Pondicherry State Co-operative Bank and Pondicherry Co-operative Central Land Development Bank with effect from 1.4.2009. Financial assistance of Rs. 500/- is provided as additional share capital to the women members of the primary agricultural co-operative credit societies/banks and Pondicherry Co-operative Central Land Development Bank. The Pondicherry State Co-operative Bank was implemented the Kisan Credit Card Scheme, to the members of the primary agricultural co-operatives credit societies (PACCS) and issuing Kisan Credit Cards to all eligible farmers to avail of Seasonal Agricultural Operation (SAO) loans from the PACCS. All the Kisan Credit Cardholders are eligible to obtain consumption loans @ 10% of the SAO loans availed by them. All the cardholders are covered under the Personal Accident Insurance Scheme (PAIS), and cardholders will be covered under the National Agricultural Insurance Scheme in respect of notified crops.

(Rs. in Lakhs)

Business Performance and Member's perception of the selected PACCSs**Table: 3 Business Performance of Sample PACCS**

Performance Indicator	2016-2017			2017-2018			2018-2019			2019-2020			2020-2021						
	Thavalakuppam PACCS	Growth Rate	Kumareswaran PACCS	Growth Rate	Kumareswaran PACCS	Growth Rate	Thavalakuppam PACCS	Growth Rate	Kumareswaran PACCS	Growth Rate	Thavalakuppam PACCS	Growth Rate	Kumareswaran PACCS	Growth Rate					
Membership*	6103	-	6155	6201	1.61	6386	3.75	6265	1.03	6610	3.51	6313	0.77	6769	2.41	6388	1.18	6922	2.26
Share Capital	12.96	-	24.04	12.96	-	24.72	2.83	12.99	0.23	25.74	4.13	13.00	0.08	26.28	2.10	13.00	-	26.76	1.83
Deposits	719.24	-	648.77	779.99	8.45	756.53	16.61	812.66	4.19	871.52	15.20	882.36	8.58	920.53	5.62	994.66	12.73	127.93	-86.10
Borrowings	65.86	-	71.71	61.02	-7.35	25.89	-63.90	54.84	-10.13	194.8	652.41	54.84	-	163.45	-16.09	-	-	-	-
Reserves	1.03	-	7.68	1.03	-	36.51	375.39	1.03	-	36.51	-	1.03	-	36.51	-	1.03	-	7.68	-78.96
Loan Issued	1025.69	-	582.16	1347.93	31.42	643.73	10.58	1306.41	-3.08	954.08	-48.21	1482.46	13.48	1024.39	7.37	2064.39	39.25	840.89	-17.91
Net Profit	7.25	-	2.26	7.66	5.65	1.77	-21.68	11.67	52.35	1.55	-12.43	29.24	150.56	4.53	192.25	21.85	-25.27	3.45	-23.84

(* in numbers)

(Sources: compiled from Audit report of the selected PACCS)

It was found that the share capital of the societies has been increasing gradually every year. Initially, both societies borrowed funds from the apex bank, in the year 2020-2021 there is no borrowed fund; which shows a positive indicator of the societies. Total loans issued by the Thavalakuppam PACCS increased from 1025.69lakhs to Rs. 2064.39lakhs during the year between 2016-17 and 2020-21. The respective figure for Kumareswaran PACCS was Rs. 582.16lakhs and 840.89lakhs. According to reserves both societies maintaining same amount during the study period. Every year the sample PACCSs gained net profit, the net profit position of Thavalakuppam PACCS showing increasing trend except the year 2020-2021. The Kumareswaram PACCS showing the decreasing trend except the year 2019-2020.

Table 4: Age-wise Distributions of the Respondents

Age distribution	No. of Respondents		Total
	Thavalakuppam PACCS	Kumareswaran PACCS	
Up to 35	3(15)	2(10)	5(25)
35-50	4(20)	3(15)	7(35)
Above 50	13(65)	15(75)	28(140)
Total	20(100)	20(100)	40(200)

(Source: Compiled from respondents schedule)

(Note: Figures in brackets are percentage to column total)

From the age-wise distribution table of respondents, it was found that the majority of the respondents stood in the age category of above 50 in both the sample PACCSs. However, the new emerging world should enable youngsters to PACCS as members.

Table 5: Accountholders in other institutions

Particulars	No. of Respondents		Total
	Thavalakuppam PACCS	Kumareswaran PACCS	
Commercial Banks	15(75)	17(85)	32(160)
Private Banks	1(5)	2(10)	3(15)
Regional Rural Banks	4(20)	1(5)	5(25)
Other financial institutions	-	-	-
Total	20(100)	20(100)	40(200)

(Source: Compiled from respondents schedule)

Commercial Banks were only having customers and not members. In this study, an effort has been made to understand the level of association of the respondents with the banks either as members of Private Banks or RRBs or as a customer of Commercial Banks while they were members of the selected PACCSs. The above table shows that majority of the respondents in both the sample PACCSs had a high percentage of transactions with Commercial Bank and comparatively low transactions with Private and Regional Rural Banks.

Table 6: Occupations of the Respondents

Occupation	No. of Respondents		Total
	Thavalakuppam PACCS	Kumareswaran PACCS	
Agriculture	18(90)	19(95)	37(185)
Non-farm sector	-	-	-
Govt. Employee	1(5)	1(5)	2(10)
Self Employed	-	1(5)	1(5)
Total	20(100)	20(100)	40(200)

(Source: Compiled from respondents schedule)

An analysis of the occupational model in rural areas shows the number of people who depends on both the agricultural and non-agriculture background of the selected societies. Though agriculture provides the livelihood for most of the people in the union territory of Puducherry, non-agricultural activities are also considered important supplementary sources of income for rural people.

The sample respondents were farmers, now the occupational profile has been changed based on the income generating capacity of the sub-sectors. Around 95 per cent of the respondents from Kumareswaran PACCS depended on agriculture as a primary occupation. For the remaining Non-Farm Sector, Government Service and self-employment are zero among the selected respondents. A few of the respondents in the category were Government Servants who also has lands. Nearly the same trend prevailed in Thavalakuppam PACCS.

Table 7: Total Sizes of Land Holdings

Land in Acres	No. of Respondents		Total
	Thavalakuppam PACCS	Kumareswaran PACCS	
Below 2.5	10(50)	2(10)	12(60)
2.5 – 5	4(20)	6(30)	10(50)
Above 5	6(30)	12(60)	18(90)
Total	20(100)	20(100)	40(200)

(Source: Compiled from respondents schedule)

For rural people, the land is considered the main asset, next to the home. The home provides shelter to them and whereas land helps the respondents to survive in this world. To take this into account, the size of landholding in agriculture plays a crucial role in the development activities of the agriculture sector.

Table 8: Perception of member respondents for the business development plans

Highly Standard	No. of Respondents		Total
	Thavalakup- pam PACCS	Kumareswaran PACCS	
Highly Satisfied	12(60)	14(70)	26(130)
Satisfied	6(30)	3(15)	9(45)
Neither Satisfied nor Dissatisfied	2(10)	3(15)	5(25)
Dissatisfied	-	-	-
Highly Dissatisfied	-	-	-
Total	20(100)	20(100)	40(200)

(Source: Compiled from respondents schedule)

The perceptions of sample respondents of both selected PACCSs were studied through a five-point Likert scale. The above table shows that the majority of the sample respondents in both the sample PACCSs want new business development plans for the societies to improve their livelihood.

Findings and Suggestions of the selected PACCSs for business development plans:

- ✓ Membership-wise both societies have improved year by year, but according to the age distribution table, the enrolment of the younger generation as a member of cooperative societies has been decreasing every year. Most of the members are old age only. To increase more members and enrol the youth into the cooperatives increase the agriculture sector as well as the youth engagement.
- ✓ The share capital of the societies has been increasing gradually every year. In the Union Territory of Puducherry as per the byelaw of the cooperative societies, a person who is having agricultural land inside the areas of operation can become an "A" class member, Government as a "B" class member and other members who are availing other than crop loan join as "C" class member. According to that, those who want to avail of jewel loan from the cooperative society have to join as "C" class members, in their concerned society.
- ✓ In the study period, both societies showed growth in mobilizing funds from their members, like other commercial banks the selected PACCSs also raised a large proportion of working capital through their deposits. The selected societies tap various deposits from their members, for example, fixed deposits, recurring deposits, matured deposits, mini deposits etc.,
- ✓ Borrowing is one of the major sources of working capital in cooperatives, in the selected. Initially, both societies borrowed funds from the apex bank, in the year 2020-2021 there is no borrowed fund; which shows a positive indicator of the societies.
- ✓ From the internal sources of the society to meet the unforeseen situation, the cooperative society set aside a portion of the fund from the profit is called as reserve fund. Every long-life institution should have more resources through its earnings and profits every year. In the study period, the selected TPACCS constantly maintained the same amount of funds for all the years, but in Kumareswaran PACCS they increased gradually from 2016-2017 to 2019-2020. In 2020-2021 it decreased.
- ✓ It was found that the total loan issued by the Thavalakuppam PACCS increased from 1025.69lakhs to Rs. 2064.39lakhs during the year between 2016-17 and 2020-21. The respective figure for Kumareswaran PACCS was Rs. 582.16lakhs and 840.89lakhs.

- ✓ The selected PACCSs constantly achieved a net profit in the study period with slight variations in the amount of profit.
- The selected PACCSs should increase the types of loans to its members. However, both societies issued similar kinds of loans, but the Thavalakuppam PACCS did not issue agricultural related loans. Especially both the selected PACCSs can extend their different types of loans like dairy, livestock, poultry, sericulture, mortgage loan, business loan, petty shop loan etc., to their "A" and "C" class members as well.
- Agro service centres, farmers' service centres and multiservice centres, innovative business practices will continue to strengthen societies in the long run. However, PACCSs can provide agricultural inputs like seeds, fertilizers, and other agricultural-related equipment to their members. If they restart those services, including add-on services like marketing arrangements with crop loans, and fair price shops (PDS), will strengthen the society's business at the base level.
- Digitalization and technology-based services will attract more members and youngsters to the cooperative banking fields. The National Cooperative Development Corporation already sanctioning financial assistance for the infrastructure development of the PACCSs. But, they may provide finance for the implementation of digitalization and business development of PACCSs.
- "Education, Training, and Information" is one of the principles of Cooperation to indicate how important education and training is for the development of the cooperative sector. Through this training method, PACCS can extend training in agriculture, farming-based entrepreneurial training, and Cooperative business model training to the members' family and their children above the age of 18 to attract more young generations into the cooperatives and agriculture field.

Conclusion and Recommendation:

Primary Agricultural Cooperative Credit Societies serve to fulfil the financial requirements of their members. Mostly the PACCS work has been stopped because of the unavailability of funds. Resource mobilization is one of the significant factors to convert PACCS into strong and viable units. It's their responsibility to attract more deposits from members and borrowings from the apex banks. The current environments have created lots of new opportunities for the sample PACCSs. The business experiences of viable PACCSs in the Union Territory of Puducherry revealed that the business

development plans have involves different processes according to the current trends and needs of the people. From the Cooperation department side, they can conduct a need-based survey of the member families and point out the anticipated services by the member community, prioritise the needs based on the urgency and include the member's view on decision making, provide credit and non-credit facilities to all members and their families, based on their needs.

And finally, strategically position the appearance of the PACCSs in the daily life of the members through appropriate promotional development plans. Agriculture is one of the major backbones of Puducherry. The important factor that articulates the overall growth of agriculture is the availability of adequate credit facilities from institutional sources in time and the availability of other services to increase agricultural production in the union territory of Puducherry. From the field study, it was noticed that majority of the respondents have link with other types of Rural Financial Institutions. Since then, the Primary Agricultural Cooperative Credit Societies are the only farmer-friendly credit institution for small and marginal farmers. The sample respondents had long time relationship with the selected PACCSs; through that relationship it is possible to grab business development. Further, the PACCS needs to prepare a realistic Business Development Plan by foreseeing the future technological and other changes and the farmer member's requirements.

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Role of Marcel Urban Co-operative Credit Society in shaping the economic condition

Pratiksha Ghadi*

Abstract:

Co-operative banks have led India to a new dawn of progress by taking banking to the common people in both rural and urban areas. Cooperatives are based on the values of self-help, self-responsibility, democracy, equality, equity and solidarity. Need of urban co-operative banks the extremity of urban co-operative banking system in India started during the nineteenth century. Banking as an integral part of tertiary sector has made a remarkable progress and expansion in the state of Goa. This paper is an attempt to study the Growth of the Marcel Urban Co-operative Bank in Goa. This bank is selected for the study, keeping in view the role and involvement in shaping the economic condition, especially in terms of Number of Branch offices, Membership, Employees, and Deposits. Under the business promotion the society, in spite of COVID19 situation, organized the program for the local people. As per the study, Marcela Urban co-operative credit society ltd during the last 30 years is making continuous progress and has become one of the leading co-operative societies in the state of Goa as per the reports of Registrar of Co-operative Societies.

Keywords: Co-operative, Progress, Challenges

1. Introduction:

Co-operation is derived from the Latin word “co-operari”, “co” means with and “operari” means to work. In other words, co-operation means working together with others for a common purpose. Co-operation is self help as well as mutual help. It is a joint enterprises of those who are not financially strong and cannot stand on their own legs and therefore come together not

* Assistant Professor of Commerce, PG Department Of Commerce,
Government College of Arts, Science and Commerce, Khandola- Marcela, Goa

with a view to getting profits but to overcome disability arising out of want of adequate financial resources” and this better their economic conditions. Shanthi. R (2017).

Co-operatives play a vital and predominant role in catering the credit needs of small and marginal farm and poor living in rural areas. Co-operatives were introduced in 1904 in India with the enactment of Co-operative Credit Societies Act. The main objective of co-operatives is to help the most distressed class of rural people who were exploited by the rural elite for several years. The Cooperative Act of 1912 was passed to improve their cooperative movement which provided for federal cooperatives in India. Ever since, the credit through cooperatives is significant in the country. As a significant part of the multi-agency approach to credit delivery in India, cooperatives, both the short-term and long-term structure hold an important position, especially in the rural credit scenario and have played a pivotal role in the development of rural credit over the years. The geographical spread of the entire co-operative credit system covers over 74 per cent of rural credit outlet (K. Nagi Reddy and. Chandraiah2019). A co-operative bank is a financial body that belongs to its members, who are the customers and also the owners of their bank at the same time. These banks are time and again made of people who belong to a similar professional or local community that share the same interest. (R.Nayak 2020)

A 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. Cooperatives are based on the values of self-help, self-responsibility, democracy, equality, equity and solidarity. In the tradition of cooperative founders, members of cooperatives believe in the ethical values of honesty, openness, social responsibility and caring for others.”(R. Sahu2010)

Need of urban co-operative banks the extremity of urban co-operative banking system in India started during the nineteenth century. Now a- days these UCBs have become the integral part of the Indian economy system. The UCBs helps in channelizing the idle savings of the society into a fruitful venture. Apart from channelizing the abortive savings, it also helps in the development of small & medium scale enterprises in urban areas by providing considerable credit facilities. (Dr. Hajera Fatima Khan2018)

The need for urban co-operative banking was initially felt when the Swadeshi joint stock banks did not take interest in providing credit to the urban middle class. The urban co-operative banks operate in metropolitan, urban and semi-urban centres and are targeted to cater to the credit needs of small borrowers like small scale industrial units, retail traders, professionals and salaried persons. These banks can organise and bring together the middle and working classes in urban and semi-urban areas and inculcate in them the habit of thrift and self help and acquaint them with the elements of ordinary banking principles. These banks can rescue the middle and working classes from the exploitation of money lenders and other unscrupulous agencies by providing credit on a reasonable term which is important in the contest of rising prices and cost of living. (S.Pandhre2016)

The urban cooperative banks are meant to uplift the poor and deserved weaker sections. The cooperatives banks in India emerged out of official policy, expanded largely in the post-independence era. These banks have come a long way since the execution of the Cooperative Societies Act, 1904 with an extensive coverage with local operational work base. They helped in enlarging the range of institutional credit by way of providing banking access to the urban and rural masses, and cultivating the banking habits among the poor who are unreached by the formal organizational system (H.Khan2018)

Department of Co-operation Government of Goa:

Banking as an integral part of tertiary sector has made a remarkable progress and expansion in the state of Goa. The banking system in the state is broadly comprised of SBI and its associates, nationalized banks, private banks and co-operative banks. (S. Pandhre 2016)

The department of cooperation has brought out various welfare schemes for the development of co-operative movement in the state of Goa. It is the movement of mass people in the Co-operative field whereby all round progress can be achieved through the co-operative societies by availing all the facilities for improvement of their economic and social conditions.

The various types of co-operative societies are being provided with the financial assistance through the registrar of Co-operative Societies to strengthen their financial base in the form of:-

1. Govt. Share capital and interest free loan
2. Managerial subsidy.
3. Loan/subsidy for construction of Godown.
4. Loan/ subsidy for purchase of furniture and fixtures.
5. Loan/subsidy for purchase of computer and transport vehicles.

The Marcel Urban Co-operative Credit Society Ltd.:

The Marcel urban co-operative credit society ltd was established and registered on 24th January 1991 by a social worker Adv. Arun A. Naik who was also former president of the Goa Co-operative Union ltd. took the initiative of establishing an Urban co-operative credit society in Marcel by holding various meetings with the active social workers especially from villages such as Cumbharjua, St. Estevem and Marcel. The actual functioning of the society began with its inauguration, which was held on 24th August 1991 in presence of then Chief Minister of Goa Shri. Ravi Sitaram Naik, Minister for Co-operations Mr. Suresh Parulekhar, MLA of priol constituency Dr. Kashinath Jalmi. MLA of Cumbharjua constituency Shri. Dharma Chodankar. The membership of society was only 30 members and the share capital was Rs. 6000/- only. With the goodwill and the blessings of the members. The society has now completed 30 years of its successful tenure. Presently the membership of the society has crossed 8000 members and the share capital has reached to Rs. 180,00,000/- and is still increasing. During 30 years, the society has shifted to its own building from the former rental premises with its Head Office Branch and other three branches at Kundai, Ponda, and Sanquelim. The society has continued its progress in its economic field and has always contributed to the economy of surrounding villages by providing financial assistance by way of loans and has gained confidence of the depositors. The Marcel Urban co-operative credit society has regularly maintained their "A" grade in their Audit report for the last 13 years due to their efficiency and progress.

2. Literature Review:

R. Kenye (2022) studied the performance of Nagaland State cooperative bank with special reference to the financial sector by using the audited reports of 5 years. The study was descriptive based on secondary data and found that overall performance of the bank and net profit to total assets to be satisfactory.

N. Talla (2021) has done an analytical study on financial performance of Dharmavaram Urban cooperative Bank and studied the progress as well as growth of membership and share capital and other indicator and found that there was significant growth in the deposit mobilization, membership, loans and advances, working capital

R.Nayak (2020) tries to analyse the financial performance of Odisha state cooperative bank for the period. The methodology employed for empirical analysis on this study involves autoregressive distributed lag, augmented Dicky fuller test and Phillips perron. The empirical results suggest that deposit and advances impact the profit of the bank positively which cost of management, capital reserves leads to lower profit. Suggested the bank to follow proactive management of capital growth with higher deposit generation and larger advances strategy to become a strong bank and grow steadily.

K. Keerthi (2020) analysed the overall financial position of the banks using ratio analysis. The secondary data was used for the entire study and identify the profitability and liquidity position of the Kumbakonam Central Cooperative bank and analysed the financial strength and weakness of the firm and study reveals that return on asset ratio was in fluctuating trend and suggested bank to take necessary steps to improve its cash position and increase its profitability position.

M. Patil(2019) highlighted the genesis of Urban cooperative banks in the world and in India and evaluated the financial position of Tasgaon Urban cooperative bank with regard to share capital, deposit, working capital, and profitability and also assess the opinion of the bank customer as regards various banking facilities and services offered by the bank. The study was based on primary and secondary data and personal discussion.

P. Agarawal (2018) focused on investigating the major factors that influence districts Cooperative bank financial performance and analysed the balance sheet and income statement and also discussed the financial ratio. The data was collected from various websites, journals, and magazines and analysed using ratio analysis and trend analysis methods and found that comparative statements showed a positive level but no constant improvement in their values year by year. Lack of available information on banking products is a major problem.

Shanti(2017) analysed the operation performance of the urban cooperative bank limited during the period of 2002-2013 and measured the financial efficiency of urban cooperative bank limited during and suggested measures to improve the urban cooperative bank in Tamil Nadu.

S. Pandhre (2016) stressed on credit to deposit management done by co-operative banks in the state of Goa for the period of ten years and tried to look at growth of deposit with the co-operative and studied how credit deployment is done by the co-operative and found that growth in number of branches have positive trend and membership in cooperative have been increasing and performance of the bank is found to be very good in all parameters during the study period.

S. Bhat (2012) studied the role of state cooperative banks in the banking sector and analysed the financial performance of the banking sector for the last 12 years. The data collected was based on secondary data and found that the adoption of technology required banks to re-engineer processes.

Research Gap:

The review of literature clearly reveals that no research was previously conducted on the growth of Marcel Urban cooperative credit society ltd. Hence the research aims to fill the gap by analysing the performance and services the bank provides for its society.

Period of The Study:

This study covers the period from 2017-18 to 2021-22 in the state of Goa.

Objectives of The Study:

1. To study the challenges faced by Marcela Urban Co-operative Credit society.
2. To study the progress of Marcela Urban Co-operative Credit society.
3. To study the business promotion activities undertaken by Marcela urban co-operative credit society.

Research Methodology:

This paper is an attempt to study the Growth of the Marcel Urban Co-operative Bank in Goa. This bank is selected for the study, keeping in view the role and involvement in shaping the economic condition, especially in terms of Number of Branch offices, Membership, Employees, and Deposits. The data is collected from secondary sources i.e. annual reports of the Marcel Urban Co-operative Bank. Research is based on primary as well as secondary data collected from annual reports of the branch and personal discussion with the branch incharge Mr. Anant Naik.

Challenges faced by Marcel Urban cooperative Credit Society:

The term challenge is not a static term but a dynamic term which changes from time to time, day to day, from area to area and from people to people and also types of businesses done by the societies as per their bylaws. The following are the major challenges faced by Marcela Urban cooperative credit society.

1. Competition among the societies:- This is a challenge because the co-operative have overlapping areas of operation and each society is formulating their own policies in order to remain in the competition with each other thereby overshadowing the small societies. There are many cooperative credit institutions functioning in the area.
2. Deposits:- The deposits have become a challenge due to some of the societies offering high rate of interest which leads the people to rush to the institution that gives more rate of interest.
3. Advancing:- Advancing is in fact the business of the society giving life as the advancing more the incoy and thereby more growth of the society but proper advancing would always give life to the society and bad advancing would put the society to the sickness. The advance was hit in between during the last two years due to shake in business on account of COVID situation.
4. Management:- Management of the society is the brain giving energy to the whole body to function in a better manner. Good, efficient and knowledgeable management makes the society not only efficient but also brings it to the leadership positions in gaining the trust of the members.

Analysis And Findings:

Comparative Chart showing Progress of Society					
Particulars	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Members(No)	6748	7585	8240	8734	9088
Share Capital*	1,11,52,500.00	1,48,93,500.00	1,73,99,100.00	1,89,91300.00	2,01,08,900.00
Deposits*	17,19,04,357.97	21,93,31,021.27	26,58,07,702.25	31,58,31,047.46	33,74,85,772.30
Advance*	15,34,46,899.93	21,53,44,309.43	25,28,18,980.43	27,50,38,235.77	29,25,56,252.69
Audit	"A"	"A"	"A"	"A"	"A"

Source: - Annual reports of MUCCSL Ltd. from 2017 to 2022. * Rs. Cr.

Members and share capital:

As on 31/03/2022 the paid up share capital of the society stood at Rs.2,01,08,900.00 as compared to Rs.1,11,52,500.00 on 31/03/2018.

The number of members admitted by the society till the end of 31st March 2022 is 374 and presently there are 9088 members in the list. The society has continued with its technical facility which has proved accessible to members in getting the knowledge of their transactions at hand.

Deposits:

The society during the last financial year has done the business of Rs 51.05 crores showing an increase of Rs. 4.5 crores. The deposits have reached Rs.33.74 showing an increase of Rs. 2.16 crores.

Advance:

During the financial year 2021-2022, the society advanced an amount of Rs. 10.10 crores by way of various loans schemes and the total advances have reached to Rs. 29.25crores.

Business Promotion activities from the year 2018-2022:

1. The society has formulated Marcel Urban Education scheme 2019 under this scheme a library consisting of a cupboard with books was provided to two schools within the Marcel area.
2. The new scheme of giving training to fresh graduates for a considerable period and giving them stipend and certificate during the training period.
3. The society conducted Vanamahotsava on 19th July 2019 at the hands of

chairman of the society in the surrounding areas at head office building of the society.

4. Distribution of study materials program was held at Government Primary school, Akhada on 15th Aug 2021. Society provided a cupboard and library books to the primary school.
5. Education Adoption schemes have been formulated mainly to provide financial assistance to the students pursuing professional studies till the completion of degree course.
6. Vendors meet was conducted for small market vendors such as Vegetable, fish and other types of vendors whose turnover is somewhere around Rs. 10,000/- per month. The meet resulted in launching of unique scheme "SAHAJ 21" the scheme specially designed for the open market vendors. 40 members from Marcel Market have taken the advances and society is further thinking to extend this scheme to other branches also. The scheme was started with Rs. 10,000/- to be repaid in 12 monthly installments.
7. The success of "SAHAJ 21" has given an inspiration to society for the formulation of yet another scheme namely "PILOT 22" meant for the motorcycle and rickshaw operators used for commercial purposes.
8. Self help group meet was held on 28/08/2021 from the surrounding area of various self help groups and 45 representatives of groups have participated and given their valuable suggestions. The attendance have influenced the society to conduct the activities for this group and come up with " Chaturthi Bazar 2021" where the product's prepared by self help groups were held for display cum sale during 5th and 6th September 2021.
9. An essay writing competition was conducted for the higher secondary and College students. The students gave a good response by contributing 33 essays received from all over Goa and the best 6 essays have been awarded prizes.

Conclusion:

As per the study, Marcela Urban co-operative credit society ltd during the last 30 years is making continuous progress and has become one of the leading co-operative societies in the state of Goa as per the reports of Registrar of Co-operative Societies. Even during the times of COVID -19 situation of

the financial year society is among the few which have shown progress.

The present progress from the charts shows continuous Co-operations of the members and strong team work of the Board of Directors and the staff of the society.

The society has continued with its technical facilities which have proved accessible to members in getting the knowledge of their transactions at hand.

Under the business promotion the society, in spite of COVID19 situation, organized the program for the local people.

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Connecting Rural Cooperatives through Tourism: A Case of State of Goa

Namrata Jadhav*

Abstract:

The government of India started the cooperative movement in the year 1904. Cooperatives mean people come together to achieve their individual and society's goals. There are various types of cooperative societies are there in Goa and India. According to Goa's statistical handbook, 5078 cooperative societies were there in 2019-2020. Goa is the 25th state of India. The study focuses on the barriers to rural tourism in Marcela village of Goa and explores rural tourism development through the rural cooperative. Unfortunately, there are no such tourism cooperatives available in Goa.

Tourism is the fastest-growing business worldwide and the largest economy-generating industry. As per the Department of Tourism-Goa, in 2022, up to July, 39,05,153 domestic tourists and 73,682 foreign tourists visited Goa. Goa is famous for its culture and heritage. Local people of rural villages are also trying to develop tourism in their villages of Goa. The researcher selected Marcela village because it is near Panaji city. Most tourists visit Panaji city so the village people can attract tourists to Marcela village. The research is based on primary data with a structured questionnaire. The structured questionnaire is given to residents of Marcela village. The primary data was collected from the structured questionnaire by distributing the questionnaire to the local people from Marcela village. The researcher used Random Sampling Method among 60 respondents. The sample respondents for the study are 60. The techniques used to analyse the data are factor analysis and Frequency with the help of SPSS software. The present paper tried to know the residents' point of view.

Keywords: *Cooperative, Goa, Marcela, Residents, Rural Tourism, Tourism.*

*Student, M.Com Part II, Post-Graduate Department of Commerce, Government College Arts, Science and Commerce, Khandola, Goa

1. Introduction to Cooperatives:

According to the International Cooperative Alliance: "a cooperative is an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirants through a jointly owned and democratically controlled enterprise" (Anbumani, K., 2007). The government of India started the cooperative movement of India in the year 1904. There are different types of cooperative societies, such as fisheries cooperatives, consumer cooperative societies, cooperative credit societies, housing cooperative societies, etc. Every society has its objective or motive to form a cooperative society with its members. It is neither private nor government.

In 2019-2020, there were 5078 cooperatives societies in Goa and, overall 12,64,272 members. There are 2240 cooperative societies in North Goa and 764118 members. In South Goa, 2838 cooperative societies are there and 500154 members (Statistical Handbook of Goa, 2019-20). Some societies are in profit and some are in loss.

1.1 Evolution of Cooperatives:

The cooperatives were first started to help starved people in Europe to make people self-manage and self-reliant without requiring the governments to help. In India, there are a large number of cooperatives established from them. Some are authorised, and some are unauthorised. Cooperatives are formed with different purposes. The cooperative movement started in India in 1904. Goa is the 25th state of India. There are different cooperative acts in Goa for various reasons, and they follow it for their related areas. Before 1962 Goa was considered and initially governed by the Maharashtra state cooperative societies act 2001 and Goa cooperative societies rule 2003. These rules were applied from 2008 onwards.

1.2 Introduction to Tourism:

Tourism is the fastest-growing industry all over the world. The economy of Tourism of many nations has come to be recognised as a significant factor (Viramgami, 2012). Tourism is the largest economy-generated industry. In tourism, the activities should occur within 24 hours and up to one year.

Tourism planning in India started after Independence. The Government of India announced its first tourism policy on November 1982. Its primary mission of it was economic growth and to promote the image of India

abroad as a bright future. The main objective is to generate employment opportunities for local people. There are different types of Tourism, such as summer tourism, Rainy tourism, Winter tourism, Adventure Tourism, Conference tourism, Cultural tourism, Business tourism, Dark tourism, Health tourism, medical tourism, religious tourism, Ecotourism, Holiday tourism, Spiritual tourism and there are many tourists developed in India as well as abroad.

Goa was liberated on 19th December 1961, along with Daman and Diu. Goa became the 25th state of the Indian Union and was conferred Statehood on 30th May 1987 (Goa Tourist Directory, Department of Tourism). Goa is a small and beautiful state. Beyond beaches, fort, and temples, Goa has many other things, such as Rural villages. Nowadays many activities are taking place in rural villages of Goa to show their nature, culture and so on. Goan people can speak Konkani, English, Hindi, and Marathi. The Population of Goa is 14,58,545, of which males are 7,39,140 and females 7,19,405, respectively, per the 2011 census (Economic Survey 2020-21). Goa is rich in its culture. Goa's fame and glory are mainly due to its beaches. Goan beaches share the names of the villages within whose boundaries they lie. Goa follows 3 R's that is Relax, Rejuvenate, Recharge.

In 2021, 33,08,089 domestic and 22,128 foreign tourists visited Goa and in 2022, up to July, 39,05,153 domestic tourists and 73,682 foreign tourists visited. Tourists visit Goa and Peak Season from November to February throughout the year. Goa is beyond beaches, forts and temples; Goa has many other places, such as Rural villages. Many activities are taking place in rural villages of Goa to show tourists their nature, culture and heritage. Many Tourists visit temples for religious purposes. Tourism Transportation is also required in Goa; rail Transport, Air Transport, Road Transport, Internal Transport, Surface Transport, and Water Transport are widely used by tourists. Foreign tourists like to see the Goan culture. Now the rural people also started tourism activities in their villages. The villages like Surla, Kuskem, Gaondongrem, Ordant, Netravali, Chandor etc. (Numinous Goa book by Luciano, Costa) are the villages that are developing as rural tourism.

1.3 Rural Tourism:

United Nations World Tourism Organization (UNWTO) defines Rural Tourism as “a type of tourism activity in which the visitor’s experience

is related to a wide range of products generally linked to nature-based activities, agriculture, rural lifestyle/culture, angling, and sightseeing (Akturk, 2021). Rural areas are essential for eradicating poverty, environmental protection, and sustainable development (Ryan, 2009). Since the seventies, in rural areas, the remarkable increase in tourism activities in all developed countries worldwide they played an essential role in the development of economically and socially depressed rural areas (Perales, 2002). Moreover, rural tourism is a dominant source of income generating for rural economies (Hummelbrunner, 1994).

2. Literature Review:

Carson et al. (2022) studied the special issue 'Rural hinterland development in sparsely populated areas (SPAs): new challenges and opportunities arising from urbanisation within the periphery'. They examined the relationship between growing cities and hinterland areas in SPAs, such as those commonly found in the Arctic, Outback and similar remote resource peripheries of developed countries. The founded issue contributes to debates about how urban growth and city-centric development strategies in SPAs might impact development prospects for small and distant settlements in the hinterland.

Jena and Dwivedi (2021) explored and prioritised the barriers to tourism growth in rural India. The result of the study identified significant barriers and their importance to tourism growth in rural India.

Akturk and Demir (2021) identified the contribution of the cooperative movement in rural tourism activities to local people and cooperative members. They analysed the challenges faced and the tourism potential of the region. The study is empirical. The researcher collected primary data. They were founded that both contribute to determining the potential tourism region and enable the identification of local products of added value that can be evaluated in tourism.

Cunha et al. (2020) explored rural tourism entrepreneurs' motivations and management practices and the consequences of their actions, considering data obtained from eight small tourism accommodation units. Analysis revealed that entrepreneurs are motivated by different factors, with lifestyle

motivation playing a central role. Business efficiency and success are a constant concern; although informal, management practices are accurate.

Wanner and Haider (2019) investigated barriers to stakeholder involvement across eight rural regions. The study is empirical.

Perez et al. (2016) analysed different urban processes linked to two similar models of tourist growth in the hinterlands and Varadero Bavaro-Punta Cana's social reproduction spaces. The existence of human settlements before the tourism development, their political systems (socialism and capitalism) and their spatial planning are essential for the urbanisation and production of dual tourist cities in those regions.

Paimin et al. (2014) investigated local community participation and barriers to rural tourism. The researcher collected primary data from 83 respondents with a convenience sampling technique. They found the significant implication of community participation in tourism, especially in rural settings. More efforts should be made to ensure that many more communities participate in tourism.

Mohamad and Hamzah (2013) purposed to share how a tourism cooperative creates economic sustainability and brings sociocultural and environmental benefits to its members. This is a case study in nature. The researcher collected Primary as well as secondary sources of data. In-depth interviews were conducted with cooperative managers and cooperative members. Purposive sampling methods revealed that community cooperative effectively manages the local people's economic, sociocultural, and environmental concerns. Society's Perception of entrepreneurship and mainstreaming has changed. Shareholder ship enables higher community involvement in decision-making, increases tourism income distribution, solidifies the sense of ownership, strengthens socio-cohesion and, inevitably, increases community support.

Viramgami and Patel (2012) studied various tourist resources of Gujarat state according to nationality, gender, age group, opinion about facilities of tourist complexes, quality of food, the price being charged for the facilities and tourism promotion facilities at various types of tourist places, obtained

opinion about new activities to be introduced for tourism. The researcher had done a comparative study. Primary as well as secondary sources of data were used for data collection. Seven hundred ninety-seven domestic and 203 foreign tourists are sample respondents. The researcher used the Stratified Random Sampling technique. The present research paper provides insight into the tourist traffic trends in Gujarat state. It has become an attractive tourist place, and TCGL is progressively looking towards marketing tourism in Gujarat.

Timothy (2010) presented a normative tourism planning model which requires cooperation between government agencies, various administrative levels of government, same-level autonomous polities, and the public and private sectors. Primary and secondary data were used to collect the data and conducted 20 interviews with small tourism business managers. He was founded that they are separate from the planning practices already in place. Socio-political factors are considered the most important reasons for the need for cooperative tourism planning in the study area. Other developing destinations with similar human environmental conditions would also need to improve using cooperative planning principles.

Aref and Gill (2009) determined the status of rural tourism in Iran and highlighted the barriers to rural tourism in Iran. The researcher has done a case study here. Founded rural cooperatives are a major critical success factor in rural tourism. This study can motivate future investigations into rural cooperatives for tourism development in the local areas in Iran.

Pesamaa, Hair JR (2008) examined cooperative relationships in the tourism industry to understand better what makes them successful. This study is empirical. Primary as well as secondary data were collected for research. Out of the 254 sample sizes, only 99 individuals responded. The researcher used Descriptive, Correlations, Confirmatory Factor Analysis, Simple Regression Models, and Hierarchical Regression for data analysis techniques. The finding demonstrated that the relationship between trust and inter-organisational commitment is mediated by interpersonal responsibility. Thus, tourism firms should develop cooperative strategies in their networks by enhancing interpersonal commitment through faith, ultimately helping to strengthen inter-organisational commitment.

Pesamaa et al. (2007) examine the role of trust between small tourism firms when cooperation is established. Primary as well as secondary sources of data were used for data collection. The finding provides implications for tourism scholars and policymakers interested in developing managerial strategies based on personal relationships.

Lepp (2007) investigated residents' attitudes towards tourism in Bigodi. Results show that residents have consistently positive attitudes towards tourism. Positive attitudes result from residents' belief that tourism creates community development, improves agricultural markets, generates income and finally, that tourism brings random good fortune.

Andriotis (2005) studied the development gap between the hinterland and the coast and provided recommendations for bridging this gap. In this paper, the researcher did a case study and used a secondary data source. Founded that in Crete, there is an unequal distribution of tourist spending and accentuated regional imbalances, with the vast majority of tourism activity concentrated on the coast and economic activity in the hinterland mainly directed to agriculture.

Gartner (2005) examined the perspective on rural tourism development. The study is conceptual. Founded that old development models, which relied on the consumptive use of natural resources, could only support rural economies with government assistance.

Huybers and Bennett (2003) studied factors conducive to cooperation regarding the use of shared environmental resources identified from the standard property literature and the literature on regional clusters. This study is conceptual. Secondary data were used for data collection. Illustrated the Inter-firm environmental cooperation is expected to materialise in nature-based tourism clusters because the environment is the major regional characteristic that determines the cluster's competitiveness.

Cai (2002) delineated destination image and branding concepts and proposed a conceptual model of destination branding. This study is conceptual. Founded that cooperative branding results in a consistent attributes-based image across multiple rural communities as perceived by the tourist but builds stronger linkages of the image to the brand identity and more favourable affective and attitudes-based brand association for a region than for individual communities.

Wicks and Schuett (1991) examined the process of travel brochure dissemination from an agency and consumer perspective. They studied the use of brochures as a communication tool by producers of tourism products. Primary as well as secondary sources of data were used for data collection. Founded ubiquitous communication tool was not found to be used in a fashion that maximised its potential effect on consumers' travel decision-making.

Cohen (1984) studied the tourist motivations, attitudes, reactions and roles, the relations and perceptions of tourists and locals, the structure of the tourist system, and tourism's socioeconomic and sociocultural impact. This study is conceptual.

3. Research Gap:

After reviewing the literature, it was found that rural tourism entrepreneurs' motivations and management practices and the consequences of their actions, considering data obtained from eight small tourism accommodation units (Cunha et al., 2020), presented a normative tourism planning model which requires cooperation between government agencies, various administrative levels of government, same-level autonomous polities, and the public and private sectors (Timothy, 2010), studied various tourist resources of Gujarat state according to nationality, gender, age group, opinion about facilities of tourist complexes (Viramgami, Patel 2012), purposed to share how a tourism cooperative creates economic sustainability and brings sociocultural and environmental benefits to its members (Mohamad, Hamzah 2013), status of rural tourism in Iran and highlighted the barriers to rural tourism in Iran (Aref, Gill 2009), destination image and branding concepts and proposed a conceptual model of destination branding (Cai, 2002),

Very few studies have been done on Barriers to rural tourism and the development of rural tourism through rural cooperatives. So, the current study focuses on Marcela residents' Perceptions Towards promoting Rural Tourism through Rural Cooperatives in the state of Goa.

4. Research Problem:

The researcher selected Marcela village because its near Panaji city. Moreover, the villagers can easily attract tourists towards Marcela village.

Panaji is the capital of Goa, and many Domestic and foreign tourists visit there. Beautiful beaches and casinos and many eye-catching places are there in Panaji city. As we all know, nowadays, tourism is the fastest economy-generating industry, and rural tourism is gaining much importance today. Development of tourism-related places and businesses in the rural cooperative can help the local people to gain employment opportunities. However, the residents of Marcela village do not have much idea about rural tourism, so the researcher conducted a study to know the Perception of villagers and to gain knowledge about it.

5. Research Questions:

- i. What are the barriers to rural tourism in Marcela?
- ii. What problems do local people face developing rural tourism through rural cooperatives?

6. Research Objectives:

- I. To study the barriers to rural tourism in Marcela.
- II. To explore the development of rural tourism through the rural cooperative.

7. Research Methodology:

The study is conducted in Marcela village in the state of Goa. The study will be conducted in November 2022. The researcher used Primary as well as secondary sources of data. The primary data were collected from the structured questionnaire by distributing the questionnaire to the local people from Marcela village. Secondary data were collected by reviewing the articles, literature, and data from the Department of Tourism, Goa.

The researcher used Random Sampling Method among 60 respondents. The study is conducted to know the Marcela resident's Perception. The questionnaire consists of five parts; the first part consists of the demographic profile of respondents, the second part consists of statements regarding barriers to rural tourism, the third part consists of tourism-related businesses, the fourth section consists of subjective questions regarding the development of rural tourism through rural cooperative and the fifth part is the future scope for tourism development. The techniques used to analyse the data are factor analysis and Frequency with the help of SPSS software.

8. ANALYSIS AND FINDINGS:

8.1: Demographic Profile of Respondents

Table No.: 1 Demographic Profile

	Frequency	Per cent
I. Gender		
Male	28	46.7
Female	32	53.3
Total	60	100.0
II. Age		
15-25 Years	20	33.3
26-36 Years	11	18.3
37-47 Years	17	28.3
48-58 Years and more	12	20.0
Total	60	100.0
III. Qualification		
SSC	13	21.7
HSSC	13	21.7
Graduate	17	28.3
Post Graduate	16	26.7
Others	1	1.7
Total	60	100.0
IV. Occupation		
Government Servant	5	8.3
Private	21	35.0
Student	8	13.3
Farmer	1	1.7
Own Business	12	20.0
Currently Not Employed	13	21.7
Total	60	100.0
V. Length of Residence		
Less than five years	7	11.7
5-10 years	8	13.3
More than 10 years	45	75.0
Total	60	100.0

Source: Primary Data

Table no. 1 shows the demographic profile of respondents in Marcela village. 46.7 % of the respondents are males, and 53.3 % are females, a total of 60 respondents. 33.3% of the respondents belong to the age group of 15-25 Years, and the lowest percentage of respondents that is 18.3%, belong to the 26-36 Years of age group. 28.3 % of the total respondents are graduates, whereas 26.7 % are postgraduates, 21.7 % of respondents have completed SSC and HSSC, which is 21.7 %, and the rest have selected other options, 1.7 %. Most of the respondents are employed in a private job, that is 35 %, and 1.7 % of the respondents are farmers. 75% of the respondents have stayed in their residence for more than 10 years.

Table No.: 2 Tourism-Related Businesses Located at Marcela

	N	Minimum	Maximum	Mean	Std. Deviation
Traditional Clothes	60	1.00	5.00	2.9500	1.25448
Lodging places	60	1.00	5.00	2.9500	1.06445
General stores	60	2.00	5.00	4.0500	.81146
Restaurants	60	2.00	5.00	3.8333	.82681
Parking facilities	60	1.00	5.00	2.8167	1.24181
Transport facilities	60	1.00	5.00	3.3000	1.15421
Site seeing	60	1.00	5.00	2.4333	1.16977
Homemade Eatables	60	1.00	5.00	3.3000	1.15421
Handicrafts	60	1.00	5.00	2.8167	1.38383
Valid N (listwise)	60				

Source: Primary Data

The data were analysed with the help of descriptive statistics, and the output is displayed in Table No. 2. The mean value for General stores and Restaurants is 4.05 and 3.83, respectively, which indicates that there is good availability of General Stores and Restaurant Businesses in Marcel Village. The table shows that the mean value for Traditional clothes, Lodging places, Parking facilities, Transport facilities, Homemade eatables and Handicrafts are 2.95, 2.95, 2.81, 3.30, 3.30 and 2.81, respectively, which indicates that there are Fairly available businesses in Marcela village. The mean value for Site seeing is 2.43, which indicates a relatively poor scope for site-seeing businesses in Marcela.

8.2. Objectives: i) To study the barriers to rural tourism in Marcela:

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.538
	Approx. Chi-Square	639.932
Bartlett's Test of Sphericity	df	351
	Sig.	.000

Source: Primary Data

Table no. shows the KMO and Bartlett's test, which measures the sampling adequacy, which should be greater than 0.5 regarding barriers to rural tourism. The present study shows the value of the KMO test is .538, which is higher than 0.5, and the significance value is shown as .000, which is less than 0.05 and at a 5% significance level. Therefore, factor analysis can be undertaken by using the data set.

8.3. Objective: ii) To explore the development of rural tourism through rural cooperative:**A) Respondents' opinions about the benefits that can be derived from establishing a rural cooperative in the village of Marcela:**

The rural cooperative will help the villagers by providing government schemes and other facilities. Tourism cooperatives will help to promote local temples as tourist sites. If rural cooperatives are established, residents will get Employment opportunities besides self-employment, and more minds will engage. The new opportunities will get many unemployed youngsters to develop new businesses, and it will help give new entrepreneurs confidence regarding local businesses and increase the economy. Villagers can come together and establish Good Transportation facilities. Through rural cooperatives, locals will get Cheaper products. The Representative should motivate the people to come forward and engage in some workshops for villagers. Even the women will get employment opportunities by providing better food facilities. The rural cooperative will help set better tourism services for tourists and provide suitable facilities for the people in the village. The area around the village will be get cleaned. Residents will adopt the new technology.

B) Main source of livelihood for the people in the village of Marcela:

As per residents' opinion, small businesses, Jobs, farming, food, clothing shops, and general stores. Moreover, vendors also setting and sell vegetables. The majority of people are in the service and retail business.

C) Respondents' viewpoint regarding better development of rural tourism activities in the region:

As per respondents, some need to develop Rural tourism activities in the region due to the lack of employment opportunities. The local temples, such as Devakirishna temples, should be promoted so that the temples will get funds. If the Mahajan community visits the Devaki Krishna temples, they only get funds. Government should also support the village people in terms of development. Tourism related to the traditional Jatra of different temples can also be promoted.

8.4. Determining the Future scope for Tourism Development in the village of Marcela-Goa:

Table no. 4 illustrates the variables: starting their own business in a rural village, Reasons behind villagers not starting their own business, and Types of Tourism (promoting, Adopt and promote tourism). The majority of people that is 40 %, want to start an Eateries business in their village, and Accommodation is the least preferred business villagers will seek to persuade with 10 % of the population. More than half of the respondents that is 53.3 %, do not intend to start their own business due to lack of guidance, and only 11.7 % of the respondents state that due to lack of skills, they do not want to start their own business. Furthermore, 61.7 % of the respondents wish to promote religious tourism in their village, and 5 % want to start Heritage tourism there. Finally, 56.7 % of the respondents expect wish to adopt and promote their selected area through social media, and only a few will promote through Blogs, which is 3.3 %.

Table No.: 4 Future scopes for Tourism Development

	Frequency	Per cent
START OWN BUSINESS IN RURAL VILLAGE		
Local Products	14	23.3
Eateries	24	40.0
Traditional Clothes	7	11.7
Accommodation	6	10.0
Transport	9	15.0
Total	60	100
Reasons behind villagers needing to start their businesses.		
Lack of guidance	32	53.3
Lack of skills	7	11.7
Lack of knowledge	11	18.3
Seasonality effects	10	16.7
Total	60	100
Types of Tourism like to promote		
Adventure Tourism	7	11.7
Religious Tourism	37	61.7
Agro Tourism	9	15.0
Eco-Tourism	4	6.7
Heritage Tourism	3	5.0
Total	60	100
ADOPT AND PROMOTE TOURISM		
Social media	34	56.7
Initiatives by the tourism department	20	33.3
Word of mouth	4	6.7
Blogs	2	3.3
Total	60	100

Source: Primary Data

9. Findings:

Based on 60 responses, drafting a structured questionnaire to the residents of Marcela village with the random sampling method. After analysing the data with the help of SPSS software. Researchers found that the villagers want to start an eateries business in Marcela village. However, more than half of the respondents of, the local people, intend to refrain from starting their businesses due to a lack of guidance. Many villagers would like to promote Religious Tourism in Marcela village Because, as for local people, there are no such good places in the village. Hence, the local peoples say that Temples can be promoted in the Marcela. More than half of the respondents want to adopt and promote the selected tourism through social media. Some villagers want to avoid developing tourism in their area because tourists will come, the population will increase, and tourists will dirt the site. Moreover, some villagers wish to the development in their place because local people will get employment opportunities and income will increase.

10. Conclusion:

This study concludes that tourism planning is the most critical development process. Moreover, the people should come together to develop the tourism cooperative and plan the activities they can create. People should encourage each other so that they can show their ideas. Women can also be involved in this tourism plan because homemakers earn some income for their daily routines. The residents have many ideas for me, but I need to implement them. The government should support the villagers by giving them a subsidiary, Loan, so that they can also involve in tourism activities. Lack of capital, the villagers, stay behind to plan new things for their village and themselves. The villagers should keep the area clean. If a rural cooperative develops in Marcela village, many youths will get employment opportunities and support financially.

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An Analysis of Purchase and Sales Performance Of the Gobichettipalayam Agricultural Producers' Cooperative Marketing Society Ltd. - A Study

V. Krithika, S.Mohana Devi, and R. Sakthiskumar*

Abstract:

In the field of agriculture especially the marketing of agricultural produces the Primary Agricultural Cooperative Marketing Society is a vital institution for providing market linkage to the farmer members. The farmers are facing many problems in the process of marketing their agricultural produces especially getting right price for their produces. With lot of hurdles the Agricultural Cooperative Marketing Societies are trying to render marketing facilities to the farmers.

Hence, the study analyze the purchase and sales performance of the sample society through Trend

Analysis. The present study is based on descriptive in nature. Both primary and secondary sources of data have been collected and analyzed. Gobichettipalayam Cooperative Marketing Society is purposively selected which is proximity to one of the researchers for the present research.

Keywords: Cooperative Marketing Societies and Trend Analysis

Introduction:

In India, Agricultural is a way of earning livelihood. It is not a business for Indian farmers. The cooperative marketing has three distinct characteristics that separate from other business. They are member owned, member controlled and generate member benefit. Marketing is a form of communication between a business house and its customers with the goal of selling its products or services to them. Marketing cooperatives deals with the marketing of agricultural production such as food grains and commercial crops.

*(M.Com Coop. Management) Students, Department of Cooperation, GRI, Gandhigram

The cooperative marketing has conferred multifarious advantages of the farmers. The agricultural producer's cooperative marketing society has been started mainly to get a fair price for the agricultural producers of the farmers and also sold the products in a fair price to the consumers. The cooperative marketing society made a great impact on sales promotion of the agricultural products and they also supply seeds to the members for agricultural purposes.

The profile of k.544 Gobichettipalayam Agricultural Producers' Cooperative Marketing Society Ltd. :

The Gobichettipalayam Agricultural Producers Cooperative Marketing Society was registered on 01.02.1928 and started functioning from 05.02.1928. Marketing cooperatives was formed to develop the agricultural sector by selling agricultural produces at the reasonable price without private middleman. The society has been functioning with 28593 members in its own Head Offices, located near Gobi bus stand with 2 acres of offices and 9 Godowns with 3950 metric ton capacity.

They also have one Godown in Erode with 500 metric ton for turmeric sales. They also have 3 other Godowns in Nambiyur with 2500 metric ton, which is 20 KMs away from Gobichettipalayam. They have been marketing turmeric and agricultural produces all over the Tamil Nadu for about 92 years successfully. The area of operation of the society is confined in Gobi, Erode and Nambiyur. The liability of the society is 'limited' to the amount of share capital subscribed by the members.

Major Functions of the Society:

- The society supplies crackers during the festival time at good quality by purchasing directly from Sivakasi.
- They conduct tenders to sale paddy, bananas, coconut, sugarcane etc...,
- The turmeric tenders will held at Erode branch.
- The society also has its own Medical shop situated near the society for the sale of Medicines at fair price.
- The society also has its own kerosene bunk inside the society and one public distribution shop along with it.

Fixed Deposit:

The society only collects fixed deposits from its members. Fixed deposit is also called as 'Term deposit' or 'Time deposit'. These are repayable at a certain period or term. In fixed deposit, a fixed amount is deposited for a fixed period of time. The period varies from 3 -10 years.

Fixed Deposit Loan:

The society issues loans on the security of the deposit. Loans are granted on the security of the fixed deposit up to 80% of the deposit amount with a margin of not less than 20% of the amount of deposit. The rate of interest is 2% more than the allowance rate of interest of fixed deposit.

Review of Literature:

Budi Fredrick Tumenta, et. al., (2021) indicated that 80% of the respondents agreed that agricultural cooperatives play a role in rural development especially in the areas of trainings, increased output production, the provision of inputs and marketing of farmers produce.

Kehinde Oluseyi Olagunju, et.al. (2021) found that technical efficiency levels of members of agricultural cooperatives are consistently higher than that of non-members.

Eric Ofori et.al. (2019) found that membership of commercial vegetable cooperatives has so far had no effect on agricultural incomes or the value or amounts of agricultural inputs whereas membership has affected technology choice, access to credit services and information transmission through technological training.

Liu, Yuying et.al. (2019) found that risk attitude, farm size, machine ownership, sales ability, and demonstration level of cooperatives are main factors that determine the members' decision to use agricultural cooperatives as a marketing channel.

Smart Mhembwe and Ernest Dube, (2017) found that cooperatives were established as a strategy to sustain livelihoods of rural communities. People in the rural communities through cooperatives managed to generate employment, boost food production, empower the marginalised, especially

women, and promote social cohesion and integration, thereby improving their livelihoods and reducing poverty.

Anania, P.F and Towo, P. E. (2016) found that the services of cooperatives include; attaining economies of scale, access to markets and farm inputs, improving bargaining power and facilitate transport of members' produce. The contribution of cooperatives in terms of social and economic sphere has duly been attested by the members.

Siddique ABM (2015) states that Ministry of local Government & Cooperative Society have been playing vital role to bring farmers within the framework of Cooperative Society and has drastically minimized the role of middlemen in marketing agricultural products of Bangladesh.

Social Impact, (2015) showed that cooperative membership leads to a moderately strong and positive impact on farmers' production and yields, small but positive impact on farmers income and inconclusive impacts of market access, acreage and poverty.

MagigiWakuru and Massambu D. Massambu, (n.d.) have highlighted the historical development of the agricultural sector, activities and how these activities influence climate and therefore impacts on cooperative development.

Ellen Verhofstadt and MietMaertens (2014) found that cooperative membership in general increases income and reduces poverty and that these effects are largest for larger farms and in more remote areas.

Tchami(2007) observes that cooperation in most cases occurs when external factors threaten a certain number of individuals; hence, cooperatives are the best possible means of defense against the worsening social and economic conditions affecting a section of the population.

Schwettmann (2004) indicated that rural cooperatives are successful in economic development since they have been taken as business enterprises, whilst they practice economic fairness by ensuring equal access to markets and services among open and voluntary membership base.

Velusamy P and Dhevan K (2016) found that Tiruchengode Agricultural Producers' Cooperative Marketing Society has been playing a vital role in providing better services to the farmers in terms of good weighment, spot cash payment, and excellent auction system.

Virendra Kumar et.al (2015) found that successful cooperatives in India like IFFCO and KRIBHCO in the fertilizer sector, the Institution like AMUL in Dairy Sector and SHGs have immensely benefitted in increasing efficiency of various agricultural inputs and overall crop productivity and finally making better profit through the efforts of cooperatives.

Thomas Philip (1990), in his paper titled, "Institutional Development in Cooperative Marketing: A Glimpse of MARKETFED" analyzed Kerala state Cooperative Marketing Federation (MARKETFED) from two angles, I) MARKETFED as a cooperative trading enterprise, and ii) MARKETFED as a cooperative institution. The study was based on both primary and secondary sources of information. The study indicated that MARKETFED has not succeeded in both these aspects. It was not able to procure a fair portion of marketable surplus of agricultural commodities in the state, so it could not have a control on prices and was also unable to contribute to the development of its member societies.

Haldauf and Cravens (2003) evidenced higher levels of sales unit effectiveness in Austrian organizations whose salespeople display high behavioral or high outcome performance. Similarly research of Spanish field sales managers proposed that behavior control, salesperson professionalism, Behavior performance and outcome performance, have a positive and significant impact on Salesforce effectiveness, treated as Salesforce efficacy and supervisor satisfaction.

Ahmad and Ghufuran (2004), in their article titled, "Agricultural Marketing Cooperatives of UP State an Overview" studied the progress and performance of cooperative marketing in Uttar Pradesh during various five-year plans. It was found that lot of steps were taken in the state to give important place to cooperative form of organizations in many branches of economic activity especially in cooperative marketing and consolidating, and strengthening agricultural marketing during third, fourth and fifth plans. It was also revealed that at the end of seventh plan the business share of marketing cooperatives at the State, District and primary level to that of

total country was not satisfactory due to less attention paid toward them especially primary marketing cooperatives. The performance of marketing cooperatives improved on indicators like membership, paid up share capital, working capital, agricultural produce marketed, etc. It was suggested to restructure the business activities of marketing cooperatives so that they could survive in the changing environment.

Objectives of the Study:

- To study the general profile of the Society
- To analyses the purchase and sales performance through Trend Analysis
- To give suitable suggestion for the betterment of the Society

Methodology and Sampling:

The present study based on descriptive in nature. Both primary and secondary sources of data have been collected and analyzed. Gobichettipalayam Cooperative Marketing Society is purposively selected which is proximity to one of the researchers for the present research.

Data Collection:

The present study is based on primary and secondary data. Data relating to the society such as its memberships, share capital, reserve fund, purchase and sales etc. were collected from annual report, audit reports and by-law of the society and necessary clarifications were also obtained from the society officials whenever necessary.

Frame Work of Analysis:

In the process of data collected were analyzed and presented in the form of tables, graphical representation growth index and percentage for better understanding of the problem under the study.

Tools Used:

Growth Index:

Growth index is a statistical tool. Growth index is initially calculated to find the growth of the particular item for a certain number of years. The past values of an item for a certain period is taken to find the growth index
Formula for growthIndex, G.I. =current year/ base year× 100

Trend analysis:

The trend analysis is the widespread practice of collecting information and attempting to spot a pattern. Although trend analysis is often used to predict future events Trend can be calculated by this equation $YC-A+B(X)$.

Summary of Findings:

The present study based on analysis of purchase and sales performance of the society. Trend analysis is used to find the progressive performance of the Gobichettipalayam Agricultural Producer's Cooperative society. In this structure, the researcher has made an attempt to the performance soundness by applying tools like Trend analysis and Growth Index. The society's purchase and sales performance are enhanced from year to year. This chapter is allocated to summaries the major findings of the study and relevant suggestions.

Major Findings of the Study:

The annual growth index of the various items is computed for the Gobichettipalayam Agricultural Producers' Cooperative marketing society over a period of 10 years between 2012-13 to 2020-21. The share capital, deposits, purchase, sales and net profit have been increased considerably every year. The loans provided on fixed deposit and on agricultural product have been recovered from the members without fail.

Progressive of Share Capital:

The progressive of Share Capital of the Gobichettipalayam Agricultural Producers' Cooperative Society in 2012-13 the Share Capital was Rs.3.85 lakhs and in the 2020-21 it has been increased to Rs.58.36 lakhs. This shows fluctuating trend during the year. The trend value of Share Capital is increased trend during the period from 2012-13 to 2020-21.

Progressive of Deposits:

The progressive of Deposits of the society in 2012-13 the Deposits was Rs.72.99 lakhs and in the 2020-21 it has been increased to Rs.782.76 lakhs. This mentioned fluctuating trend during the year. The trend value of Deposits is increased trend during the period from 2012-13 to 2020-21.

Progressive of Loans and Advances:

The progressive of loans and advances of the society in 2012-13 the Loans

and Advances was Rs.37.23 lakhs and in the 2020-21 it has been increased to Rs.442.17 lakhs. This mentioned fluctuating trend during the year. The trend value of Loans and Advances is increased trend during the period from 2012-13 to 2020-21.

Progressive of Purchase:

The purchase performance of the society in 2012-13 the purchase was Rs.191.84 lakhs and in the 2020-21 it has been decreased in Rs. 534.08 lakhs. This mentioned the fluctuating trend during the year. The trend value of purchase is increasing trend during the period from 2012-13 to 2020-21.

Progressive of Sales:

The sales performance of the society in 2012-13 the sales was Rs.1095.08 lakhs and in the 2020-21 it has been increased to Rs.1937.91 lakhs. This mentioned the fluctuating trend during the year. The trend value of sales is increasing trend during the period from 2012-13 to 2020-21.

Progressive of Sundry Debtors:

The progressive of Sundry Debtors of the society in 2012-13 the Sundry Debtors was Rs. 24.52 lakhs and in the 2020-21 it has been decreased to Rs. 235.06 lakhs. This mentioned the fluctuating trend during the year. The trend value of Sundry Debtors is increasing trend during the period from 2012-13 to 2020-21.

Progressive of Sundry Creditors:

The progressive of Sundry Creditors of the society in 2012-13 the Sundry Creditors was Rs. 126.86 lakhs and in the 2020-21 it has been increased to Rs. 626.47 lakhs. This mentioned the fluctuating trend during the year. The trend value of Sundry Creditors is decreasing trend during the period from 2012-13 to 2020-21.

Problems:

- Fiscal and political instability is threatening Agricultural Policies, as their Political disagreement and fiscal comprehension in agriculture.
- Developing people and developing markets, changing trends affects as there marketing society's traditional marketing methods.

- Private market intermediation.
- The necessary details of the members and their signature are not collected & maintained properly.

Suggestions:

- To renew the license of the paddy cleaning factory.
- To Develop Agriculture infrastructure
- Storage and warehouse facilities can be established to the remote villages.
- Education to farmers for high production.
- Information technology must reach all over the country. Enhancement and coordination over the agriculture markets.
- Outstanding account of the society should be cleared.

Conclusion:

The traditional marketing system in rural areas affects both the farmers and consumer these problems are changed with the help of marketing society. In the marketing society the farmer sells directly to the consumer, without any middlemen. The trend analysis shows the fluctuating trend in purchase and sales performance of the society.

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Strengthen Rural Economy by Connecting with Dairy Cooperatives

Dr. Vivek H. Ksheersagar*

Abstract:

Cattle and buffalo always held the top spots among all other useful animals as domestic animal rearing began to develop in the early days of human civilization. Here, it's crucial to keep in mind that the risks involved differ from those that typically apply to machinery and other non-living objects because livestock is a living creature. Risk management includes identifying the various risk exposure types that the organisation is exposed to, measuring those potential risks, suggesting ways to hedge, insure, or mitigate some of the risks, and estimating the impact of various risks on the company's future earnings. Risk can be controlled in a number of ways, such as by purchasing insurance, using derivatives as hedges, pooling risks with others, or avoiding all high-risk positions. The dairy sector in India is unique in a number of ways. The world's largest herd of cattle is found in India. The most significant agricultural product in the country by output is milk. The purpose of this essay is to explain the risks associated with livestock management and its effects on the economy. Data was gathered through the use of surveys and the distribution of well-designed questionnaires, and the same have been analysed and interpreted. In this paper, broad conclusions reached and useful suggestions that emerged are presented. The dairy industry must seriously consider reorienting the paradigm shift if it is to thrive in the ever-increasing global competition and excel in its quality and safety approach. The dairy industry has a bright future in India and it is estimated that its contribution to the India's GDP will continue to show rising trend.

Keywords: Livestock, types of risks involved, insurance,

*Rtd. M.D. Pune Zillha Sahakari Dudh Utpadak Sangh Maryadit, Pune

Introduction:

Domestic animal rearing began to develop during the early days of human civilization, cattle and buffalo always occupied the top positions among all other useful animals. Domesticated animals raised for food production, including milk and meat, fibre, and labour, are known as livestock. Here, it's important to keep in mind that because livestock is a living creature, the risks involved are different from those that typically apply to machinery and other nonliving objects. These dangers consist of financial, operational, and financial failures as well as market disruptions, environmental catastrophes, and regulatory violations. Risk is a statistical concept that is quantified through the use of statistical ideas related to an ambiguous future. It affects almost all investments.

Identification of the different risk exposure types within the organization, measurement of those potential risks, suggestion of ways to hedge, insure, or mitigate some of the risks, and estimation of the effects of various risks on the company's future earnings are all part of risk management. Risk can be managed in a variety of ways, including through the purchase of insurance, the use of derivative instruments as hedges, the sharing of risks with others, or the avoidance of all high-risk positions.

With 300 million animals producing more than 146.3 million tonnes of milk annually, dairy farming in India has grown to be a crucial industry. Since milk and milk products are highly perishable, they must be of sufficient quality and be safe for consumption.

India's dairy industry is distinct in a number of ways. India has the largest population of cattle in the entire world. In terms of output, milk is the single most important agricultural product in the nation. When a rural household owns land, dairy contributes close to 33% of the gross income; when a rural household does not own any land, dairy contributes 50% of the gross income. Both nationally and within the state of Maharashtra, milk is becoming more readily available per capita.

Studying the level of livestock management risk awareness and the corrective actions taken by dairy farmers and dairy cooperative societies is the study's goal.

The study was conducted using the survey method as the research methodology. The study, which included 60 primary dairy cooperative

societies, was carried out in 13 talukas of the Pune district. This paper presents the key findings as well as the recommendations that emerged.

Risk Management in Dairy:

The dairy industry generates revenue. Every economic activity aims to make a profit. Profit, in accordance with economic theory, is what one gets in exchange for taking risks. Dairy activity is therefore also a risky activity. Every industry, including the dairy industry, entails some level of risk. Risk is characterised by the unknown nature of the results. Agriculture involves a wide range of complex risks. This is primarily because Indian agriculture is reliant on the whims of the monsoon. India is a large country, and the climate varies from one region to another. Because of this, the source of risks and their seriousness vary depending on the circumstance. Management is the process of making decisions and selecting the best course of action to accomplish a goal. This is accomplished through a number of management strategies, including, in general, planning, budgeting, staffing, leading, communicating, reviewing, etc. As a result, risk management entails understanding potential risks associated with any activity, considering all available alternatives, and developing a strategy to mitigate those risks. The evaluation of risk in advance and the creation of strategies to deal with it are crucial.

Subhash Chand, Prem Narayan and Khyali R Chaudhary (2018) have concluded that for marginal and small farmers, the livestock serve as a living ATM. They must raise a certain type and quantity of livestock in order to support their way of life. The top two risks were marketing and institutional, and a framework for a livestock policy should take these into consideration. Institutional and policy support must be added to the risk management techniques that were deemed most effective and popular. According to the study, market-related risks should be addressed through proper institutional and policy support so that small and marginal farmers can take advantage of them for increased livestock production.

Risks involved:

Individual farmers:

In the current environment, it is essential that the dairy farmer understand the economics of the dairy activity before engaging in it. Dairy farmers are now aware of whether or not their dairy operation is profitable because it

has been observed that they do not keep books of accounts. Recent price increases in green and dry fodder, as well as cattle feed, have made the dairy industry only marginally viable.

Purchase of cattle:

After evaluating their production for three milking, farmers should carefully choose newly calved cattle or buffalo of the second and third lactation with the idea that these cattle or buffalo would be used as future bull mothers. To ensure that their peak yield is not missed, these should be bought within 15 days of calving.

Breeding and Health Care Management:

The main barrier to raising herd quality in India is the lack of technical knowledge among dairy farmers, including record-keeping and progeny testing skills. It can be resolved by growing the artificial insemination (AI) network, using natural service bulls, and utilising extension services offered by academic institutions, the government, cooperative societies, and the private sector. To address these issues, breeding services utilising top-notch, disease-free germplasm must take precedence. Improved livestock health will further increase productivity and milk quality through timely disease detection and knowledge of preventative measures.

Housing arrangement for the livestock:

The animal shed is the main source of contamination. It ought to have good ventilation, lighting, and drainage. In the animal shed, the ground ought to be dry. To maintain hygienic conditions, the milking area needs special attention. The cattle should be provided with potable water for drinking. To avoid contamination, the udders, flanks of the animals, the containers used to collect the milk, and the hands of the milker should all be clean.

Raring the livestock & health care:

Health Care:

Milk from sick animals needs to be stored separately and disposed of properly. Mastitis is one example of a contagious disease that needs to be isolated from healthy animals. If routine animal washing is not practised, as is typically the case, at least the animals should be groomed to keep hair and dust out of milk. Before each milking, the udder needs to be cleaned and dried with a fresh towel or cloth.

Milking the cattle:

When milking by hand, there is a greater risk of contamination from the milker than when milking by machine. Therefore, the milker should be healthy and free of infectious diseases. She or he should have well-trimmed nails, wear clean clothes, wash their hands with soap and water before milking, and then pat their hands dry with a clean towel. After each milking, the milking area should be thoroughly cleaned.

Storage and Transport, Supplying the milk to the dairy / ultimate consumer:

More caution must be exercised when storing the milk. The container's cleanliness must be guaranteed before it is stored. The container must be made of stainless steel, per current legal regulations. To make sure that any particles that may have gotten into the milk are kept out, the milk should be filtered before it is stored. The container must have a suitable lid, and it must be kept in a cool location. The containers should be cleaned and sanitised prior to each milking. The storage area must be free of dust, dirt, insects, and other contaminants.

Care of the calf:

Sucking method:

There are many different methods, and each has benefits and drawbacks. Due to space restrictions, only one popular method is described in detail below, along with pros and cons. In this procedure, the calf is permitted to remain with its mother and is only given a small amount of milk before and after the cow is milked. Whole milk is provided to the calf throughout lactation.

Advantages:

- i) This is natural system of feeding.
- ii) The calf gets contamination free milk.
- iii) No much care is required to take during feeding.
- iv) The mother-calf affection developed.

Disadvantages:

- i) If calf dies, the cow refuses to let the milk.
- ii) It cannot be ascertained about over feed or under feeding of the calf.

- iii) If milk is infected the infection may be transferred to calf.
- iv) The actual quantity and quality of milk yield of cow cannot be calculated.
- v) The post-partum heat is late.

Village level dairy societies:

- a) Proper collection arrangements
- b) Proper storage arrangements
- c) Transporting the milk to the headquarter of the Dudh Sangh
- d) Maintenance of proper records
- e) Proper payment system for the milk proceeds.
- f) Ensuring proper education and training to the dairy farmers
- g) Providing guidance to the dairy farmers.

Broad Findings of the study:

- ❖ 75.6% of the respondents have reported that the dairy activity has helped them in increasing their income level. It means that the dairy activity is certainly an activity allied to agriculture which helps the dairy farmers to supplement their income level.
- ❖ 27.87% of the respondents have reported that they have biogas plant.
- ❖ Majority of the respondents (54.57%) have reported that they do not get prompt loan from the local bank branch for purchase of the dairy animals. This position needs to be further probed and the extension officer and block development officer should sort out this issue at the Block Level Consultative Committee meeting.
- ❖ It has been observed that 80.53% of the respondents stated that since the establishment of the dairy in their village the villager's income level has gone up
- ❖ 65.47% of the respondents concurred with the statement that the dairy activity has led to the increase in the employment potential for the youth in the villages.
- ❖ 57.73% of the respondents have reported that they maintain separate accounts for the dairy activity. It shows that they are cost conscious of their business activity.

- ❖ For maintaining the proper health of the dairy animals' guidance and support of the veterinary doctor is essential. The government veterinary doctors are visiting the villages for this purpose. It is observed that 60.53% of the respondents have vouched that the govt. veterinary doctors are regularly visiting their villages. Besides Katraj dairy veterinary staff also provides guidance on regular basis.
- ❖ It has been observed that 60.13% of the respondents either agree or strongly agree with the statement that the rate given by the private dairy societies is higher than the rate given by the Dudh Sangh
- ❖ It is observed that 58.03% of the respondents have not insured their milch animals. This is quite alarming figure. It means the general insurance companies have a lot to be done in this regard. Certainly, it is in the interest of the dairy farmer to insure the milch animals. There is need to create awareness about the ease and benefits from the insurance policy.
- ❖ It has been observed that 57.74% of the respondents have expressed that they have intention to expand their dairy activity by purchasing additional cattle. There is need to educate the dairy farmers about the profitability of the dairy activity, availability bank finance, etc. so that he will be motivated to buy additional milch animals.
- ❖ Majority of the members (79.73%) have expressed that the society staff should extend them assistance in putting insurance claim with the insurance company and to chase it for its early settlement. The expectation is quite normal.
- ❖ It has been observed that majority of the respondents (77.07%) are aware of the benefit of the regular medical check-up of their livestock and that they observe it strictly.
- ❖ During the artificial insemination operation extra precautions are required to be taken. 57.6% of the respondents have the knowledge of those precautions.

Important suggestions emerged during the study for Dairy Farmers:

- ❖ Given that the biogas plant can produce the energy needed for domestic lighting and cooking, it is suggested that farmers who do not currently have biogas installations be persuaded to get them so they can receive free gas and lighting.
- ❖ It is advised that dairy farmers who have irrigation on some of their land also cultivate high-quality green fodder, if only for their own needs, so that the guaranteed high-quality green fodder will benefit their cows' or she buffaloes' ability to produce milk.

- ❖ The urgent need is to ensure that dairy farmers are properly instructed in the fundamentals of science. A capsule programme for small-scale dairy farmers should be developed by the district-level Dairy Union in cooperation with the district-level Animal Husbandry Department in order to raise their awareness of the need to pursue the dairy industry scientifically in order to ensure its sustainability and increase the output of clean milk.
- ❖ Following a reasonable break, these farmers will receive brief orientation training to help them improve their knowledge of how to raise the milk production of the livestock they raise.

For the Dairy Coop. Societies:

- ❖ In every taluka the dairy milk society can come together and start their own cattle feed manufacturing unit so that they can ensure that good quality cattle feed is available for their members at still cheaper rates.
- ❖ It is advised that the Dudh Societies also make payments to the supplier's bank account given that the Indian government supports cashless transactions and wants to help rural residents develop a banking habit.
- ❖ According to some, cooperative dairy societies can make significant contributions to the insurance of dairy animals. The possibility of granting agency to these societies and making them business partners in obtaining the insurance business should be investigated by the insurance companies.
- ❖ The dairy society should inform dairy farmers about the different varieties of semen on the market and the benefits of using high-quality semen, even though it might be slightly more expensive. The quality of the dairy animal and milk production won't improve until after people are aware of the issue and start using good quality semen.

Conclusion:

A large amount of room exists for the dairy and food industries to expand given globalisation and rising consumer purchasing power. The National Dairy Plan (NDP), a World Bank-funded project, aims to boost milking animal productivity by offering high-quality sperm, on-demand AI services, and scientific feeding methods.

Currently lumpy – viral skin disease in livestock has spread in Maharashtra and the government machinery is addressing to arrest it. It will have marginal impact on the milk production of the livestock and consequently on the dairy economics.

If the dairy industry is to survive in the ever-increasing global competition and excel in its quality and safety approach it has to seriously think of reorienting the paradigm shift. The dairy industry has a bright future in India and it is estimated that its contribution to the India's GDP will continue to show rising trend.

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A Study of Innovative Business and Services in Select PACS in Dindigul District Tamil Nadu

**R. Sharmila¹, S. Mohamadha Irfana²,
P. Sri Aarthi³**

Abstract:

The Primary Agricultural Cooperative Credit Societies (PACS) are considered miniature banks or village banks as they are issuing loans to individual members, particularly for agriculture and allied activities, and accept deposits. Implementation of Prof.Vaidyanathan Committee recommendations helped to improve the viability of credit cooperatives and the involvement of employees and members. This paper focus as on major core activities of innovative business and services in select PACS in Dindigul district in Tamil Nadu. The objectives of the study are to study the performance of select PACS in Dindigul identify problems and suggest innovative businesses and services for PACS. The present study used both primary and secondary data i.e., Thadikombu PACS, Pithalaipatti PACS, and Pudhupatti. PACS were selected by using a random sampling technique. The data were analyzed with the help of appropriate statistical tools. The major findings derived from the study are to enhance the quality of the service delivery system and working performance of Primary Agricultural Cooperative Credit Societies.

Keywords: *Cooperatives, PACS, Societies, Business, Credit, Innovative business, Performance.*

¹ Student of M.com (cooperative management), Department of cooperation, The Gandhigram Rural institute (deemed to be university), Tamil Nadu, India

² Student of M.Com (cooperative management), Department of cooperation, The Gandhigram Rural Institute (Deemed to be University), Tamil Nadu, India

³ Student of M.Com (cooperative management), Department of Cooperation, The Gandhigram Rural institute (deemed to be university), Tamil Nadu, India

Introduction:

Primary Agricultural Cooperative Credit Society (PACS) occupies an important place in the cooperative credit structure of the country. As one of the units of three tier cooperative credit structures in the country, the Primary Agricultural Cooperative Credit Society (PACS) has been generally at the gross root level of a village. It is the essential unit that works in a straight line with the rural people, providing loans and recovery loans. Their main objective is to provide agricultural and non-agricultural credit in rural areas. Agricultural Credit includes crops and loans for allied agricultural purposes like the purchase of machinery, micro irrigation, milk animals etc. Non Agricultural credit includes a loan for housing, income- generating activities of self-help groups and the Non- farm sector. Allocation and sale of agricultural inputs like fertilizers, seeds, and small agricultural trappings have also been taken up by the cooperative societies. The financial strength of the cooperative credit structure in the country depends upon the working of these societies. The government provides support and encouragement to PACS to increase its membership, working capital, providing credit to farmers and also basic necessary inputs to the farming community. The working capital of the PACS is basically from borrowings from the District Central Cooperative Banks (DCCB) and in smaller proportions from its own funds and member deposits. At the same time, PACS have not succeeded in attracting deposits from rural areas reflecting the low savings habits of the rural population. The rich farmers invest their savings in a physical asset or lend them directly as agriculturist money lenders to other farmers in the village. PACS must be managed efficiently as well as directly.

Indian Cooperative Movement:

India is an upward country in spite of some problems, such as the population explosion, low productivity, inequalities, low living standards, and increase and so on. India consisting of 16 per cent of the world's population sustains only 2.4 percent of its land resource. The agriculture sector is the only livelihood for two-thirds of its population which gives service to 57 percent of the workforce and is a source of raw materials for a large number of industries.

After 75 years of independence taking into concern these problems, the growth of the Indian economy is rather slow. For the solution and for quick economic development, it was necessary to accept a mixed economy as

an economic system for the balanced growth of the public and private sectors together with a main role for cooperative societies in the process of economic development (C.Pitchai, 2012). In the context of globalization of rural development perspectives, developing countries like India needs to offer greater attention towards rural development. The new economic policy aims to impart a new element of the drive to agriculture, trade and industry, to encourage foreign ventures and technologies for making Indian products competitive in the international market to improve the performance of public undertaking and to influence cooperatives, since cooperatives work as an essential part of the country's economic organization. It is hoped that the cooperative movement will respond to the changes and develop firm self-discipline.

The cooperative movement has made fabulous progress in every aspect of the Indian economy. Cooperative activities occupy a major place in the sphere of the Indian economy. Initially, the cooperative movement was started with a limited scope of activities of rural credit but now it has entered all fields of Economic activity with social essence .Now, the movement has covered 98 percent of villages and functions over 8.5 lakhs cooperatives of various levels with membership coverage of 30 crore. It has been playing a significant role in disbursing agricultural credit, distributing agricultural inputs, providing market support, processing, etc. The cooperative movement has been recognized as an effective instrument for the economic development of the rural masses and improvement in the socio-economic condition of the poor. In India, cooperation had become a part of national policy and hence the Indian cooperative movement is sometimes ironically described not as a movement but only as a product of government policy. (C.Pitchai, 2012) It spread and diversified with the encouragement and support of the government.

Cooperatives Movement in Tamil Nadu:

The Cooperative Movement in Tamil Nadu has witnessed over the decade's large growth in diverse areas of the economy. There is not a single major sphere of economic activity which has not been touched by cooperatives. From a small beginning, the cooperative movement in Tamil Nadu has grown in might over the years. The opening of a village cooperative credit society in Thiroor in Thiruvallore District in 1904 marked the advent of the cooperative movement for the people of the state, particularly the agriculturist families. From Agricultural Banks to Marketing societies

and Consumer Cooperatives provides services to the people in various economic activities. Cooperatives also run the Public Distribution System which provides relief to every family in the state. (B.Punniyan, 2022) Among all the cooperatives, cooperative credit societies continued to play a vital role in the economic development of the state and weaker section in exacting.

Objectives:

1. To study the performance of select PACS in Dindigul district
2. To identify the problems and suggest measures to overcome for better performance PACS.
3. To explore innovative business and services for PACS

Methodology of the Study:

The study used both primary and secondary data. Sources for primary data were collected by personally visiting the society. The Thadikombu PACS, Pithalaipatti PACS and Puhupatti PACS were selected by using a random sampling technique. Secondary data were collected from the records of PACS and newspapers, documents of National, State and

District Cooperative Institutions, orders, and circulars issued by the Registrar of Cooperative Society. The collected data were analyzed by using percentage and average.

Credit Cooperatives in Dindigul District:

The development of cooperatives in Dindigul District has shown a positive trend and its area of operation consists of 8 Taluks and 14 Blocks. As the primary institutions for meeting the agricultural credit needs of farmers at the grassroots level, PACS have to play an important role in providing production credit for member-cultivators besides providing infrastructural facilities like rural storage to improve farmer's retaining power, allocation of agricultural inputs and essential consumer goods. They assist the farmer members to market their agricultural produce at remunerative prices. This is facilitated through providing loan, godown facilities. In the changing scenario of aligning with market forces, PACS have to design their 38 Business Development Plans, expand and spread their activities to improve

their competitive ability and viability. A brief review of the performance of the PACS in the district indicates that the societies still remain primarily a supplier of credit slightly higher than reordered priorities towards diversification and development of business activities. Table-1 shows the total number of members in PACS with respect to India, Tamil Nadu, and Dindigul. And then Table-2 shows the membership & share capital position of the select PACS in Dindigul. Table-3 shows the deposit and borrowing of the select PACS. Table-4 shows the lending, recovery and working capital of the select PACS.

Table1: Number of PACS and Membership – All India & Tamil Nadu

Particular	Year	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Number of PACS	India	95595	95238	95995	95509	102559
	Growth rate (%)	0	-0.37	0.79	-0.50	7.38
	Tamil Nadu	4511	4520	4521	4525	4502
	Growth rate (%)	0	0.19	0.02	0.08	-0.50
	Dindigul	197	197	197	197	197
	Growth rate (%)	0	0	0	0	0
Total Membership	India	131235	130547	132029	138157	137168
	Growth rate (%)	0	-0.52	1.14	4.6	-0.7
	Tamil Nadu	13201	12287	11269	11689	12409
	Growth rate (%)	0	-6.9	-8.2	3.7	6.16
	Dindigul	625	627	629	630	632
	Growth rate (%)	0	0.32	0.32	0.16	0.32
Total Membership Of Select PACS	Thadi kombu	2820	2820	2820	2732	2763
	Growth rate(%)	0	0	0	-3.12	1.14
	Pithalaipatti	3220	3220	3220	3221	3223
	Growth rate (%)	0	0	0	0.03	0.06
	Pudhupatti	2384	2384	2978	2978	2830
	Growth rate (%)	0	0	24.9	0	-4.9

Source: National Federation of State Cooperative Banks Ltd. (NAFSCOB 2022)

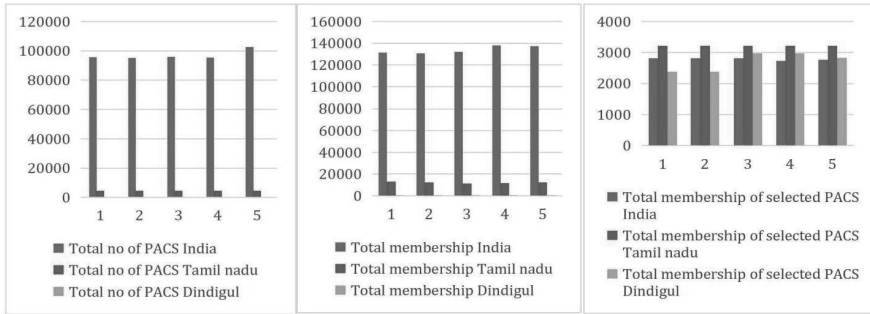


Table-1 shows the number of PACS and membership in India, Tamil Nadu and Dindigul. In the study period total number of PACS has increased gradually in India and Tamil Nadu state but in Dindigul remains the same. In the selected PACS of Pithalaipatti primary agricultural cooperative credit society membership is more when compared to other two PACS. During the study period, there is a slight change in the membership position of India, Tamil Nadu and sample PACS. During the year 2016-17 to 2017-18, one per\cent of membership has decreased due to drought in some states of India. During the study period there are slight changes in the membership position of India, Tamil Nadu and sample PACS.

The below Table 2 shows the share capital, deposit, and borrowing of selected PACS in Dindigul district.

The share capital of Pithalaipatti PACS gradually increased in the study period. All the selected PACS show growth in mobilization of funds from members comparing all the three PACS. Thadikombu PACS has a high amount of deposit than the other two selected PACS. About borrowing is one of the major sources of working capital of the selected PACS. In this table, Pithalaipatti PACS have borrowed more funds than the other two PACS. During 2016-2017 the members participation was less. During 2017-2018 to 2020-21, the 'B' class members are actively participated. So the share capital, deposit and borrowings automatically increased.

Table 2: Share Capital, Deposits, Reserve fund, Borrowings and working capital of Select PACS

(Amount in lakhs)

Particular	Year	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Share Capital	Thadi Kombu	12.98	17.98	17.22	17.98	14.99
	Growth rate (%)	0	38.5	-4.2	4.4	-16.6
	Pithalaipatti	27.30	29.31	31.28	34.70	36.98
	Growth rate (%)	0	7.36	6.7	10.9	6.57
	Pudhupatti	15.87	19.03	19.86	20.08	21.14
	Growth rate (%)	0	19.9	4.36	1.1	5.27
Deposits	Thadi Kombu	361.77	375.68	460.51	564.50	575.29
	Growth rate (%)	0	3.8	22.58	22.58	1.9
	Pithalaipatti	283.94	296.23	389.45	458.68	496.73
	Growth rate(%)	0	4.3	31.46	17.7	8.29
	Pudhupatti	293.27	298.36	369.29	389.33	499.46
	Growth rate (%)	0	1.7	23.7	5.4	28.28
Borrowing	Thadi Kombu	265.85	210.23	118.88	138.80	208.17
	Growth rate (%)	0	-20.9	-43.45	16.7	49.9
	Pithalaipatti	412.35	393.91	367.46	291.29	381.54
	Growth rate(%)	0	-4.47	-6.7	-20.7	30.9
	Pudhupatti	408.69	386.58	351.18	268.42	376.35
	Growth rate (%)	0	-5.4	-9.15	-23.56	40.2
Reserve Fund	Thadi Kombu	226.18	269.79	299.94	216.15	239.38
	Growth rate (%)	0	19.28	11.17	-27.9	10.7
	Pithalaipatti	26.27	30.21	169.75	5.09	65.42
	Growth rate (%)	0	14.9	461.9	-9.7	1185.3
	Pudhupatti	83.82	40.21	18.65	49.63	65.87
	Growth rate(%)	0	-52.02	-53.6	16.6	32.7
Working Capital	Thadi Kombu	866.78	873.68	896.55	937.43	1037.83
	Growth rate(%)	0	0.79	2.6	4.5	10.7
	Pithalaipatti	749.86	689.24	618.44	789.76	849.83
	Growth rate(%)	0	-8.08	-10.27	27.7	7.6
	Pudhupatti	634.01	663.76	721.68	727.46	831.08
	Growth rate(%)	0	4.69	8.7	0.8	14.24

(Source: Compiled data Annual Reports of the Select

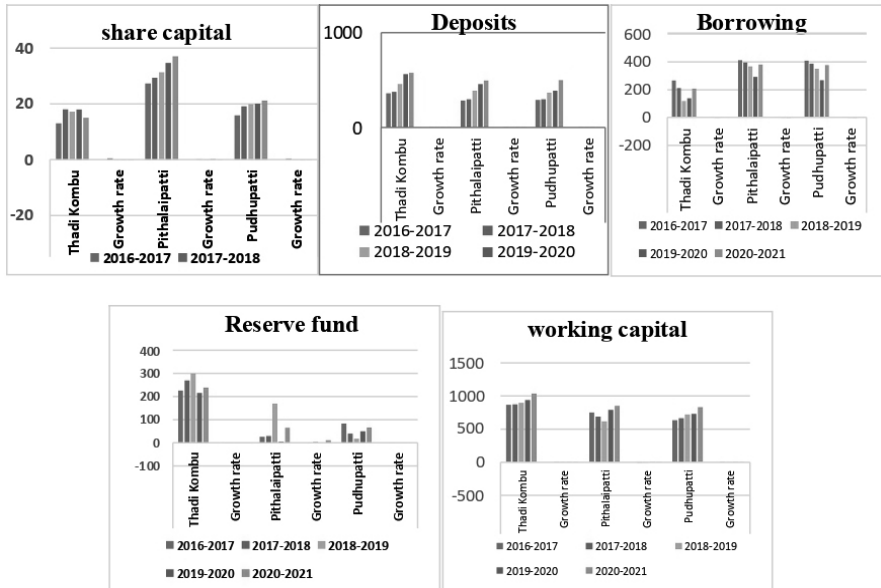
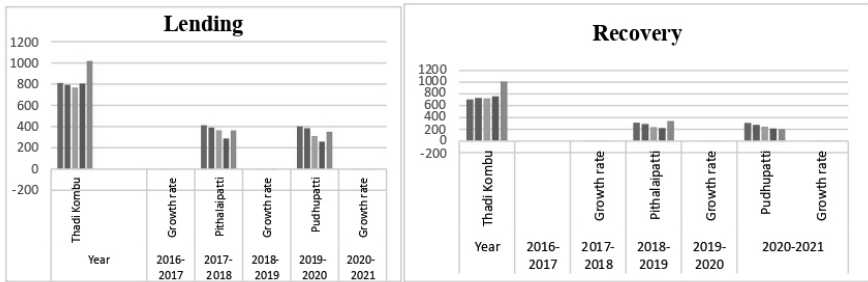


Table 3: Lending and Recovery of Select PACS (Amount in lakhs)

Particular	Year	2 0 1 6 - 2017	2 0 1 7 - 2018	2 0 1 8 - 2019	2019 - 2020	2 0 2 0 - 2021
Lending	Thadi Kombu	812.74	792.97	766.89	805.55	1019.59
	Growth rate (%)	0	-2.4	-3.28	5.04	26.57
	Pithalaipatti	410.27	389.63	365.84	289.91	362.76
	Growth rate (%)	0	-5.03	-6.1	-20.7	25.13
	Pudhupatti	398.98	383.61	312.89	259.96	351.46
	Growth rate (%)	0	-3.8	-18.4	-16.9	35.19
Recovery	Thadi Kombu	707.40	731.27	728.39	761.56	1013.08
	Growth rate (%)	0	3.37	-0.39	4.5	33.03
	Pithalaipatti	312.67	286.53	235.41	218.64	339.89
	Growth rate(%)	0	-8.36	-17.8	-7.12	55.45
	Pudhupatti	306.72	271.83	245.63	211.81	203.54
	Growth rate (%)	0	-11.37	-9.6	-13.7	-3.9

(Source: Compiled data from the Annual Reports of the Select PACS)

Table shows the significant process of lending, recovery and working capital of selected PACS. In lending, it is found that Thadikombu PACS



issued more loans to their members in the study period and also lending increased from 15 to 25 percent in the study period of 2016-2021. As for as recovery is concerned, it is found that the Thadikombu PACS recovered more in the study period and also the recovery increased from 19 to 23 percentages

in study period of 2016-2021. In working capital, it is found that Thadikombu PACS having high working capital in the study period and also the working capital increased from 20 to 25 percentage in the study period of 2016-2021.

Issue of overdue:

The reason for the overdue in the sample PACS is that the members of the society felt that the loans will be waived during the election. During the study period, the Thadikombu PACS have more over dues of Rs 5, 75,000 among the sample PACS. The Pudhupatti society having low amount of over dues because of efficient recovery management

Lack of funds for Society:

PACS requires more financial support from the government. This financial problem is caused by insufficient investment in the cooperative by the members' owners. The selected PACS did not get expected funds from DCCB. The DCCB did not provided expected amount to the selected PACCS, because PACS were not repaying amount to the DCCB.

Lack of transportation:

The Pudhupatti PACS is not located in the central part of the village. The society located in the interior village.

Political interference:

In general, the role of cooperative sector is neutral place. i.e. not completely private, not all government.

Discrimination of funds:

The PACS lend on the basis of relations, friends, etc. Hence, credit distribution is not perfect. The society located in the interior village. Lack of technology adaption in the selected PACS of Thadikombu, Pithalaipatti and Pudhupatti and are not fully computerized. Selected PACS does manual work, for computer based work, the government has now initiated step.

Lack of storage facilities:

There are no cold storage facilities higher in the select society

Suggestions:

Technological upgradation:

As mentioned above, the selected societies have only few computers to administer the society. Still, Thadikombu, Pithalaipatti and Pudhupatti PACSs are carrying out manual recording of the data. Following traditional methods without technological up-gradation, it is critical in the upcoming digital era. Delivering SMS facility, ATM provision, and other digital transaction will grab the member's attention.

Education and training:

In the cooperative sectors there is a principle called "education training and information" to indicate how important this education and training is for the development. In these societies, the staff. Initially attended some cooperative oriented training programmer at the times of recruitment, but things are change now rapidly. The modern economy gives lots of competition especially for cooperatives. Bring change into the management process and provide skill and technology oriented training will help the staff to improve professionalism in the business.

Innovative business activities:

Diversification and innovation business practices will strengthen these PACS in the long run. However, in Thadikombu, Pithalaipatti, Pudhupatti

PACS, already put an end to providing agriculture inputs, agro services center multi services center. If they restart those services, including add on services like a direct sale of crops extension Centre service, and fair price shops, it will strengthen the society at the base level.

Proper credit management:

Loan waiving is intended to benefit the poor farmers due to natural calamity, but this waiving has become a political tool to grab votes at the time of election. As such, the over dues are mounting-up and strict rules must be adopted to check the eligibility of the farmers for availing loan waiving. The concerned state government should take necessary steps to device the eligibility of the farmers getting benefits from this loan-waiving scheme.

Innovative Business and Services in the Select PACS:

From the beginning the PACS are functioning in a traditional way. The traditional system has to be changed to render more services to the members and improve the performance of the PACS. There are some PACS came forward with innovative practices and business diversification. Now, government initiated the policy implementation and schemes to introduce innovative practices in the PACS.

These are:

- Multi Service Center
- Model Bye-laws
- Computerization

Multi Service Center:

Installation of Photocopier:

Photocopying is the one way to increase the profit. The PACS can earn Rs. 2000 to Rs. 3000 daily from Xerox shop business.

RO water plant:

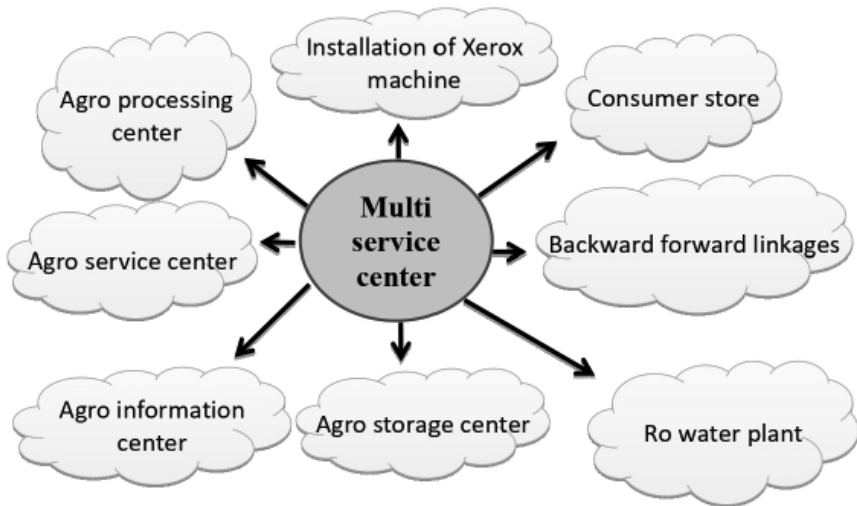
Reverse osmosis plants are will be very useful for generation of income for the PACS.

Agro storage centre:

Agricultural storage facility also means agricultural ware housing, through these services, income may be generated.

Consumer store:

A consumer store is organized, owned and controlled by consumer themselves. The objective of such stores is to reduce the number of middlemen who increase the cost of the product and thereby provide service to the members. PACS can supply requirement of the members at a very reasonable price.



Agro processing centre:

The concept of agro processing centre is to process the grains at village level to substantially enhance the income of the farmers. The food processing activity is one of the major employment intensive segments and profit making activity.

Agro service centre:

Agro service center provide financial assistance to farmers. These centers providemachines to farmers on a rental basis as per their needs.

Agro information centre:

Agricultural technology information center is functioning as a single window delivery system and provides agricultural technologies and farm advisory services to the farmers.

Model Bye-Law for PACS:

The Government has formulated a new national policy for cooperatives initiatives are on legal framework, discovery of regulatory, policy and operational barriers; ease of doing business; reform for increase governance; promote new and social cooperatives; refreshing non-operational ones; making cooperatives lively economic entities; cooperation among cooperatives and increasing membership of cooperative.

Computerization of Primary Agriculture Credit Societies (PACS):

Computerization is very important to all the business. Similarly; the PACS shall improve their performance through the computerization.

- Government approves Rs.2, 516 crore for computerization of 63,000 Primary agriculture credit societies
- Results are reliable
- Common platform at the national level
- Reduction in the frauds/mishandling of funds
- Common Accounting System(CAS)
- Faster audit and providing hardware support to the system.

Conclusion:

The short term cooperative credit structure has really improved the performance in all fronts. It is proved beyond doubt from number of reports prepared by the experts and also it is confirmed with the above discussion. Most of the PACS have capitalized the opportunities for its betterment. The PACS in particular, is one of the main players for the success of the green revolution of the country. The PACS could not be separated from the farmer members and it is one of the community based organization that became part of the village in carrying out rural development activities. The policy makers rather than reducing the role of PACS should focus on making them more vibrant, as 'one stop shop' to render all services that

are needed by the farmer members. The elections for the cooperatives have been conducted and democracy has been restored in Tamil Nadu since 2013, after a very long period. One could be confident that performance of these directors will take the PACS to a new height. The glory and enthusiasm of the past will be brought back and the cooperatives will excel in its entire sphere in the days to come.

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Mangrove Eco-tourism - A Case of Swamini Self-Help Group in Sindhudurg District of Maharashtra

¹Akshata Thavai, ²Shivaji Argade* and ¹Akilandeshwari A.

Abstract:

Swamini Women's Self-Help Group (SHG) is the first women SHG to venture out into the area of mangrove eco-tourism since 2017 in Mandavi creek of Sindhudurg district, Maharashtra. Mangrove Cell of Maharashtra Government supported Swamini SHG member's epiphany of how to use Mandavi creek for providing alternative livelihood options to fisherwomen residing nearby. The case study methodology was followed to describe the women's mangrove eco-tourism venture. Boat rowing was the toughest task to make this tourism venture as eco-tourism. Over time, the women members got the confidence in rowing boats with the help of their male partners. Women put up with their sufferings and diversified their activities. Along with eco-tourism, they started a food court and ornamental fish rearing unit. In 2017, they started with a rate of ₹ 70 per person per ride and at present, it's ₹ 200 per person per ride. The profit from six month (November-May) eco-tourism in the initial year (2017-2018) was ₹ 1 lakh followed by ₹ 2.35 lakh from both eco-tourism boating and food court in 2018-2019. The Swamini SHG's journey from being a group of friends with an idea to becoming a community icon for mangrove conservation is inspiring as well as exemplary. The major factor for the Swamini SHG success is the grit of the group which made Mandavi Creek as a source of their income & employment. As the State's first women's SHG successfully running mangrove eco-tourism, it can be replicated with other interested women SHGs in the mangrove regions to make use of mangrove ecosystem for sustainable income and employment generation.

Keywords: Fisher, Women empowerment, SHG, Eco-tourism, Mangrove.

¹Research Scholars,

²Scientist- ICAR-Central Institute of Fisheries Education, Mumbai - 400061

Introduction:

India is the second largest fish producing aquaculture nation in the world. India contributes about 7.7% to the global fish production and the country ranks 4th in global exports of fish products. The total fish production during 2019-20 is 14.16 Million Metric Tonnes (MMTs) with a contribution of 10.43 MMTs from the inland sector and 3.73 MMTs from the marine sector (Handbook on Fisheries Statistics, 2020). The growth statistics of Indian fisheries clearly depicts a paradigm shift from marine dominated fisheries to inland dominated fisheries. As India's potential of marine fish production is only 4.5 MMTs by exploiting 80% of the resources, it cannot be stretched much more (FAO, 2018). Therefore, encouraging other income generating activities in coastal areas could be the best potential option for sustaining the livelihood of men, women and youth residing along the coast. Recently launched PMMSY envisages addressing critical gaps in fish production and productivity, quality, technology, traceability, post-harvest infrastructure and management, creation of a conducive environment for private sector participation, development of entrepreneurship, promotion of ease of doing business, innovations and innovative project activities including start-ups, incubators in fisheries and aquaculture sector. PMMSY also aims to empower youth and women through capacity building and innovations.

Globally, women play key roles in harvest and post-harvest activities both in capture and culture fisheries. The percentage of women in the fisheries workforce is 46% globally and 72% in India (FAO, 2018). Women's participation and contribution to fisheries and aquaculture sector have been long established. But, their participation and contribution to fisheries and aquaculture sector is remain invisible due to a lack of gender disaggregated data along the fisheries value chain and largely affected by constraints such as such as lack of education & skills, dual responsibilities of farm and home, restricted social mobility, non-participation in decision making and inadequate access to production resources and services. Fisheries and aquaculture in India is described as a sunrise sector, as its share in the overall economic contribution to the country is increasing. Simultaneously, women's contribution to fisheries and aquaculture sector is also increasing proportionately. The numbers of women-owned businesses are growing fast and making significant contributions in terms of employment and income generation and thus, to the farm economy.

Mangrove Cell supports the implementation of various livelihood activities under the 'Mangrove Conservation and Livelihood Generation Scheme' in

Konkan region of Maharashtra. Sindhudurg's natural beauty, with its warm white sands and calm blue waters, combined with a rich and ancient history housed in its monumental sea forts and heritage buildings, has long drawn tourists from across the country and beyond. Acknowledging this potential of the district, Sindhudurg became the first district to be declared as a Tourism District in Maharashtra. Sindhudurg is the district of the Konkan region in Maharashtra and covers only 3.8% of the mangrove vegetation. The Mangrove Cell has also promoted alternative livelihood options such as mangrove crab farming, oyster farming, and mangrove ecotourism through programs such as the UNDP-GEF project. A SHG is entitled to 90% of the subsidy while an individual (landowners with more than 1 acre of private mangroves) is entitled to 75% of subsidy for livelihood activities. This scheme has been extended till 2025. There are a total 463 women SHGs in Konkan region which includes five districts (Table 1).

Table 1. Total No. of SHGs & No. of SHGs involved in eco-tourism in Konkan region

District	SHGs involved in Eco-tourism	Total SHGs
Palghar	0	39
Thane	1	54
Raigad	2	32
Ratnagiri	7	60
Sindhudurg	11	278
Total	19	463

About 19 SHGs involved in mangrove ecotourism. It is not only a means of livelihood for the local community but it also helps in creating education and awareness among visitors about this lesser-known habitat (Mangrove). Local communities from villages like Kalinje and Diveagar in Raigad, Anjarle and Songaon (Ratnagiri) and Taramumbri, Mithmumbri, and Nivti (Sindhudurg) have been trained for undertaking various ecotourism activities. These Mangrove ecotourism initiatives are a part of community-based conservation initiatives taken for the upliftment of local communities and promote mangroves and marine biodiversity conservation.

Case Study Methodology:

The Swamini SHG was selected purposively as a case for the present study. Swamini Women's Self-Help Group (SHG) is the first women SHG to venture out into the area of mangrove eco-tourism. All women members (10) and SHG records provided the required qualitative and quantitative data. This case includes details about genesis of Swamini SHG, profile of SHG members, mangrove ecotourism, food court, ornamental fish rearing unit, empowerment of SHG members and success and achievements of Swamini SHG including field observations and statistical data analysis.

Genesis of Swamini SHG:

Shweta Hule, a fisherwoman and the president of Swamini Women's Self-Help Group lives near Mandavi Creek. When she went to collect oysters in the creek one day, she had an epiphany about how to use and utilize the best of the creek for an alternative livelihood for the women. Shweta Hule expressed her thoughts to her friend Nandini Chavhan in 2015, who motivated and proposed the idea of establishing eco-tourism in the region. Shweta Hule shared this idea with Durga Thigale, the UNDP India Project Associate of Vengurla, Sindhudurg, with the help of a friend. Durga Thigale asked her to organize a Self-help Group of eight to ten women. Shweta Hule pitched the idea of mangrove eco-tourism to all Vengurla SHGs, and the interested women joined together to create eco-tourism in Mandavi Creek. All women have undergone training on rowing boats given by Shweta Hule's husband Sachin Hule. UNDP hired a trainer for teaching swimming to women members of SHGs. Apart from these women attended training such as bird watching, preparation of value-added fish products, hotel management, natural trail, mangrove biodiversity, sustainable tourism, ornamental fish rearing, English speaking, etc. Mangrove cells gave technical guidance for identifying mangrove species, bird species, and aquatic animals located in Mandavi creek.

Profile of Swamini SHG Members:

There were 10 women members in the Swamini SHG. Two women had an age of above 50 years followed by six women between 35–50 years and two had an age of below 35 years. Six women studied up to the secondary school level while three women completed their under graduation. About 60% of members belonged to joint families. The gender of land owner, family head, and house owner of the majority household were men only. Women were involved in fish selling, fish cutting, and oyster and crab catching.

Table 2 demonstrates the daily activity profile of Swamini SHG members. As per the daily activity clock of women members, women were more involved in productive works (10.5 hrs/day) and less in reproductive works (5 hrs/day) (Table 3).

Table 2. Daily activity profile of Swamini SHG members

Activities	Time
Wake up & refreshment	5:00 am – 5:30 am
House cleaning, Washing clothes, cooking, etc.	5:30 am – 8:30 am
Breakfast	8:30 am – 9:00 am
Eco-tourism activity (Boat Safar, food court	9:00 am – 2:00 am
Lunch	2:00 pm – 2:30 pm
Boat safari	2:30 pm – 6:30 pm
Refreshment	6:30 pm – 7:00 pm
Fish Selling and cutting/ Ice cream stall/ Vada pav stall	7:00 pm – 8:30 pm
Washing utensils & cooking	8:30 pm – 9:30 pm
Serving food, dinner & washing of utensils	9:30 pm – 10:30 pm
Watching TV, spending time with family, etc.	10:30 pm – 11:00 pm
Sleeping	11:00 pm – 5:00 am

Table 3. Distribution of work hours spent by Swamini SHG members

Roles and activities	Hours
Productive work	10.50
Reproductive work	05.00
Refreshment/ leisure	02.50
Rest	06.00

Mangrove Biodiversity:

The mangrove species *Sonneratia alba*, *Rhizophora mucronata*, *Rhizophora apiculata*, *Excoecaria agallocha*, *Acanthus ilicifolius*, *Heitiera littoralis*, *Bruguiera cylindrica*, *Xylocarpus granatum*, *Sonneratia caseolaris*, and *Kandelia candel*. Birds such as the White-bellied Sea eagle, White-breasted

waterhen, Common kingfisher, Pied kingfisher, Indian cormorant, Western reef Egret, Glossy ibis, Brahmani kite, Black kite, Asian openbill stork, Common sandpiper, Curlew sandpiper, and Indian pond heron found in Mandavi creek. Aquatic species such as *Uca spp.* (Fiddler crabs), *Telescopium telescopium* (Screw Shell), *Paphia malbarica* (Shortneck Clam), *Mystus gulio* (Long whiskers catfish), *Heniochus acuminatus* (Wimple Fish), *Scatophagus argus* (Spotted scat), *Monodactylus argenteus* (Mono angel), *Siganus canaliculatus* (White-spotted spinefoot), *Siganus guttatus* (The orange-spotted spinefoot), *Acanthopagrus anstralis* (Sea bream), *Elop saurus* (Ladyfish), *Mugil cephalus* (Flathead grey mullet), *Perna viridis* (Green mussel), *Villorita cyprinoides* (Black Clam), *Crassostrea madrasensis* (Indian backwater oyster), *Periophthalmus barbarous* (Mudskipper), *Etroplus suratensis* (Green chromide), *Lates calcarifer* (Asian sea bass), *Lutjanus argentimaculatus* (Mangrove red snapper), *Siganus vermiculatus* (Vermiculated spinefoot), *Scylla serrata* (Mangrove mud crab), *Scylla olivacea* (Red crab), *Penaeus monodon* (Tiger prawn), *fenneropenaeus indicus* (Indian white shrimp), *Sphyraena barracuda* (Barracuda), *Hemiramphus far* (Half break fish), *Tylosurus crocodilus* (Needlefish), and *Gerres filamentosus* (Whipfin silver-biddy).

Mangrove Eco-tourism:

On the occasion of Makar Sankranti Patang Mohatsav (Kite festival) 2017, Swamini SHG started their eco-tourism journey in Mandavi Creek. For the very first time, they gave free rides to 500 visitors from Mandavi jetty to Navabag jetty. UNDP India provided 2 boats worth ₹ 3 lakhs, 20 life jackets worth ₹ 48,000, 2 binoculars, and 1 Gajibo (a shade made of bamboo) worth ₹ 2.5 lakhs to Swamini SHG. The total cost was around ₹5,98,000. Making this project eco-friendly this woman learned to row a boat. Boat rowing was the toughest task. They faced problems in rowing boats like drifting because of the direction of the water current, speedy wind, etc. Then also without fear, these women continued their eco-tourism. Taking time out from daily work, these women started running eco-tourism. Four women are responsible for taking tourists by boats around two kilometers in Mandavi creek, one woman engages the tourists with interesting facts and information on the mangrove biodiversity and the species found in Mandavi creek. They take twelve tourists for a mangrove safari in one ride for one hour. Initially, they started with a rate of ₹70 per person a ride in 2017, and at present 2022 it's ₹ 200 per person. Timing: 10.00 am to 06.00 pm on all days. The month of November to May is the ideal season to visit Mandavi creek to experience eco-tourism.

Swamini SHG's desire to perish in the field of eco-tourism doesn't stop here. With a ₹5,60,000 investment and financial assistance of a 90% subsidy from the mangrove department and a 10% contribution from the women in the group, they established an ornamental fish-rearing unit in Vengurla in 2021. There are 9 rearing tanks in the unit, with 2 tanks holding 2000 liters of capacity and 7 tanks holding 700 liters each. Initially, they were provided with two hundred Goldfish, two hundred Angelfish and two hundred Silver Dollar fish to rear for 4-5 months. Angelfish is sold out at a rate of ₹15/ fish, and Dollar fish is sold for ₹18/ fish. The mangrove cell has appointed a project associate to look after the ornamental fish-rearing unit for guiding the fisherwomen of SHG. He is assisting them in the input supply (fish seed procurement from the fisheries department) and marketing of the reared ornamental fishes. The role of women members is actively involved in the activities of fish rearing (feeding, siphoning out water) and selling it to nearby aquarium shops and local markets.

In another breakthrough, the group started their food court for tourists in 2019. They serve breakfast that has Marathi cuisines- Poha (flattened rice), Shira, Ghavane (quick and easy rice flour batter), Amboli (fermented batter of rice, pulses, and herb/ spices), and lunch (Konkan cuisines- veg thali, chicken thali, fish thali).

The profit from eco-tourism in the initial year (November 2017 to May 2018) was ₹ 1 lakh, in their second year (November 2018 to May 2019) they earned ₹2 lakhs 35,000 from both eco-tourism boating and food court. The food court made them gain more profit than the previous year. The economic performance of the SHG was poor from November 2019 to March 2020. The livelihood of these women was affected by the COVID pandemic and they were forced to shut down their eco-tourism in March 2020 abiding by the pandemic lockdown. The peak season for eco-tourism is the months of April, May, and December (Christmas and new year holidays attract more tourists to the spot). During the COVID pandemic, they didn't make enough profit, they made only 1.5 lakhs from November 2020 to May 2021. In the last year (November 2021 to May 2022), they had a profit of ₹1 lakh 20,000.

Swamini eco-tourism has made Vengurla as a tourist city, and because of that local people are able to sell fish pickles, prawn pickles, and malvani

spices to a tourist which is the additional income source for them. During peak season (usually in December), Swamini SHG employs 3-4 local women @ ₹500/day/person to make food at their food court. Additionally, Swamini SHG takes orders for food for weddings, birth ceremonies, ganpati, and the diwali festivals.

Swamini Self-help group actively participates in mangrove conservation activities such as mangrove plantation, and mangrove awareness camps for school students. In the future, they wish to build a mangrove nursery near the Mandavi jetty. On the first of every month, women members clean the creek. They restricted the usage of plastic in the creek area. Women's row boats manually until now rather than using diesel engine boats in order to maintain the ecology of Mandavi creek.

Swamini SHG member's Empowerment:

About 80% of women said they have access to a great extent to the resources and services they need to run their businesses. About 80% of women said they take help from their male partners to run business activities to some extent. Half of the women said they can manage their business expenses and income well, while the other half said they can only do so to a certain extent. About 50% of women said they can manage their bank accounts to a great extent followed by 40% said to some extent they can manage and 10% said not at all. All women are respected in their families/society. About 80% of women feel they are self-confident and empowered to a great extent. All women feel happy and satisfied. Half of the women said they have the freedom to take decisions related to business to great extent while the other half of the women said to some extent. About 30% of women stated they can take decisions related to family or household to great extent. Half of the women said they are able to visit places related to business needs to a great extent while the other half of the women said they can do it to some extent. About 40% of women said they have contact with state department/research personnel to some extent while 60% of women don't have any contacts with them. All women have sufficient skills and knowledge to run a business. About 70% of women said they are aware about the development schemes and programs to some extent while 30% said they didn't aware.

Success Coverage of Swamini SHG:

A similar project was adopted by Om Sai Bachat Gat Nivati, Sindhudurg, and Jalkannya Bachat Gat, Devgad, Sindhudurg. They took guidance from Swamini SHG. The success of the Mandavi creek eco-tourism by Swamini

SHG was lauded and praised by YouTube vloggers such as Eco India and Prajakta Koli. Television channels such as BBC news, ABP Maza, Z24 Tas, DD Sayadhari have documented the success story of Shweta Hule's eco-tourism. The Guardian, a British daily newspaper, wrote an article titled "how nine women are helping save India's mangroves with foraging and eco-tours" dated 29 July 2022. The Swamini SHG received prestigious awards as mentioned below,

- ❖ Wetland Champion Award on 22nd May, 2022
- ❖ Best SHG of Maharashtra on 16th August, 2020
- ❖ Rotary Club Award on 9th December, 2019

Conclusions:

The major factor for the Swamini SHG success is the grit of the group which made Mandavi Creek as source of their income & employment. The Swamini Group has not only demonstrated a successful model of ecotourism in mangroves but has also encouraged other women's groups to adopt similar ecotourism projects in the Konkan region. The mangrove safari program of Swamini SHG has been recognized as a model for community-led mangrove conservation through ecotourism. These women have become community champions for protecting the mangroves and increasing the tourism value of mangrove ecosystems. The women members of Swamini SHG are able to do tangible economic contributions in their family income. They are more empowered to take financial and family related decisions. Swamini SHG case is one of the best examples of connecting rural women, empowering them, and making them financially independent. As the State's first women's SHG successfully running mangrove eco-tourism, it can be replicated with other interested women SHGs in the mangrove regions to make use of mangrove ecosystem for sustainable income and employment generation.

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Connecting with nature green Initiatives by Goa Bagayatdar Sangh

Riya Bharne*

Abstract:

Business organisations involved in various marketing, agricultural and economic activities owned and controlled by their members are known as cooperatives. Cooperatives play a very crucial part in the growth of any country. It contributes to the development of countries by providing better working conditions to its citizens. Mainly, in an agro-based and continuously developing country like India, cooperatives play a vital role in supporting the farmers, raising their standard of living, and helping them grow economically. Being the largest cooperative society in Goa, the researcher has selected Goa Bagayatdar Sahakari Kharedi Vikri Sanstha Maryadit for this case study to explore its various green initiatives as a cooperative.

Along with being Goa's largest cooperative society Goa Bagayatdar also has its largest supermarket chains all over Goa. It is widely called 'one shop for all,' as it has almost anything and everything available for consumers under one roof. It acts as an intermediary between the farmers and the government when introducing and implementing different schemes for the betterment of farmers. Various studies are found on companies and organisations implementing green initiatives and studying their impact on their performance, employee awareness, and factors influencing their adoption. However, studies on different green initiatives adopted by cooperatives are minimal. Hence, this study has focused on studying the different types of green initiatives that can be adopted by Goa Bagayatdar and whether they are practised or not. The study is based on primary data collected with the help of an unstructured questionnaire by interviewing the management of Goa Bagayatdar. The study will highlight the green

* Student, M. Com Part II, P.G. Department of Commerce, Government College of Arts, Science & Commerce, Khandola- Marcela, Goa

initiatives undertaken by Goa Bagayatdar in going green, its progress, and its impact on the performance of the said cooperative society.

Keywords: *Cooperative, Farmers, Goa Bagayatdar, Green initiatives*

1. Introduction:

The International Cooperative Alliance (I.C.A., 2005) defines a 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". A cooperative society is an organisation where individuals (members) come together voluntarily, start a business venture, and share their gains. When establishing a cooperative society, there are some everyday needs of its members, be they social, economic, or cultural. It can be formed for promoting cultural and traditional activities and business purposes like manufacturing/producing, marketing, and agriculture. The amount generated from such activities is then divided among the cooperative society members as profit, which helps raise their standard of living in the form of additional income. The members can spend the revenue generated to meet their needs and wants as and when they would like to. (Wanyama, 2009).

Another widely acknowledged cooperative definition is the one adopted by the United States Department of Agriculture (U.S.D.A.) in 1987: A cooperative is a user-owned, user-controlled business that distributes benefits based on use. This definition showcases the three generally considered primary cooperative principles, i.e., user ownership, user control, and proportional distribution of benefits.

The cooperative society members form an executive committee to manage it consisting of President, Secretary, Treasurer, and other members. They consider necessary decisions for the well-being and growth of their cooperatives. According to the International Labour Organization (I.L.O.), the cooperative members also enjoy several benefits in return for the risk taken (I.C.A. 1995).

1.1. Growth of cooperatives:

Cooperatives were formed even before any trading activities took place.

Earlier, ordinary people who had everyday needs used to come together and produce, hunt, collect or share the resources they possessed in exchange for the resources they needed from others for their survival.

Rochdale Pioneers of England is said to be the universal cooperative established in 1884. (Mori, 2014). The reason for the establishment of this cooperative was to meet the basic needs of the ordinary people and workers who faced problems even in earning their necessities of life, as the income they earned as labourers were very low and insufficient due to the increasing price of necessary commodities. Formerly, the cooperative consisted of only 28 people, who were skilled labourers and weavers. Together, they opened a shop to sell their goods and framed some principles for them to work smoothly.

In the beginning, the shop was open only twice a week. However, eventually, as the demand for their goods increased, the shop was then opened for five days a week. Subsequently, they made some of their customers members of their group, and each member got a share in the profit earned. The profit generated from this business was far more than what they earned as labourers.

In a developing and agro-based country like India, the growth of cooperatives is at a fast pace. Various cooperatives are being formed as per the needs of the people, some of which are agricultural cooperatives, fisheries cooperatives, students' cooperatives, credit cooperatives, employees' cooperatives, dairy cooperatives, women cooperatives, marketing cooperatives, etc.

Similarly, a tiny yet magnificent state like Goa is full of natural beauty on the western coast of India. It covers 3,702 square kilometres of land, comprising Revenue Districts called North Goa and South Goa, which collectively have a population of 1.82 million. Being a developing state, Goa is well connected to other states via National Highways, ports, and airports (official website of Government of Goa). Therefore, forming different cooperatives for the economy's growth and employment in a fast-developing state like Goa can be considered of utmost necessity.

Previously, the residents of Goa had to abide by The Maharashtra State Cooperative Societies Act, 1960, and its rules. Initially, it was limited to some sugar factories, Urban Cooperative societies, consumers, and services. However, eventually, it started to govern the whole state under the Act. Hence, due to the continuous exploitation and elimination of the entrusted interest of people in Goa, The Goa Cooperatives Societies Act was passed in 2001. However, even though the Act was passed in 2001, its implementation was done in 2008, with a foresighted belief to get an optimistic change in Goa's cooperative sector. After that, the Cooperative sector of Goa kept on intensifying, resulting in a positive change in the economic position of Goa (Popker, 2015).

Currently, there are 5078 cooperative societies in Goa, out of which 2240 are in North Goa, and 2838 are in South Goa (Statistical handbook, 2019-20).

1.2. Green Initiatives:

The rising level of environmental issues like climate change, pollution, and depletion of natural resources have become primary reasons for concern and has resulted in a severe impact on the environment and economies of many countries worldwide. For example, since 1970, nearly an 80% increase has been seen in greenhouse gas emissions from human activities (Hutt, 2016). In addition, excessive use of harmful fertilisers, pesticides, and industrial emissions has given rise to environmental pollution.

Now it is high time that people realise the need to go green and adopt different green initiatives to protect the environment and preserve natural resources for future generations. Green initiatives may include cutting off the emission of greenhouse gases from industries or opting for reforestation.

1.3. Goa Bagayatdar Sahakari Kharedi Vikri Saunstha Maryadit:

Goa Bagayatdar Sahakari Kharedi Vikri Saunstha Maryadit is the largest cooperative society in Goa. Following every principle of a cooperative, Goa Bagayatdar helps local farmers to flourish by supplying reliable agricultural aids and inputs to produce high- and better-quality horticultural products and assisting in its distribution and sales with maximum remuneration possible and also helps in providing quality goods to the consumers at very competitive rates.

Presently, Goa Bagayatdar has more than 9500 members across Goa. It comprises 29 branches, with its headquarters at Ponda- Goa. After a period of every 5 years, they elect a new committee of 19 Directors who function and decide on behalf of the society.

The said cooperative society was formerly registered as “Central Supari Sahakari Kharedi Vikri Society Ltd.” on 31st July 1964, at Ponda- Goa, with several Rs. 10,500/- as its initial fund, to which 116 members contributed. Within one year of registration and successful operation of the cooperative society, its membership increased to 250, resulting in the growth of its share capital to Rs. 31,800/- which also included the contribution of Rs. 15,000/- from the Government of Goa. The cooperative's area of operation was limited to the entire state of Goa only.

Previously, the society was established to secure a better price for the areca nuts its members produced. In the first year of operation, the society registered a nominal profit of Rs. 800/-. However, the goal was achieved only with the staff capacity of two persons; one secretary and one clerk.

It can be said that in the year 1975, a revolutionary change took place as the government decided to merge "Goa Coconut Producers Cooperative Marketing and Processing Society at Margao with Supari Society; hence the name of the Society was changed and "Goa Bagayatdar Sahakari Kharedi Vikri Society Ltd.” Further in the same year as there was an increase in the paid-up capital, the name of the society was then changed to Goa Bagayatdar Sahakari Kharedi Vikri Sauntha Maryadit (official website of Goa Bagayatdar).

2. Literature Review:

Kushwaha and Sharma (2015), in their study, examined the relationship between automobile firms’ green initiatives and firm performance and the relationship and impact of automobile firms’ green initiatives on sustainable development. The study is based on the various facts and findings analyzed by different reputed researchers. It shows a significant result towards the automobile industry as it has the highest blame for ruining the environment. The control of carbon emissions is the major challenge for these automakers. That is why they face dual pressure, one from the government towards carbon emission and the other from the cost controlling and firm

performance. Goodwill and company image are also significant concerns for these auto manufacturers; green initiatives help create goodwill and competitive advantage. It has been observed that greening the supply chain and adapting other green, or ecological ways of performing the business has a positive relationship with the firm performance.

Aziz et al. (2017) in their research, examined the influence of institutional pressures on green initiatives adoption and the extent of green initiatives adoption by Malaysian P.L.C.s. The research findings indicated that coercive and normative pressures significantly influence the adoption of green initiatives in P.L.C.s. In contrast, mimetic pressure does not influence the adoption of green initiatives in P.L.C.s.

Ashton et al. (2017) in their paper explored the motivations for U.S. Midwestern S.M.E.s adopting a variety of green business practices, using a survey of 59 S.M.E.s in the tool and die manufacturing industry. The study's findings revealed that most firms appear internally motivated to implement green practices – driven primarily by cost and competitiveness concerns more than social responsibility concerns. In addition, external coercive pressure from the government or customers does not appear to be a significant motivation for these S.M.E.s.

In their article, **Cruz and Quilloy (AN)** examined the effect of green training on the decision of agricultural cooperatives to adopt green practices. The article's findings showed improvements in the members' self-ratings in the knowledge of green growth, support for the promotion and practices of green growth, and belief in the benefits of green growth. This study also assessed the change in the green scores or the level of commitment of these cooperatives to pursue green growth opportunities before and after the training.

Bortree (2009) in their study explored the impact of awareness of environmental initiatives on perceived environmental legitimacy and the subsequent impact of legitimacy on organisational admiration. The study's findings suggest that raising awareness of an organisation's environmental initiatives improves environmental legitimacy; however, an investigation of the relationship between legitimacy and admiration found that only one dimension of environmental legitimacy influences the level of respect of an organisation.

In their article, **Aziz et al. (2017)** aimed to examine the extent of green initiative adoption and its impact on the environmental performance of publicly listed companies (P.L.C.s) in Malaysia. The article's findings revealed that the extent of adoption of green initiatives and environmental performance is moderate. However, green initiative adoption positively affects the environmental performance of Malaysian P.L.C.s.

Wysocki (2021) in their research, aimed to indicate innovative green initiatives undertaken in the S.M.E. sector while identifying their impact on the operation of entities in this sector. The results concluded that the innovative green initiatives combine environmental objectives with economic objectives and bring measurable benefits to the implementers (e.g., revenue growth), which occurs in parallel with environmental safety maintenance.

In their research, **Li et al. (2017)** studied the influence of green initiatives and green performance on the financial performance of the top 500 publicly traded companies in the U.S.A. by industry sector. The results show that green initiatives harm Energy Productivity and Green Reputation and that green initiative and green performance significantly impact financial performance. These results are mixed and vary by industry sector. The results suggest that companies take a reactive, not proactive, approach to implementing green initiatives. In addition, the results indicate that the impact of green performance on financial performance is short-term and may take more than a year for companies to observe.

Tavares et al. (2019) aimed to verify if adopting green initiatives in the packaging supply chain affects the environmental, economic, and operational outcomes of companies participating in this chain, according to the perception of professionals who work in these companies. The study's results have pointed out that adopting green initiatives influenced only the environmental outcomes of companies in this supply chain.

Baskutis et al. (2021) examined the improvement of energy security and the government's actions to promote renewable energy sources, focusing on increasing energy efficiency and reducing energy intensity and dependence on energy imports in Lithuania. The results of the article provide the state of renewable energy sources in Lithuania, aspects of sustainability, and future development directions and perspectives.

Stolka (2016) in their research, studied the factors which have a significant impact on green initiatives for logistics companies. The research findings paid attention to environmental issues in logistics companies are on the increase; researchers still need to dig further and see what types of incentives would be suitable for supply chain members to adopt green initiatives.

Faezah (2021) in their study, examined the design and deployment of green practices that unraveled entrenched, peripheral, and intermediate ecological practices. The field of inquiry involved public universities established in Malaysia. The study findings pointed out several initiatives and practices reflecting their campuses' ecological practices. Green initiatives emerged as a powerful tool that generated E.E.B. among the participants.

Rashid (2009) in their paper, approached the introduction of eco-label with two perspectives in mind. Firstly, while earlier studies from western scholars use eco-label as a part of the augmented product, this study introduces eco-label as a separate moderating variable. Secondly, the choice of employees working in ISO14001-certified organisation as the study population explore a potentially conducive place to initiate a systematic effort in developing a green consumer community. The results of the paper showed that with some exposure to environmental-related experiences (such as those working with organisations implementing the E.M.S.), Malaysian consumers would react positively to the eco-label. In fact, for a situation requiring them to consider the environmental aspects of a product they wish to purchase, the eco-label will be the crucial factor that will push them to make the right purchase choice.

Mathiyazhagan et al. (2019) reviewed the scenario of green supply chain management (G.S.C.M.) in India and the electronics industry perspective based on an extensive literature review. Also, this study focused on identifying the most influential challenging factors for adopting green initiatives in traditional practices with the help of the decision-making trial and evaluation laboratory (D.E.M.A.T.E.L.) approach. The study results concluded that the biggest challenge faced by the Indian electronic industries is the lack of guidance from experts and ignorance of reverse logistics, among others. By using these results, the concerned authority can take the required steps and initiatives to improve the condition of Indian electronic industries, which can play a significant role in the adoption of G.S.C.M. and other green practices.

Alfaro (2021) in their study, aimed to propose the Green Economic Development Plan or G.E.D. plan, which may be used as a guide by Small and Medium Manufacturing Enterprises or S.M.M.E.s to achieve a more competitive advantage. The findings showed that among the green initiatives implemented by S.M.M.E.s, which resulted in the reduction of total costs and expenses, were the proper disposal and segregation of waste materials, water management by recycling wastewater and using water-efficient equipment, installing energy-efficient equipment, using eco-friendly packaging materials and local supplies, managing efficiently natural resources and raw materials.

In their paper, **Sarmiento and Thomas (2010)** discussed research gaps and the potential applications of the analytic hierarchy process (A.H.P.) in an internal benchmarking process used to identify improvement areas when firms adopt green initiatives with a supply chain perspective. The paper's findings propose a novel framework and approach to apply A.H.P. to examine various potential challenges firms and supply chains might face when adopting green initiatives.

Moise (2021) in their study, aimed to test a model for analysing the incidence of green practices as drivers for generating positive hotel image and guest trust and satisfaction, evaluating the moderating role of guest gender in these relationships. The study's findings highlight the importance for hotels in developing countries of implementing green practices to improve their image and increase the degree of trust and satisfaction of their guests to maintain long-term relationships.

3. Research gap:

Various studies are found on sustainable development, green marketing, green retailing, and green initiatives. For example, Kushwaha and Sharma (2015), Ashton et al. (2017), and Stolka (2016) in their studies have explored industries like automobile, manufacturing, and logistics that have adopted green initiatives and their impact. Nowadays, studies on adopting green initiatives in enterprises and organisations can be observed on a large scale. However, studies on the adoption of green initiatives in cooperatives are found to be limited.

In this study, the researcher has opted for a survey of green initiatives adopted by Goa Bagayatdar as a cooperative.

4. Research problem:

Green initiatives are a path toward going green and sustainable. Green marketing is the evolution in the marketing sector. Going green is the need of the hour; hence studies on these require more highlights. Goa Bagayatdar is the largest cooperative society in Goa, which acts as a link between the government and farmers when schemes are introduced for the betterment of the farmers and also plays a significant role in the growth of the economy of Goa by paying a large sum of revenue to the government in the form of various taxes and also providing employment to several people in their branches across Goa. Moreover, Goa Bagayatdar acts as a role model for other cooperatives across Goa. Hence it can play a crucial role in taking the initiative to adopt green initiatives and making a move to go green.

5. Research Question:

What are the different green initiatives adopted by Goa Bagayatdar?

6. Research Objective:

To study the different green initiatives adopted by Goa Bagayatdar.

7. Research Methodology:

The study period is from October 2022 to November 2022 and is limited to the state of Goa only. The respondent of the study was the management of Goa Bagayatdar, Ponda. Primary data sources were used for this study, and an unstructured questionnaire was used for the interview.

8. Discussion and Analysis:

Green Initiatives adopted by Goa Bagayatdar and its progress

1. Practising material recycling:

Goa Bagayatdar practices recycling wherever possible. They have kept different dustbins for biodegradable and non-biodegradable wastes at their supermarkets. The Municipality collects the generated waste, and recyclable wastes like plastic bottles and papers are further sent for recycling. Biodegradable wastes like vegetable leftovers are used for making organic manures for plants.

2.Organizing recycling programs at stores/supermarkets:

3 years ago, Goa Bagayatdar adopted an initiative to help consumers minimise and recycle their waste. The supermarkets of Goa Bagayatdar all over Goa kept big dustbins outside their stores for the consumers to get their biodegradable and non-biodegradable waste packed separately and throw them into the allocated dustbins. So that it could be further sent for recycling processes.

However, unfortunately, the program's outcome was different from what it was supposed to be. First, most consumers packed all types of waste together and threw them in either dustbin. Then Goa Bagayatdar had to get people to dig up all the waste and sort it out properly. This caused the surrounding area to be dirty and smelly all over, and a lot of time and effort was wasted on it. Hence, the program had to be stopped.

3.Saving energy by turning off lights and fans when not in use:

In the office and stores of Goa Bagayatdar, they see that all of the resources are well-spent, be it light or water. So in the stores, when it is the lunch break, and no consumers are present, they turn off the lights and fans. Also, in the office, there are fans and lights for each person in their cabins; here, it is the responsibility of each person to turn them off when they leave their cabins.

4.Using L.E.D. and C.F.L. lights:

Goa Bagayatdar has replaced the old tube lights and bulbs with L.E.D. and C.F.L. lights in all their stores and offices. These lights do not harm the environment and have a longer life and emit sound effects.

5.Elimination/reduction of harmful material in cleaning supplies:

Cleaning supplies like disinfectant and floor cleaners are used daily to keep the stores and office clean. Hence, while using such cleaning supplies, Goa Bagayatdar considers environmental safety and uses environmentally friendly products authorised by relevant departments.

6.Pollution prevention (Air, Water, Land, Noise):

Regarding pollution, Goa Bagayatdar does not contribute to Noise pollution as it does not dwell in such activities that may lead to noise pollution. When it comes to water, the water that is used in the office and stores have been diverted into sewage; as for land and air pollution, the waste generated is

given to the Municipality for recycling so there is no waste left that can be burnt or dumped anywhere which may cause land or air pollution.

7. Report the importance of going green to customers:

Not every time, but when needed in certain situations, like when consumers ask for plastic bags, the employees of the Goa Bagayatdar sincerely tell the consumers when and why the plastic bags and been stopped and what are the harmful effects it has caused on the environment.

8. Practising waste minimisation:

Although recycling is practised, Goa Bagayatdar sees that unwanted waste generation can be avoided as much as possible. Sometimes waste material includes unused or partially used products, which contribute to unnecessary waste generation.

9. Conducting Green audit:

Goa Bagayatdar does not conduct green audits separately. However, the Green audit is a part of their general audit.

10. Including green initiatives in the vision, mission, and goals:

Green initiatives still need to be included in the vision, mission, and goals of Goa Bagayatdar because, in their opinion, it is only partially possible. However, according to them, even without including it in the vision, mission and goals, green initiatives should be undertaken as much as possible.

11. Organizing programs like tree plantations such as C.S.R.:

Such programs still need to be included in the C.S.R. of Goa Bagayatdar, but taking tree plantation as a C.S.R. activity will be an excellent initiative to go green.

12. Considering green initiatives as a necessity, not an option:

According to Goa Bagayatdar, it is very much necessary for each one to consider green initiatives as a necessity and not as a mere option. It is positively achieved in Goa Bagayatdar to a certain extent.

13. Using wooden planks for shelves:

Goa Bagayatdar has started using wooden planks for shelves as and when

possible. This is because the old shelves made of metal and plastic can only be replaced after some time. So now, when new shelves are made, they opt for wooden planks.

14.Using energy-efficient equipment:

Goa Bagayatdar focuses on purchasing electronic equipment with energy-efficient stars. So, whether in the office or stores, the refrigerator, fans, A.C.s, etc., are of good star ratings.

15.Making bags and receipts optional:

Goa Bagayatdar has made shopping bags of cloth optional for consumers to purchase. However, receipts cannot be optional as consumers especially ask for the receipt to cross-check the items.

16.Practising G.S.C.M. (Green Supply Chain Management):

As a part of G.S.C.M., Goa Bagayatdar has started opting for intelligent packaging, i.e. using the right size packaging boxes for the right products and avoiding oversized packaging boxes. Also, they have started replacing plastic packaging with recyclable cloth pads as and where possible.

17.Stopped selling plastic spoons, cups, etc:

Goa Bagayatdar stopped selling plastic spoons, cups, etc. when the government banned plastic containing less than 51% microns. They replaced it with paper cups and wooden spoons completely. It took a toll on their sales to a certain extent, but most consumers supported the initiative.

18.Replacing the plastic containers, buckets, etc., which are still being sold:

According to Goa Bagayatdar, it will be possible to replace only when suitable substitutes are available. Of course, as the consumers demand these things, it will affect the store's sales, but it can be tried by replacing them with suitable substitutes.

19.Opting for paperless business/digitisation:

Goa Bagayatdar is still in the process of going paperless as much as possible. However, adopting digitisation and eliminating the use of paper will reduce wasting paper to a great extent.

20. Adopt green purchasing:

Goa Bagayatdar tactfully follows green purchasing, i.e. it purchases products as per the requirements only, eliminates the products with content restrictions, chooses the products with utmost content labelling, and purchases the products from certified suppliers only.

21. Introducing reverse logistics:

Goa Bagayatdar undertakes reverse logistics, i.e. sending back the defective or sales-returned products from the consumer to the manufacturer for replacement or recycling so that waste generation can be avoided to a certain extent.

22. Polluted water management:

The used water from pantries or washrooms in Goa Bagayatdar is diverted into sewage. Therefore, there is no polluted water management initiative undertaken as such.

23. Inventory management:

Inventory management, i.e., recording the stock, checking for sufficient stock, and deciding what to order and when to order, is solely done through the software used by Goa Bagayatdar.

24. Selling greener products:

Goa Bagayatdar focuses on selling green products wherever possible, i.e., sustainable and eco-friendly products from certified sellers that do not have or have the least plastic packaging or use recycled plastic for packaging.

25. I am setting up solar panels:

Setting up solar panels requires a considerable sum of money, and the decision needs to be taken by the board of directors. Goa Bagayatdar looks forward to implementing such a cost-effective energy generation, but a decision has been made to set up solar panels.

9. Findings:

- Goa Bagayatdar has taken a great initiative in adopting green initiatives at a reasonable rate.

- While not many green practices are adopted, they can still be considered an optimistic step towards a green society.
- Adopting such initiatives is more accessible, but it also needs to be maintained well and carried on in the future.

10. Conclusion:

Being the largest cooperative society in Goa, Goa Bagayatdar can act as a role model in introducing several green initiatives for protecting the environment. Green initiatives can be adopted quickly by just keeping the concept of sustainability in mind. Using green products and minimising waste generation can help any organisation preserve the environment. Introducing and managing green initiatives in a cooperative with a vast supply chain network and stores across the state is a challenging task. However, the management of Goa Bagayatdar plays a good role in focusing on conserving the environment by going green as much as possible.

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Cooperative Care for Senior Citizens in Kerala – An Exploratory Study

¹Dr. G.Veerakumaran, ²Dr.Shaheena P, ³Dr. E.Vinaikumar

Abstract:

Throughout the world, population ageing is a reality due to reduction in fertility and improvement in survival. The World Population Prospects 2019 of United Nations reports that by 2050, one in six people in the world will be over the age of 65 years, which was one in 11 in 2019. As per the Elderly in India Report 2021, India's elderly population is estimated to be nearly 138 million in 2021, comprising of 67 million males and 71 million females and is projected to touch 194 million in 2031. Interestingly the state of Kerala has the maximum proportion of elderly people in its population (16.5 percent) and it is projected to reach 20.9 percent in 2031.

Many studies have reported innumerable problems for the senior citizens. In this context the paper attempts to explore the services offered by cooperatives in Kerala, a state with wide network of cooperatives in various sectors, to the elderly. The paper consolidates issues faced by the elderly under four broad categories viz. economical, physiological, housing and crime against aged. The paper also sketches the efforts made by the Government of India and Kerala to solve the problems of senior citizens. Interview with the officials of four cooperative societies were made to understand what cooperatives are doing for the senior citizens and what further can be done to the aged. The discussions revealed that cooperatives

¹Professor and Head, Department of Cooperative Management, College of Cooperation, Banking and Management, Kerala Agricultural University, KAU Post, Thrissur, Kerala-80656

²Professor and Head, Department of Development Economics, College of Cooperation, Banking and Management, Kerala Agricultural University, KAU Post, Thrissur, Kerala-680656

³Former Dean, College of Cooperation, Banking and Management, Kerala Agricultural University, KAU Post, Thrissur, Kerala-80656

confine their services to elderly to the provision of financial assistance in general. Yet another point to be noted that there are 16 Welfare Fund Boards in Kerala which are linked to the membership in the respective cooperatives and disbursement of pension is also through the cooperatives. Another interesting fact is that the cooperatives in Kerala has more aged membership and board of management with significant number of senior citizens. The paper proposes four models for providing service to the aged. All the models have its own merits and demerits. But considering the need for public funding, Corporate Social Responsibility, mission mode of service of NGOs, cooperatives' concern for community, the fourth model (Public, Private, NGO, and Cooperative Partnership) is assumed to be a sustainable one. Here, the cooperatives can act as a nodal agency for implementing the need based schemes for senior citizens viz., home care, day care, old age home. For all the care systems, the stakeholders can think of accommodation, common kitchen, Medical Infrastructure, Library and Entertainment clubs and Conduct of Funeral. Incidentally this also reflects the new cooperative policy framework which demands a transformation of PACS in to a Multi Service Centres.

However, the old age needs care, companionship and compassion apart from financial assistance. The cooperatives can reach out to the elderly by designing and executing the services needed by the elderly. It can be a platform for the provision of home care, day care services and running old age homes that the elderly lead a life with dignity and with peace.

Key words: Population Ageing, Pension, Problems of Senior Citizens, Cooperatives, Multi Service Centres.

Background and Justification:

Population ageing denotes to a change in the age distribution of population towards older ages. Throughout the world, population ageing is a reality due to reduction in fertility and improvement in survival. This resulted in the increase of older age group while that of younger age group declines. The *World Population Prospects 2019* of United Nations reports that by 2050, one in six people in the world will be over the age of 65 years, which was one in 11 in 2019. As per the *Elderly in India Report 2021*, India's elderly population is estimated to be nearly 138 million in 2021, comprising of 67 million males and 71 million females and is projected to touch 194 million in 2031. Interestingly the state of Kerala has the maximum proportion of

elderly people in its population (16.5 percent) and it is projected to reach 20.9 percent in 2031. Further, the old age dependency ratio of Kerala which was 19.6 percent as per 2011 census (15.7 percent at all India level), has risen to 26.1 percent in 2021(15.7 percent at all India level) and is projected to be 34.3 per cent in 2031(20.1 percent at all India level). Moreover, female old age dependency ratio, as compared to male, is significantly higher in Kerala, Tamil Nadu, Himachal Pradesh and Punjab in 2021.

Many studies have reported innumerable problems for the senior citizen. Here, we consolidate it into four issues namely economical, physiological, housing and crime against aged.

1	Economic Problems	<ul style="list-style-type: none"> • Basic to all the other problems faced by the aged. • Loss of employment and income • Reduction in their self-esteem and well-being. • Lack of adequate financial resources make it more difficult to handle old age related issues and requirements.
2	Physiological Problems	<ul style="list-style-type: none"> • With growing age, older persons experience various anatomical and physiological changes. These changes bring many psychological, behavioral and attitudinal changes in them. • Loss of physical strength and stamina become more acute as a person grow older and require systematic handling.
3	Housing related Problems	<ul style="list-style-type: none"> • Housing for the aged need to be suitable to the conditions of failing health and illness, commonly associated with later years of life viz. <ul style="list-style-type: none"> o failing eye sight of hearing, o slowing and un-sureness of steps, o diminishing energy and o more acute disabilities, such as blindness, forgetfulness etc.
4	Crime against Aged persons	<ul style="list-style-type: none"> • Aged persons are most vulnerable to be victim of any crime, since they are soft targets. • Aged persons are facing many problems such as murder, theft, hurt, cheating and bag snatching by the both known and unknown persons.

Source: Elderly in India 2021

In order to solve the problems of senior citizens, both the government of India and the respective state governments are taking sustained efforts through their policies and programmes. Here a brief review is being made to understand the Measures taken to mitigate the Problems of Senior Citizens. It is worthwhile to mention the National Policy on Older Persons 1999 envisages ‘State support to ensure financial and food security, health care, shelter and other needs of older persons, equitable share in development, protection against abuse and exploitation, and availability of services to improve the quality of their lives. The policy also covers issues like social security, intergenerational bonding, family as the primary caretaker, role of Non-Governmental Organizations, training of manpower, research and training’.

The Government of Kerala as well evolved an Old Age Policy namely *Vayojana Nayam 2013*. The Policy acts as a guidelines to make Action Plans to form various schemes and projects for the welfare of Senior Citizens in the State. The Policy ensures the protection and welfare of all citizens above the age of sixty especially for the elderly women. The Policy aims to provide the better social economic and healthy life to the Senior Citizens and by the Policy the Kerala Government give the direction to all departments to ensure the economic security, better social living, providing Legal aid, protect from abuses, ensure better health by implementing projects, creates geriatric wards in the hospitals and special care in the Hospitals and give high priority in all fields.

The trend setting act namely ‘The Maintenance and Welfare of Parents and Senior Citizens Act 2007’ was promulgated with a mission to ensure the rights of parents and duties of their children. Kerala state has also adopted this central act and implementing it meticulously. Here, the terms maintenance and welfare includes

- Provision of food, clothing, residence, medical attendance and treatment
- Provision of healthcare, safety, and security for parents and senior citizens to lead a life of dignity
- Other amenities for the physical and mental well-being of a senior citizen or parent.

Based on the policy and acts, both the union and state governments are implementing many schemes for the aged. Let's list out some of the major initiatives.

Sl. No.	Name of the Scheme	Purpose
Government of India		
1	National Action Plan for the Welfare of Senior Citizens (NAPSrC)	This is an action plan of GoI for the welfare and wellbeing of senior citizens of the country, by taking care of the top four needs of senior citizens viz., financial security, food, health care and human interaction/ life of dignity.
2	Pradhan Mantri VayaVandanaYojana	This is a pension scheme launched by GoI in May 2017 to provide social security exclusively for the senior citizens aged 60 and above. The scheme is now extended up to March 31, 2023.
3	Indira Gandhi National Old Age Pension Scheme (IGNOAPS)	The scheme is being implemented by the Ministry of Rural Development since 2007 for senior citizens and are below the poverty line.
4	National Programme for the Health Care of Elderly (NPHCE)	to provide dedicated health care facilities at various levels of primary, secondary and tertiary level
5	Rashtriya Vayoshri Yojana	The scheme provides physical aids and assistive devices for elderly suffering from age related disabilities/infirmities, and those who belong to BPL category. The scheme aims to address disability/infirmity, low vision, hearing impairment, loss of teeth and locomotor disability

Sl. No.	Name of the Scheme	Purpose
6	Pradhan Mantri Jan Arogya Yojana (PM-JAY)	Launched by the Ministry of Health and Family Welfare in 2018, this health insurance scheme provides a health cover of Rs. 5 lakh to poor and vulnerable families, per family per year for secondary and tertiary care hospitalisation across public and private empanelled hospitals.
Government of Kerala		
7	Institutions for Elderly Care in Kerala	Old Age Homes and Day Care Centres
8	Old Age Pension Scheme	<ul style="list-style-type: none"> • Non-contributory Social Security Pensions to beneficiaries who are identified by the local bodies. • The pensioners receive a monthly pension of Rs. 1600 of which, greater share is met by the State Government.
9	Kudumbashree	Empowerment of Special Neighbourhood Groups

Source: *Economic Review 2021, Government of Kerala*

Objectives and Methodology:

Though there are schemes to protect the elderly persons in the state, we hear stories of negligence, ill-treatment, poverty, poor healthcare and so on. There arises a sustained effort for maintenance and welfare of aged. This is therefore an attempt to understand what the cooperatives in Kerala is doing for the aged and what further cooperatives can do for the aged. For drafting this paper, the writers have reviewed the available literatures on the concept of ageing, policies and legal remedies for senior citizens. Further an interview with the officials of four cooperative societies were made to understand what cooperatives are doing for the senior citizens and what further can be done to the aged. The outcome of the interviews is presented in the following paragraphs.

Cooperative Care for Senior Citizens in Kerala- Few Experiments:

Adoor Taluk Senior Citizens Cooperative Society Ltd:

Adoor Taluk Senior Citizens Cooperative Society Ltd is specifically organised by the senior citizens for their welfare. The membership is restricted to senior citizens only. The society provides loans and advances to the members without considering their age. The rate of interest is 2 percent less than that of other cooperative banks. The loan instalments are collected directly from the member borrowers at their home. The society also gives ½ percent more interest on the members' deposits. The society has meeting facility for evening get together where the member find time and people to socialise themselves. On regular intervals, the society organises medical camps and laboratory check-ups at a discounted rate. Those who are not able to visit the lab or campsite, the society arranges home services as well.

Peringandoor Service Cooperative Bank Ltd:

Peringandoor Service Cooperative Bank Ltd is a model Primary Agricultural Cooperative Credit Society in Kerala which has many innovative schemes. It caters to the entire village community irrespective of their profession. The Cooperative offers the following services for senior citizens.

- 0.5 per cent additional interest to the fixed deposits of senior citizens. This is being followed in all credit cooperatives/Cooperative Banks in Kerala.
- Disbursement of all social security pensions to the senior citizens of the village. Of course this is also being carried out by all other PACSS in Kerala.
- Sukhayuss Pension Scheme. An amount of Rs.1200/- is paid to all members of senior citizens category. The amount is paid at their door steps by any one of the Board of Director.
- Door delivery of medicine for senior citizens.
- Medical care at Home. The Cooperative has appointed doctors, nurses, and other para medical staff for the purpose. Reduction of 14.5 % to 60 % for all lab tests and medicines. It operates under the banner of *Thanal Arogya Kendram*.
- Medical Insurance Coverage up to Rs.100000/-
- Death Relief Fund of Rs.10000/- per member for their funeral.
- Hi tech ambulance services, Mobile freezers

Irinjalakuda Co-operative Hospital Ltd:

Irinjalakuda Co-operative Hospital Ltd is a super speciality hospital serving its members and the community. The Hospital admits general public in its area of operation. The hospital mainly adopts allopathic system of medication. The members and senior citizens are having the following privileges:

- Laboratory tests and, in-patient treatment cost at 30 percent discount
- Discount on Medicine
- The hospital facilitates to obtain Medical Insurance of all insurance companies at a competitive price
- Government of Kerala Pensioners medical insurance is being implemented in the Hospital
- There is a separate palliative care unit to treat the people with terminal illness

The Cooperative Hospital is a solace to the senior citizens of the area.

Thrissur Primary Cooperative Society: Employees Pensioners Cooperative Society Ltd:

The Employees Pensioners Cooperative society was formed by the retired employees of the Primary Agricultural Credit Cooperatives. There are around 300 members in the society. The major objective behind the formation of the society is to provide financial assistance to the retired employees. The following are the welfare measures extended to the members.

- A higher rate of interest of 9 per cent to the deposits of the retirees
- Loan to a maximum of two lakhs to the members on guarantee of two individuals
- The society is running a Chitty for the benefit of the members.

Other Pension Schemes for the members of Cooperatives:

Dairy farmers who have taken welfare membership with The Kerala Dairy Farmers Welfare Fund after becoming a member of the Primary Dairy Co-operative Society in which they are milking, on completion of any five annual years with milking and after the age of sixty years an amount of Rs.1600/ - per month is paid as pension.

Small Farmers who attained 60 years and above were provided Karshaka pension @ ₹1,600 per month. Just like that there are 16 such Welfare Fund Boards in Kerala and mostly they are linked to the membership in the respective cooperatives and disbursement of pension is also through the cooperatives.

Another interesting fact is that the cooperatives in Kerala has more aged membership and board of management with significant number of senior citizens.

Prospects of Cooperative Care for Senior Citizens:

Kerala has got a wide network of all types of cooperatives without any regional imbalances. There are 12284 cooperatives under the control of Registrar of Cooperative Societies in Kerala. Of which 2082 are rural cooperatives and they are directly involved with the farming community. Altogether there are 3402 Cooperatives such as Handloom, Coir, Khadi & Village, Other industries, Dairy and Fisheries cooperatives in Kerala. Moreover, 98 Cooperative Hospitals are function in the state. This phenomenal cooperative network with strong federal cooperatives can be used to provide better services to the aged. Here we propose four models for the providing service to the aged.

All the above models have its own merits and demerits. But considering the following points, the fourth model (Public, Private, NGO, and Cooperative Partnership) will be a sustainable one.

- **Public** funding in the form of Social Security Pension
- **Corporate** Social Responsibility Funding
- **NGOs** : Mission mode of serving the vulnerable communities
- **Cooperatives** : have the principle of Concern for community

Here, the cooperatives can act as a nodal agency for implementing the need based schemes for senior citizens. All the three mode of operation namely

- Home Care: service at their door steps,
- Day Care: only during day time
- Old Age Home: Full-fledged Homes for senior citizens can be thought of under this umbrella.

For all the above three care systems, the stakeholders can think of the following common services:

- Accommodation
- Common Kitchen
- Medical Infrastructure
- Library and Entertainment clubs
- Conduct of Funeral

This also reflects the new cooperative policy framework which demands a transformation of PACS in to a Multi Service Centres. One such service could be for the aged.

Conclusion:

The involvement of cooperatives with the elderly is minimal in a state with high share of senior citizens compared to the national average. It is mostly confined to providing a higher rate of interest on the deposits, provision of loans, a nominal pension and after death financial assistance. Old age needs care, companionship and compassion apart from financial assistance. The cooperatives can reach out to the elderly by designing and executing the services needed by the elderly. It can be a platform for the provision of home care, day care services and running old age homes that the elderly lead a life with dignity and with peace. To this end the paper suggests a quadripartite partnership of public, private, NGO, Cooperative organisations.

New Generation Cooperatives: The Practices and Future Prospects

¹Dr. Aryashree Debapriya

Abstract:

Cooperatives over the past one and half century have played a critical role in terms of empowering weaker sections of the society including farmers and other small producers. In many countries this has proved to be a successful social business enterprise in terms of elimination of middlemen. At the same time such institutions have also been a support for the sections of consumers by providing them with quality products at a fair price. However, many of these social enterprises across the world are plagued with several weakness and inefficiencies leading to loss of producers and consumers confidence. At this juncture, few experiments in establishment of new generation cooperatives were made in the developed countries in America and Europe to overcome the issues and challenges faced by the traditional cooperatives. These cooperatives emphasizing more equity participation and patronage from the owner members were popularly known as New Generation Cooperatives. Economists, practitioners and social anthropologists brought those experiments through several papers and articles. This article reviews the concept of new generation cooperatives and the possibilities of establishment of such social business enterprises in the backdrop the policy focus of newly established Ministry of Cooperation by Government of India to support the farmers and small producers.

Key Words: New Generation Cooperatives, Patronage, Investor Owned Business

Introduction:

COOPERATIVES have played a major role in the economic upliftment of farmers and other producers of basic commodities in developed as well

¹Associate Professor, National Institute of Rural Development and Panchayati Raj, Rajendranagar, Hyderabad – 500030

as developing countries for well over a century. The role of a cooperatives are to create an interface between the producers and market, provide access to permanent risk bearing capital for producers, manage risk for them through diversification, set standards in the market, provide more competitive market conditions and market access to the producers and to promote economic democracy at the grass root level (Singh, 2008). They have been important in both farm supply (providing fertiliser and other inputs) and product marketing (including transport, storage and processing). It is a well-accepted fact that cooperatives are different from other forms of organisations not only in terms of business functions they perform but also in the manner and philosophy with which these functions are performed.

However, it is an accepted fact that cooperatives at the first place are business enterprises. As such they must succeed in the marketplace, competing against other cooperatives, and businesses established as companies or other entities. To compete successfully, they must do most of the things that other businesses do. While there are often advantages in establishing a business as a cooperative, the fact that it is a cooperative does not guarantee success, even if members have a strong commitment to make it work. Profits must be made if the cooperative is to sustain its capital base. Members must be paid a competitive price; they may accept a lower price for their product for a short period, but cannot do so for long. Customers must also be offered a competitive price; they will not pay a higher price because they are buying from a cooperative. Successful cooperatives are successful businesses first, and cooperatives second. In view of this, it is important to agree on the fact that the producers have clarity on the nature and scope of the business, the sources of capital, the business strategy and so on. As part of this process they should consider the corporate structure, which could be a cooperative, company, association or other structure which might be peculiar to the particular country. The best corporate structure will often, but not always, be a cooperative structure.

It is believed that in rural communities where market failures are more likely to persist, locally based cooperative organizations may be a more favourable alternative to profit motivated business. It is also agreed with the view that there are durable benefits to each type of organization, and that cooperatives need to focus their management strategy on their unique identity. More often than not, there is a sense that cooperatives want to differentiate themselves from the investor owned business. It is believed that

this sense of a different corporate culture can be turned into an advantage. Chaddad and Cook (2003), for example, indicate that cooperatives have found some creative solutions to bypass the financial constraints problems, yet do not convert themselves into investor-owned business. They resort to organizational changes, allowing outside capital injections while preserving member control.

The success of cooperatives have, however, been accompanied by frequent failures. Many cooperatives have been forced into liquidation or merger as a result of changing conditions in their business environments, poor business models, bad management or the failure of members to support them. In some cases, such as Japanese cooperatives, they have become institutionalised by government intervention, becoming part of the system by which farm prices are regulated. In these circumstances, they are inclined to become inefficient and uncompetitive, and a burden on both farmers and the broader economy. Co-operatives in general have suffered from the problems globally and resulted in failure with some exceptions. The traditional cooperative form of organizations have suffered from various constraints, which have had a negative effect on the day-to-day operations and performance of cooperatives. These constraints, which originate in the very nature and principles of the cooperative form of organisation, include the commitment to buy the entire produce from all members, lack of financial and managerial resources, lack of market-orientation, and small size of operations. In the light of the previous experience of the poor performance of traditional cooperatives, it was felt that there was a need to give more freedom to cooperatives to operate as business entities in competitive markets.

Collectives & Cooperatives:

Farmer collectives are viewed as an important element in linking smallholders with modern markets (input and output) as they provide many benefits for this interface. Further, primary producers' organisations or collectives are being argued to be the only institutions which can protect small farmers from ill-effects of globalization or make them participate successfully in modern competitive markets (Trebbin and Hassler, 2012). Producers' organizations not only help farmers buy or sell better due to scale benefits but also lower transaction costs for sellers and buyers, besides providing technical help in production and creating social capital function different than the conventional cooperatives and act as new generation cooperatives.

Evolution of New Generation Cooperatives (NGCs):

New generation cooperatives (NGCs) have surfaced, mostly in the US and to some degree in Canada in the past three decades, as a response to changing conditions in agriculture. Varieties of assistance programs from governments and other agencies in these countries have an important role to play in the development of different forms of cooperatives. However, it is up to members and their management to keep the business afloat and maintain a viable cooperative structure.

Many, if not most, NGCs are formed in response to some type of market failure or adverse market conditions to secure additional profits through value-added enterprises, or as community economic development (Cook 1995). Sometimes a secondary objective may be to support a specific interest or hobby. When successful, these ventures can become secondary income sources. In many situations, the members consider that they have the opportunity to pursue a particular business opportunity through acting together. They may see an opportunity to develop a business with lower costs or one producing innovative, value added products. NGCs of this type are 'entrepreneurial' in nature and generally carry higher risks. They can succeed only with an innovative business model.

NGCs differ markedly from traditional cooperatives in that they have a restricted or closed membership with members having specified delivery rights based upon the number of shares held. A democratic form of organization with one vote per member policies and a board of directors elected by the members from the members is the norm. Earnings are distributed among members on the basis of shares (Cropp 1996). The price and delivery requirement per share is essentially established by the capital required for financing the development of a processing facility and the capacity of the planned facility (Stefanson, Fulton, and Harris 1995). While members are usually allowed to purchase varying amounts of stock, the members' investment constitutes a legally binding agreement to deliver the predetermined quantity of the commodity. To allow for community involvement and support, many NGCs sell preferred stock. The holders of this stock do not have voting rights. Some of these cooperatives require only a small amount of startup capital; however, a majority require millions of dollars to be raised before they begin operations. Depending on the specific NGC, the investment and producer requirements can differ substantially.

Functional Modalities of NGCs:

The main focal point of NGCs in the current market scenario is value-added processing. Whereas the traditional cooperatives centre on commodity marketing, basically acting as a clearing house for the members' products (Stefanson, Fulton, and Harris 1995). According to Stefanson, Fulton, and Harris (1995, 14), "Motivated, determined producers are the most important element in the success of New Generation Cooperatives." Producer members must spend an immense amount of time working together to develop an NGC. Regardless of individual differences or past disputes, members must band together to develop a unified front. The specific core group of members is most important and they are the nucleus of the development process. It is this group that must work with lenders, arrange for feasibility studies, develop a business plan, and recruit prospective members. With a strongly motivated central core, the cooperative can entice the collaboration and dedication of not only producers, but also economic development and perhaps governmental agencies. After a project has been determined feasible and a business plan has been created, the equity drive is the next major component in forming a NGC. Without adequate start-up capital, the NGC can-not be successful in starting and this is often a major deficiency of NGCs. The initial contribution by members is a measure of their commitment to the project. NGC typically tries to sell enough shares to provide the necessary inputs for processing. Financial institutions generally want 40-60 percent of the start-up capital to be investor equity, depending on the lender and the nature of the project. The logic behind the financial institutions' requirements is simple. The greater the investment that members of the NGC have in a project, the more committed they tend to be to the project's success. The specific amount of investor equity required is likely to be greater if there is currently no established market for the product, if risk elements involved have never been dealt with before, or if the product is extremely high-tech (Thyfault 1996).

The price and delivery requirement per share is essentially established by the capital required for financing the development of a processing facility and the capacity of the planned facility (Stefanson, Fulton, and Harris 1995). While members are usually allowed to purchase varying amounts of stock, the members' investment constitutes a legally binding agreement to deliver the predetermined quantity of the commodity. To allow for community involvement and support, many NGC's sell preferred stock. The holders of this stock do not have voting rights. Majority of the NGCs

require huge amount to be raised for establishment. However, depending on the specific NGC, the investment and producer requirements can differ substantially.

Many NGC have restricted or limited membership, links product delivery rights to producer member equity, raises capital through tradable equity shares among membership, enforces contractual delivery of produce by members, distributes returns based on patronage, goes for value addition through processing or marketing, and makes use of information efficiently throughout the vertical system. However, it retains one member – one vote principle for major policy decisions (Harris et al 1996). The advantages of delivery rights shares for members are assured with procurement prices and market share of profits due to value addition (residue claims), and appreciation of share prices due to better performance of the cooperative. This kind of restructuring, especially equity linked delivery shares and contractual delivery of produce helps cooperatives to tackle problems of free riding by membership horizon, which is at the root of financial constraint; and opportunism, both of members as well as of the cooperative. This arrangement by cooperatives has helped them become economically efficient, financially viable, and obtain member loyalty wherever it has been tried (Harris et al 1996).

Mulkanoor Cooperatives an Indian Experiment of NGCs:

Mulkanoor Cooperative Rural Bank and Marketing Society Limited (MCRBMS), in Warangal district of Telangana state of India was established to provide relief to the farmers from the Agrarian Distress and protecting them from the moneylenders is one similar such experiment on New Generation Cooperatives in India. Started in 1958, the key purpose of the bank was to provide short term crop loans to the farmers, bring them out of the clutch of the money lenders and fertilizer suppliers. For supply of credit the cooperative was dependent upon Cooperative Bank or other commercial banks. The capital base of Mulkanoor Cooperative Bank was not healthy. To strengthen the capital base of the cooperative society, the General Body authorized the cooperative to make deductions initially at 1:10 ratio and subsequently at 1:5 ratio from the loan amount of the borrowers. This helped the society in raising capital base of the cooperative for undertaking business. The second initiative was to make it compulsory for the members borrowing from the cooperative to deposit 5% of the seasonal crop loan amount with the cooperative once in every

year. It was also agreed upon that the deposit amount of the members could be withdrawn only upon withdrawal of membership from the cooperative. This unique initiative led to drastic increase in the capital base of Mulknor Cooperative and facilitated diversification of its services and growing needs of the members. The internal generation of funds gave the cooperative greater freedom in terms of financing the members liberally for other uses including construction of bore wells etc. This way Mulknor Cooperative judiciously used various programmes and schemes for betterment of the members. It provided finances for purchase of pump sets, supply of fertilizers, pesticides, agricultural equipment etc. At the same time the cooperative society gradually decreased the external dependence for Capital with increasing internal dependence on all active members in an equitable member. This has promoted responsible member behaviour. The loan recovery percentage of the credit cooperative has grown to an average 90% to 95%. Which reflects responsible member behaviour.

Over the past few years Mulknor cooperative has been able to generate sufficient internal funds has ventured into establishing 1tph capacity rice mill with the support of NCDC. With assured supply of paddy from its own members the value addition in term rice production, storage and marketing best quality rice. Over the period of time the capacity of the rice mill has increased to 4tph with a storage capacity of 10,000 MT. The cooperative society succeeded in this venture since it was able to link paddy procurement to repayment of loans by the members and payment of higher market price for the produce. Apart from this, in the past the cooperative also introduced High Yielding Variety Programme with an objective to ensure regular supply of quality seed to the member farmers. The availability of abundant capital with Mulknor Cooperative led to another great initiative in establishment of the first all women dairy cooperative in India viz., The Mulknor Womens' Mutually Aided Milk Producers Cooperative Union Ltd. Established in the year 2002 is having 23,000 women dairy producers. This unique initiative is the first community based dairy cooperative enterprise in India which is fully owned and managed by women.

In order to strengthen the internal governance and management system and increase the performance and accountability the cooperatives under the Mulkanor were registered under the Andhra Pradesh Mutually Aided Cooperative Society Act 1995. The Act ensures greater freedom and autonomy to the cooperative institutions. In view of the high level

of patronage of the members, they are highly cautious in exercising their voting rights. The active participation of the members in the General Body and ensuring that the capital and other resources are used prudently and economically and the services provided are satisfactory.

From the experience of the Mulknoor Cooperatives it is construed that active participation and promoting responsible behaviour of members and in recognising mutuality of their obligations for the cooperative in ensuring their patronage only can secure real benefits for the members. Performance of the cooperative enterprise is strongly dependent on the members actions. By patronizing the services of their cooperatives members can secure benefits of cooperation. High level of financial patronage of the members in cooperatives is one key area which the new generation cooperatives have rightly emphasized upon.

Challenges for NGCs:

The most disastrous component of an NGC can be the members themselves. If members cannot work together for the benefit of the group as a whole rather than compete with each other, the cooperative is most certainly doomed. Another major hurdle in the formation and operation of an NGC is obtaining capital. While establishment of processing facilities can cost more than millions of dollars, it can be daunting to even consider finances. However, with a significant number of shares, an unbelievable array of available grants, low interest loans, tax credits, and other financing options, the goal is certainly not unobtainable. A related obstacle can often be influencing potential members on the benefits of joining the NGC. The concept of buying contract shares in a cooperative is relatively new to most farmer producers, especially when processing is involved. Some producers simply do not see themselves as part of the production industry. To these producers, the NGC may not seem like a realistic investment. Members and facilitators devoted to the project with a reasonable amount of technical knowledge are needed to explain what a producer can gain through membership or they may not be willing to invest. However, after realizing the potential for high premiums and returns on stock in addition to a few successful examples, producers can be convinced more easily.

Conclusion:

NGCs offer producers an opportunity to compete in today's global marketplace. By adding value to farm products through processing, these

cooperatives help keep a greater portion of the profit in the hands of producers. Working together, the economies of scale is needed for obtaining vertical integration. NGCs often result from a group effort to correct a market failure. Low commodity prices and eroding rural economies have brought more focus to such topics. Rural economic development efforts are more often being focused on agriculture. While there is no recipe for success in developing an NGC, the number of current thriving operations allows for comparison of characteristics. A strong and committed membership core with leadership capabilities, strong equity financing, and technical guidance can help develop a successful NGC. The possibilities with increasing technology and expanding niche markets are only limited by the imaginations of farmerproducers. With the success of Mulkanoor Cooperatives in India, replication of such member owned social business enterprises is a reality for the future to empower the farmer and other producers in India. The establishment of Ministry of Cooperation by Government of India with a policy thrust for establishment of professional cooperative institution opens a flood gate of opportunities for New Generation Cooperatives. However, it is of utmost important for the policy makers, investors and the producers to make cautious steps towards establishment of NGCs so as to avoid the mistakes committed in the past.

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Value Chain Management Practices of Farmer Producer Companies (FPCs)

¹M. Ragubalan and ²Dr. S.V. Akilandeewari

Abstract:

Farmer Producer Organisations (FPOs) are introduced in 2002, by amending the Companies Act, 1956 to strengthen the mussels of the Indian cooperatives. As on 2021, 7,000 FPOs are functioning in India carrying out various kinds of agricultural produces. The role of FPOs is to provide support to the farming process of the farmer members. The FPOs are providing the services such as procurement, marketing, input supply, value addition, technological support, training and consultation. The present study focus on the value addition practices of the select FPCs in Tirupur and Dindigul Districts of Tamil Nadu. Two FPOs from Tirupur District and one FPO from Dindigul District selected for this study. Both primary and secondary data were collected and discussed in the study.

Keywords: FPOs, FPCs and Value Chain Management and

Introduction:

India's government-owned agricultural extension system struggles to address the emerging broad-based needs of farmers in the backdrop of globalized agriculture trade scenarios and agricultural platforms primarily influenced by climate change factors. The extension system is trying many concepts to address this situation. 'Cooperative can be one such model. Though many cooperatives are established on agricultural and other

¹ Research Scholar, Department of Cooperation, The Gandhigram Rural Institute (Deemed to be University), Tamil Nadu, India.

² Assistant Professor & Head, Department of Business Administration, Athoor Cooperative Arts and Science College, Dindigul, Tamil Nadu, India.

commodities, very few successes could be realized. Corruption, political intervention and lack of a 'business mode' approach were the principal reasons. (Dr. C. Pitchai & Dr. S. V. Akilandeswari, 2020) Hence, in 2002, to revamp the cooperative structure, with the amendment (in Section 581) of Companies Act 1956, as a response to the Report of the Committee under the Chairmanship of Professor Dr. Yoginder K Alagh, Ministry of Consumer Affairs, Government of India introduced the Bill 2003 for amendment by introducing part IX-A and thereby paved the way for incorporation of Producer Companies. The concept of incorporation of 'Producer Company,' thus, began its journey. (Dr.C.Pitchai, 2018) As a result, many farmers producer companies (FPCs) were established in various parts of the country, covering a more comprehensive range of commodities. There are many FPOs entered in the process of value addition to enrich the business and serve to their members.

But after 2013, the government took significant initiatives to promote FPOs, especially the Policy and Process Guidelines for Farmer Producer Organizations was issued to form and function the FPOs under various forms such as Cooperatives, Companies, Trusts, and NGOs. Around 7000 FPOs are functioning in India in various forms till 2020 and the Government introduced a new central sector scheme called “Formation and Promotion of FPOs” on 29th February 2020 with the budget allocation of Rs.6,866 Crore to form 10,000 new FPOs in India. (Bhagwat, 2020)

The study focuses on the value addition practices of select FPOs in the state of Tamil Nadu.

Objectives of the Study:

- To study the general working of the select Farmer Producer Organisations.
- To explore the value addition practices of the select Farmer Producer Organisations.

Methodology:

Both primary and secondary data were used for this study. Primary data was collected through observation. The process of value addition in each select FPOs are observed and analysed in the study. Secondary data were collected from the books and records of the select FPOs of the study. The study covered three FPOs by the convenience of the researchers. Two coconut based FPOs from Udumalpet, Tirupur District namely Udumalpet Coconut Producer Company Limited and Madathukulam Coconut Producer

Company Limited. One guava and fruits based FPC from Palani, Dindigul District namely Ayakudi Guava and Fruits Producer Company Limited.

Profile of the Sample FPOs:

The Udumalpet Coconut Producer Company Limited (UCPCL) is promoted by Snehalaya Agriculture Management Society with its own fund and registered as per the Indian Company's Act 1956. By and for the farmers of the Udumalpet and nearby area, till 2021, 2180 farmers have joined together and formed the producer company. The Snehalaya Agriculture Management Society taking the lead role to lay the road work started a producer company. Now, the company emerging as manufacturing and also attempting to add value to the goods with the support of various institutions. Under UCPCL 10 federations are organized and functioning for the company. The UCPCL renders the services like Agricultural consultancy services, Agri-input services, Providing market information to the farmers through SMS or Whatsapp, Friends of Coconut Tree Programme (FoCT) and Micronutrient Root Feeding to their members.

The Madathukulam Coconut Producer Company Limited (MCPCL) was formed on 23rd November 2015, registered under Central Coconut Development Board by nine coconut producer federations in Tirupur District with over 1850 farmers from the town of Madathukulam, Udumalpet, Palladam and it situated at Udumalpet town. MCPCL engaged in manufacturing, trading, training, and awareness programs regarding agriculture-oriented processes, especially for coconut-producing farmers. The objective of MCPCL is to carry on the business of producing, farming, harvesting, procuring, distributing, marketing, selling, handling, branding, export of all types of Agricultural products and allied businesses of the members and buying within India or importing goods or services for the benefit of the members. The MCPCL renders the services like area expansion programme, laying out demonstration plants, providing assistance for organic manure units and friends of coconut tree programme to their members.

Ayakudi, Palani, one of the blocks of Dindigul District of Tamil Nadu, located in North-West region of the state. Guava is the predominant fruit crop, grows in approximately 5000 acres, concentrated around this block, spread across different taluks. It was the initiative of the researchers of Tamil Nadu Agricultural University (TNAU), Coimbatore, to seed the idea of establishing a producer company by analyzing the guava growers, who were struggling to market their produce for a reasonably remunerative

price. Under the World Bank-funded National Agricultural Innovative Project (NAIP), the researchers of TNAU facilitated the guava growers of Ayakudi to register this company under Company's Act with Small Farmers Agri-Business Consortium (SFAC) in 2014. The registered name of the company is 'Ayakudi Guava and Fruit Producer Company (AGFPCL). It renders services like the sale of agricultural inputs, auctioning produce, consultancy services, training to the members, training programmes to the other FPO members and Export.

Value Addition Practices of the select FPOs:

The sample FPOs are procuring the produces of their members and making it as value-added products. By this process, the members get good price for their produces and receive more dividends from the net profit of the FPO.

Figure 1

Value Addition Process of FPOs

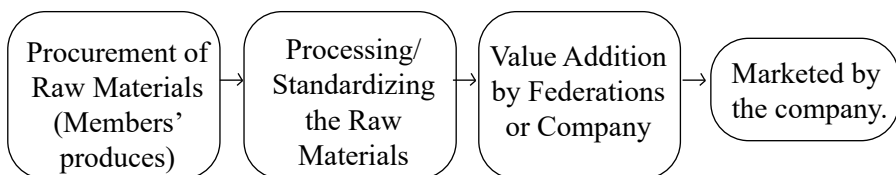


Table 1

List of Value Added Products Produced by the FPOs

Name of the FPO	UCPCL	MCPCL	AGFPCL
Value Added Products	Neera, Coconut Sugar, Coconut Jaggery.	Neera, Coconut Sugar, Coconut Jaggery, Organic Coconut Oil Coconut oil based Soups in four flavours.	Guava Juice

Neera:

In 2017, the Government of Tamil Nadu granted permission to extract neera for the benefit of the coconut farmers. The UCPCL and MCPCL are

extracting neera from their member farmers. Neera will be extracted twice a day from a coconut tree and it is stored in a cold storage. It is a perishable product and should be sold within two days from the extraction. Up to three liters can be extracted from a single tree per day. After extracting the neera, the FPOs immediately packed in the water bottle and supplied to the bakeries and restaurants around Udumelpet town.

Coconut Sugar and Jaggery:

The UCPCCL and MCPCL are in the business of making coconut sugar and coconut jaggery production. Neera is the raw material for the production of Coconut Sugar and Coconut Jaggery. Based on the demand, the FPOs extracted the neera from their members coconut trees and used the unsold neera for this production. Nowadays, the demand for coconut sugar and coconut jaggery increased and the FPOs are selling them by packing in a box. It is sold through the temporary shops in the National Highways.

Organic Coconut Oil:

The MCPCL producing unrefined coconut oil which has been pressed at low heat and then filtered. The low heat allows it to maintain its biologically active antioxidants and phenol compounds in the oil. The MCPCL has separate demand for this oil and it is not sold through any other retailers. The company is producing only on prior order from buyers.

Coconut Oil Based Soaps:

The company producing four flavoured soaps from coconut oil where coconuts are processed without chemicals to extract pure coconut oil. Thus, oil is then organically saponified with alkali for producing a soap of fatty acids that will provide great benefits to the human skin. The four flavours such as Neemthulasi, Multanimatti, Panjakavya and Gram flour. The soups are also produced by prior orders of the buyers and are not supplied to the private shops.

Guava Juice:

From 2016 onwards, a member of the company namely Mr.Kathirvel started producing Guava Juice in Ayakudi and sold in the name of Ayakudi Guava and Fruits Producer Company Limited. This activity helps the

members to get reasonable price, by the juice unit. This juice was marketed all over Tamil Nadu. The Ayakudi Guava and Fruits Producer Company Limited has made an agreement with Guava Juice Unit to provide royalty for using the name of AGFPCL.

Conclusion:

The study found that the select FPOs are functioning to serve the farmer members without any deviation. Comparing to all three FPOs, the Madathukulam Coconut Producer Company Limited produces more value-added products and Ayakudi Guava and Fruits Producers Company producing only one product through a member of the company. Apart from the value addition, the FPOs are not having a vision for marketing. The FPOs need to analyse and identify their market to increase the sales volume. The AGFPCL have a possibility to produce the guava and other fruits juices instead it is done through a member of the FPO. The AGFPCL should enter into value addition process and improve their business performance. The Coconut Development Board largely promotes the coconut producer companies and it has created websites to all the coconut producer companies. The UCPCCL and MCPCL has utilized this facility to display their value added products and marketing/selling through online.

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Co-operative intervention in collection and marketing of Non-Timber Forest Products (NTFPs) in Kerala

¹Dr. Ushadevi K. N, ²Vijaykumar N

Abstract:

Indigenous communities living in the forests depend on the forest resources like Non-Timber Forest Products (NTFPs) for their survival and livelihoods [Howell et.al., 2010]. It was estimated that around 400 million people worldwide depend on the NTFPs derived from the forests for their primary and subsistence source of livelihood [Sharma et.al., 2015]. More than 50 million people in India depend on forest-based NTFPs for their consumption and income [Lepcha et.al., 2020]. NTFPs provide 55 per cent of total employment in the forest sector of India. Kerala has obtained the highest Human Development Index (HDI), but the scheduled tribes remain socially and economically vulnerable. To improve their living conditions, the Union and State governments have launched several programmes, schemes and established institutions from time to time for promoting NTFPs. It is time to assess whether these interventions are within reach of the tribals and to what extent the Cooperatives positively affect the promotion of NTFPs and the livelihood of NTFPs collectors. This study fulfils the research gap in the area of the Cooperatives contributions towards improving the livelihood of NTFPs collectors, which will, in turn, help them to intervene in the appropriate areas necessary for intervention.

The current study investigates services rendered by the Cooperatives to tribes in the collection and marketing of NTFPs, the awareness level of the

¹Professor & Head, Department of Rural Marketing Management, College of Co-operation, Banking and Management, Kerala Agricultural University, Vellanikkara, Thrissur 680 656, India

² Research Scholar, Department of Rural Marketing Management, College of Co-operation, Banking and Management, Kerala Agricultural University, Vellanikkara, Thrissur 680 656, India

tribal towards the activities of tribal Cooperative Societies, the impact of the services of tribal Cooperatives to tribals. The study further identifies problems faced by the tribal Cooperatives and tribals in terms of collection and marketing of NTFPs. For the purpose of the study 3 Scheduled Tribes Service Cooperative Societies each from Palakkad, Wayanad and Thrissur district were selected. More over the intervention of Tribal Cooperative Marketing Development Federation of India (TRIFED) was also addressed in the study. A sample of 100 tribes involved in NTFPs collection for the last ten years were selected randomly from Palakkad and Wayanad district of Kerala (based on number of NTFPs collectors). The study was mainly based on primary data and was supplemented with secondary data wherever necessary. Participatory rural appraisal (PRA) was conducted among tribes to collect primary data by administering semi-structured interview schedule. Garret's ranking technique was used to identify the problems, an awareness index was employed to understand tribals awareness level toward institutions activities and an impact diagram was draw to assess the impact of institutional intervention.

The study highlighted that the Societies provides services like information sharing, procuring NTFPs, facilitating financial assistance and provision for storing. The services rendered by the TRIFED includes, providing essential training, provision for selling NTFPs through e-portals and facilitating the benefits through various schemes. Most of the tribals were unaware of many activities of the institution. Societies and TRIFED have made many interventions to promote NTFPs in Kerala, mainly in the area of regular collection, procurement and marketing of NTFPs. The study revealed that the intervention of Cooperatives resulted in increase in income, reduction in dropouts, an increase in women collectors, reduced debt of tribals and reduction in migration. The study also found that that the low price availability of NTFPs, inadequate availability of NTFPs in the forest, lack of guidance and support from government officials for marketing of NTFPs and no training for value addition of NTFPs were the major problems encountered by the tribals while collection and marketing of NTFPs. More intervention from the Cooperative Societies by way of creation of awareness programme, developing infrastructure facilities and imparting training for value addition which will help the tribal's to fetch more price for their NTFPs and to improve their standard of living is warranted.

Keywords: NTFPs, collection, marketing, tribals, cooperatives

Introduction:

The tribes in India form an essential element of the total population. Tribals constitute 8.61 percent of the country's total population, numbering 104.28 million and covering about 15 percent of the country's area. The 35 tribal communities in Kerala make up about 2 per cent of the state's total population. In terms of proportion, the scheduled tribe population constitutes 1.45 percent of the total population. The highest proportion of scheduled tribes in Kerala was recorded in the Wayanad district with 18.53 percent (GOI, 2011).

Center for International Forest Research definition for Non-Timber Forest Products (NTFPs) is "NTFPs are any product other than timber that is produced in forests. They include fruits and nuts, vegetables, fish, medicinal plants, resins, essences and a range of barks and fibres such as bamboo, rattans, and a host of other palms and grasses".

Indigenous communities living in the forests depend on Non-Timber Forest Products (NTFPs) for their survival and livelihoods [Howell et.al., 2010, Klate et.al., 2022]. It was estimated that around 400 million people worldwide depend on the NTFPs for their primary and subsistence source of livelihood [Sharma et.al., 2015]. More than 50 million people in India depend on forest-based NTFPs for their consumption and income [Lepcha et.al., 2020]. NTFPs provide 55 per cent of total employment in the forest sector of India (Ahamed et al 2022). In recent decades, much attention has been paid to NTFPs without addressing the ecological factors and environmental impact. In India during the 2019-20, approx 40 percent of total official forest revenues and 55 percent of forest-based employment is provided by NTFPs (vijaykumar 2022). The volume and value of NTFP was 474.003 tonnes and ₹291.045 lakhs respectively in Kerala (Forest Statistics, 2020).

In order to prevent the exploitation of the tribals by middle man, the government granted the rights of collection of NTFPs to the Scheduled Tribe Service Cooperative Societies (STSCS) in 1978, with membership reserved for tribals alone. From the current categorization of Cooperative Societies, non-credit Cooperative Societies such as the STSCS can be potential participants in promoting NTFPs in Kerala. There are 24 STSCS in Kerala and were involved in the procurement and marketing of NTFPs.

Tribal Cooperative Marketing Development Federation of India (TRIFED) was founded in August 1987 under the Multi-State Cooperative Societies Act, 1984. The objective of TRIFED is the socio-economic development of the tribal communities through market development of tribal products.

Kerala has obtained the highest (Human Development Index) HDI, but the scheduled tribes remain socially and economically vulnerable. To improve their living conditions, the Union and State governments have launched several programmes, schemes and established institutions for promoting NTFPs. It is time to assess whether these interventions are within reach of the tribals and to what extent the Cooperatives positively affect the promotion of NTFPs and the livelihood of NTFPs collectors. This study fulfils the research gap in the area of the Cooperatives contributions towards improving the livelihood of NTFPs collectors, which will, in turn, help them to make intervene in the appropriate areas necessary for intervention.

Objectives:

- Services rendered by the Cooperatives to tribals in collection and marketing of NTFPs
- The awareness level of the tribals towards the activities of Cooperatives
- Impact of the services of Cooperatives to tribals
- Problems faced by the tribals and Cooperatives in collection and marketing of NTFPs

Materials and Methods:

The present study was conducted in Palakkad and Wayanad districts of Kerala. A sample of 100 tribals involved in NTFPs collection for the last 10 years were chosen proportionately from selected district. The study was mainly based on primary data and was supplemented with secondary data wherever necessary. Participatory Rural Appraisal (PRA) was conducted among tribals to collect primary data by administering semi-structured interview schedule. Garret's ranking technique was used to identify the problems, an awareness index was used to understand tribals awareness level toward institutions activities and an impact diagram was drawn to assess the impact of institutional intervention.

Results and Discussion:

Services rendered by the Cooperatives to tribals in collection and marketing of NTFPs:

NTFPs play a crucial role in people's daily life and welfare worldwide. In order to support NTFPs collectors, central and state governments have established many institutions. Scheduled Tribe Service Cooperative Societies (STSCS) and Tribal co-operative Marketing Development Federation of India Limited (TRIFED) were the major institutions. The services provided by both institutions is depicted in Table 1.

Table 1 Services rendered by the Cooperatives to tribals in collection and marketing of NTFPs

Services	Institution rendering services
Sharing of information with members of the society	STSCS
Provided depot for storage of NTFPs	STSCS
Procurement of NTFPs from tribals	STSCS & TRIFED
Support for market development through Institutional support for the development and marketing of Tribal products/produce	TRIFED
Ensuring Fair Prices to Tribals through Mechanism for marketing of Minor Forest Produce (MFP) through Minimum Support Price (MSP) and development of value chain for MFP	TRIFED
Income generation for NTFPs collectors through Pradhan Mantri Van Dhan Yojana (PMVDY)	TRIFED
Selling of raw and value added NTFPs through retail outlets and e-portals (Tribes India)	STSCS & TRIFED
Facilitating financial assistance in the form of advance for collection of NTFPs	STSCS
Providing essential training to the members of the Society	TRIFED

Source: primary data

STSCS-Scheduled Tribe Service Cooperative Societies, TRIFED - Tribal co-operative Marketing Development Federation of India Limited

The STSCS provides various services to its members. They inform tribals regarding the quantity of NTFPs to be collected. The society secretary informs it in person or over the phone. They provide the depot for storage of NTFPs collected by tribals. Sometimes they used to construct a temporary depot in the forest so that tribals do not want to carry the collected NTFPs

for a long distance. They also used to hire a depot if they did not have adequate space for storage in their depot. Society provides advance to tribals for the NTFPs to be collected. Earlier, Society had provided loan to tribals, but tribals continuously failed to make repayment. Every month they used to conduct meeting either tribal settlement or in their office to discuss about selling price of NTFPs and to here the problems faced by the tribals. They also sell the raw NTFPs to the consumer.

Institutional Support for development and Marketing of Tribal Products was introduced in 2014-15. TRIFED is the nodal agency for executing the scheme. The purposes of the scheme were socio-economic development, livelihood generation, and empowerment of tribals. The primary activity under the scheme- is market development, where TRIFED acts as a facilitator and service provider to the tribals to market their NTFPs. They started to market the procured raw and value-added NTFPs from tribals under the brand name Tribe India. This initiative has benefitted more than one lakh tribals in India. It provides a stable basis for the marketing of tribal products across India. There are 121 tribal outlet networks in India. As part of market expansion, the products of Tribes India are now available through e-commerce platforms like Tribes India, amazon and flipkart. The Mechanism for Marketing Minor Forest Produce (MFP) through Minimum Support Price (MSP) & Development of a Value Chain for MFP' was launched on 14th April 2018 and implemented by TRIFED to ensure fair prices for the tribal collectors.

Under PMVDY, they set up tribal community-owned Van Dhan Vikas Kendras (VDVKs), and 10 Self-Help Groups were established. Each SHG will comprise up to 30 NTFPs collectors, i.e. about 300 beneficiaries per Kendrais. Tribals were provided working capital, technical support and training to add value to the products they collected from the forest. TRIFED has conducted 10 trainings and 19 workshops over the last 6 years. The workshop was on schemes available for scheduled tribes and training in value addition of honey. All the programmes were conducted at tribal settlements and were for the tribals in Palakkad and Wayanad districts. Initially 2019-21 TRIFED sanctioned 13 VDVK in Wayanad district.. Later 31 more VDVK were also sanctioned during 2020-21, and Rs. 402 Lakhs was sanctioned for its funding. Out of these a amount of Rs. 201 Lakhs was released to the Kerala government.

Volume and value of NTFPs collected by STSCS:

The five years (2016- 2021) data of STSCS was examined in order to understand the volume of NTFPs procured from tribals and their share on total volume of collection by 24 Societies. The volume and value of NTFPs procured through the society during 2016-21 are shown in Table 2. More than five lakhs tonnes of NTFPs were collected by 24 Societies during 2016-2021. Out of total volume of collection, a major share comes from MSTSCS except during 2018-19. As flood had negatively impacted the volume of collection during the year. There was variation in the collection share of selected societies from 2016-21. MSTSCS constituted a total of 484.35 tonnes, with a maximum quantity recorded in 2017-18 (145.32 tonnes). MSTSCS had highest share (22 percent) recorded in 2019-20 and 2020-21.

Table 2 Volume and value of NTFPs collected by Schedule Tribe Service Cooperative Societies

Year	Volume and Value of NTFPs	Trichur Scheduled Service Co-operative Society (TSTSCS)	Meppadi Scheduled Tribe Service Co-operative Society (MSTSCS)	Malapuzha Schedule Tribe Service Cooperative Society (MSTSCS)	Others	Total
2016-17	Volume (000kg)	18.40 (4)	107.90 (21)	13.76 (3)	370.70 (72)	510.85
	Value (Lakhs)	5.68 (8)	17.62 (25)	2.80 (4)	43.76 (63)	69.86
2017-18	Volume (000kg)	19.75 (2)	145.32 (14)	19.89 (2)	837.32 (82)	1022.28
	Value (Lakhs)	7.58 (7)	19.98 (19)	6.58 (6)	70.16 (68)	104.29
2018-19	Volume (000kg)	21.55 (2)	16.93 (1)	16.14 (1)	1211.06 (96)	1265.68
	Value (Lakhs)	9.51 (7)	14.79 (12)	10.15 (8)	93.89 (73)	128.34
2019-20	Volume (000kg)	22.95 (5)	106.08 (22)	19.35 (4)	325.63 (69)	474.01
	Value (Lakhs)	12.13 (23)	17.07 (32)	9.29 (17)	15.05 (28)	53.53
2020-21	Volume (000kg)	24.06 (5)	108.03 (22)	36.28 (7)	327.88 (66)	496.25
	Value (Lakhs)	13.26 (21)	11.82 (19)	10.90 (17)	27.56 (43)	63.53

Source :Kerala State Federation of SC/ST Development Co-operatives

Last two years selected societies share on volume of NTFPs collection increased from 31 percent to 34 percent. There was a huge decline in the volume of collected NTFPs of STSCS from 1265.68 tonnes in 2018-19 to 496.25 tonnes in 2020-21. MSTSCS had a better share of collection value than other societies except 2020-21. Malapuzha Schedule Tribe Service Cooperative Society had shown an increase in the share of collection value (8 to 17 per cent) from 2018 to 2020. MSTSCS constituted a collection value of Rs 81.27, with a maximum value recorded in 2017-18 (Rs 19.98 lakhs). The selected societies had highest share of collection value in 2019-20 (72 percent).

Figures in parenthesis is percentage share on total volume and value of collection of all Society in five years

Volume and value of NTFPs sold by Schedule Tribe Service: Cooperative Societies:

Quantities of NTFPs sold through the selected Societies during 2016-2021 and share on sales are depicted in Table 3. A total volume of 24.05 tonnes of NTFPs were sold through the STSCS for the last 5 years. Thrissur and Meppadi STSCS had shown a decrease and increase in the volume on total share of NTFPs sold. However, Malapuzha STSCS shows an increase in share on volume of 2 percent (2016-17) to 7 percent in (2020-21). MSTSCS had the highest share on total sales volume (34 per cent) during 2020-21. There was a massive increase in the share (4 to 32 percent) of the sales value of NTFPs of TSTSCS, and they had an increase in the sales value throughout the years. Malapuzha and Meppadi STSCS had the highest share (37 per cent) on total sales value in 2019-20.

Table 3 Volume and value of NTFPs sold by Schedule Tribe Service Cooperative Societies

Year	Volume and Value of NTFPs	Thrissur Schedule Tribe Service Cooperative Society	Meppadi Scheduled Tribe Service Co-operative Society	Malapuzha Schedule Tribe Service Cooperative Society	Other	Total
2016-17	Volume (000kg)	18.40 (4)	32.91 (7)	11.89 (2)	415.06 (87)	478.25
	Value (Lakhs)	7.61 (3)	7.33 (3)	4.47 (2)	273.65 (92)	293.07
2017-18	Volume (000kg)	19.75 (3)	48.97 (7)	13.74 (2)	638.22 (88)	720.69
	Value (Lakhs)	9.57 (8)	24.99 (22)	3.82 (3)	77.42 (67)	115.80
2018-19	Volume (000kg)	21.55 (3)	15.19 (2)	18.35 (3)	645.50 (92)	700.58
	Value (Lakhs)	11.78 (14)	15.62 (18)	9.86 (11)	49.30 (57)	86.55
2019-20	Volume (000kg)	22.95 (10)	21.03 (9)	15.82 (7)	165.23 (74)	225.04
	Value (Lakhs)	15.72 (28)	13.30 (24)	13.36 (24)	6.31 (24)	56.07
2020-21	Volume (000kg)	24.06 (9)	96.19 (34)	19.32 (7)	140.68 (50)	280.25
	Value (Lakhs)	17.82 (32)	11.49 (21)	12.25 (22)	6.08 (25)	55.48

Figures in parenthesis is percentage share on total volume and value of sales of all Society in five years

Source :Kerala State Federation of SC/ST Development Co-operatives

The awareness level of the tribals towards the activities of Cooperatives:

In order to support tribals, many institutions had formed with the support of the State and Central governments. The tribals need the necessary information and support from these institutions concerning the collection of NTFPs. However, the extent of awareness will vary from one tribal to another tribal. It is essential to study whether they were aware of the activities and how much they were aware. Index method was used to analysed the tribals awareness level of activities of Cooperatives. The awareness level of tribals in Kerala is presented in the Table 4.

Index range defining awareness level:

Extremely aware	Greater than 66.6
Somewhat aware	66.6-33.33
Not aware	Less than 33.33

Table 4 The awareness level of the tribals towards the activities of Cooperatives

Statement	Total (N=100)		
	S	I	LoA
Procurement of NTFPs from tribals by STSCS	300	100	EA
Procurement of NTFPs from tribals by TRIFED	100	33	NA
Information provided by the STSCS regarding the quantity of NTFPs to be collected.	200	67	SWA
Market channel of STSCS	240	80	EA
Market channel of TRIFED	100	33	NA
Depot facility offered by STSCS for storage of NTFPs.	300	100	EA
Financial assistance offered as of advance for NTFPs collection	130	43	SWA
Tribes India e-portal of TRIFED for selling raw and value added NTFPs	100	33	NA
Retail outlets of TRIFED for selling raw and value added NTFPs	100	33	NA
Retail outlets of STSCS for selling raw NTFPs	160	53	SNA
Training to the members of the Society	140	47	SWA
Support for market development through Institutional support for the development and marketing of Tribal products/produce	100	33	NA
Fair prices to tribals through Mechanism for marketing of Minor Forest Produce (MFP) through Minimum Support Price (MSP) and development of value chain for MFP	100	33	NA
Income generation for tribals through Pradhan Mantri Van Dhan Yojana (PMVDY) for income generation through value addition of NTFPs	140	47	SWA
Composite Score/ index	2210	53	SWA

Source : primary data S-score, I- indices, LoA- Level of awareness

Impact of Spot payment by STSCS:

The impact diagram clearly shows that the STSCS provides an advance amount to tribals for collecting NTFPs. The balance amount was provided at spot once they brought the NTFPs to the depot. The impact of the intervention was that tribals did not want to borrow any money or take any loans from others. As a result, the debt of tribals was reduced significantly, and more tribals were interested in NTFPs collection.

Impact of knowledge enhancement programme by TRIFED:

After examining the impact of the intervention on the knowledge enhancement programme, it is clear that the TRIFED had provided training on sustainable harvesting and value addition on honey. Among selected tribal only 40 percent had received the training. A meaningful judgment was that the quantity of honey collected increased and increased the income of NTFPs collectors. There was an increase in the number of women collectors, and regular income was assured for them. Which in turns resulted in better life for women collectors.

Impact of procurement and marketing by STSCS:

STSCS regularly procures NTFPs from tribals and marketing NTFPs with the help of the SC/ST Federation through auction cum quotation. The important find was that they were getting regular income and which in turns resulted in promoting children's education.

Impact of institutions intervention in Kerala:

STSCS and TRIFED had made many interventions for promoting NTFPs in Kerala. A major intervention was the provision for regular procurement and marketing of NTFPs. Important findings was increase in income, reduction in dropouts of children from school, increase in women collectors, reduced the debt of tribals and reduction in migration of tribals from colony

Problems related with collection of NTFPs:

The study tried to examine the significant problems of tribals and Cooperatives in collection and marketing of NTFPs in the study areas. Tribals were asked to express and rank their problems related to collection and marketing. The problems related to collection and marketing are depicted in tables 5 and table 6.

Table 5 Problems related with collection of NT

Statement	Total	
	Average score	Rank
Low price availability of NTFPs	78	1
Inadequate availability of NTFPs in the forest	72	2
Long distance to collect NTFPs	55	4
Negative interactions with wild animals	67	3
Behaviour of forest officers	50	5
Lack of training to extract NTFPs	11	10
Lack of proper instruments for extraction of NTFPs	24	9
Flood	45	7
Scattered distribution of NTFPs in the forest area	49	6
Lack of demand for NTFPs	42	8

Source; primary data

It is clear from table 5 that the top five problems faced by tribals in Kerala were low price availability of NTFPs (1), inadequate availability of NTFPs in the forest (2), negative interactions with wild animals (3) and long distances for collecting NTFPs (4). The low price received by tribals resulted in a reduction in the quantity of NTFPs collection, low income and lack of interest in youth collectors. The absence of timely cleaning of the forests and the absence of forest fire contributes to the inadequate availability of NTFPs in the forest. Inadequate and continuously declining availability of NTFPs in the forest is a significant problem for their livelihood. The negative interactions with wild animals like elephants, tigers, and foxes often make it difficult for them to venture into the forests to collect the products. Another major problem faced by the tribes was the long distance to collect NTFPs. The tribals need to travel more than 14 km to the forest to collect NTFPs, and as they do not have any vehicles, self-carriage is the only option left. Men used to carry more than 10kg and women more than 4kg as head load. The continuous carriage of the collected NTFPs creates health issues like back pain. Further, the NTFPs are scattered through the forests, so they must travel more distance.

Problems related with marketing of NTFPs:**Table 6: Problems related with marketing of NTFPs**

Statement	Total	
	Average score	Rank
Lack of guidance and support from government officials	78	1
No training for value addition of NTFPs	40	4
long distance to travel to market place	54	2
Poor road facilities	47	3
Poor transportation facilities	39	5
High transportation cost	30	6
No institutional support after training programme	26	7
Lack of training for value addition of NTFPs	23	8

Source:primary data

Table 6 showed the main marketing problems faced by tribals in Kerala viz: lack of guidance and support from government officials for marketing of NTFPs (1), long distances to travel to the marketplace (2) and poor road facilities. They were forced to sell NTFPs in raw form at lower price, as government had not provided adequate support for marketing NTFPs. They were not provided necessary information on the aspects like demand, price, etc. The metallic road is there for only 2-3 km and not in proper condition. None of the tribals in the selected district has a vehicle and therefore depends on a private vehicle. Only a few private vehicles are available and charge a higher price. There is no support from any institutions for transportation. The tribals were staying far away from the market and they need good road and transportation facilities for selling the collected NTFPs to the final customer.

Problems faced by the Cooperatives:

The STSCS in selected districts were facing similar problems such as flood, covid 19, unscientific collection of NTFPs by the tribals, and lack of storage facilities. There is delay in fund release by SC/ST federation to Society for procuring NTFPs from tribals and it is the another problem faced by the society. The volume of NTFPs collected from tribals decreased

due to Covid 19, flood and lack of storage facility. The tribals were not scientifically collecting NTFPs, so they were not able to sell all the procured NTFPs and which in turn affected the volume of sales in Kerala. Domine of single company leads to be the buyer as price maker and it had forced the societies to procure NTFPs at lower price from tribals. No problems expressed by TRIFED.

Conclusion:

The present study highlighted the interventions of Cooperatives in the collection and marketing of NTFPs and its impact on NTFPs collectors. The study revealed that the Societies provides services like information sharing, procuring NTFPs, facilitating financial assistance, and provision for storing. The services rendered by the TRIFED includes, providing essential training, provision for selling NTFPs through e-portals and facilitating the benefits through various schemes. Most of the tribals were unaware of many activities of the institution. Societies and TRIFED have made many interventions to promote NTFPs in Kerala, mainly in the area of regular collection, procurement and marketing of NTFPs. The study revealed that the intervention of Cooperatives resulted in increase in income, reduction in dropouts, an increase in women collectors, reduced debt of tribals and reduction in migration. The study also found that that the low price availability of NTFPs, inadequate availability of NTFPs in the forest, lack of guidance and support from government officials for marketing of NTFPs and no training for value addition of NTFPs were the major problems encountered by the tribals while collection and marketing of NTFPs. More intervention from the Cooperative Societies by way of creation of awareness programme, developing infrastructure facilities and imparting training for value addition which will help the tribal's to fetch more price for their NTFPs and to improve their standard of living.

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Paradigm Shift in Functioning of Multipurpose Fisheries Cooperative Society in Versova, Mumbai

Ankush L. Kamble¹, Shivaji D. Argade²,
Rujan J³ and Jayapratha T³

Abstract:

VERSOVA, originally named Vesave, is a small fishing village of the Kolis, situated in northern suburb of Mumbai city. The existence of rich fishing grounds for both Demersal and pelagic nearby, resulted into spectacular growth in fishing activities in village. Fishery is the principal source of livelihood in village involved 3,000 active fishermen and employ about 5,000 people in auxiliary activities. Village engaged more than 300 trawlers and contributes approximately Rs 400 crore annually to the stakeholder's income. Co-operatives have played a major role in the development of fisheries in Versova. There are three fishermen cooperative societies which are successfully functioning at Versova village. Though there are three co-operative societies operating in the village, the Vesava Machchimar Vividh Karyakari Sahakari Society Ltd. (VMVKSSL), is the largest among them with 4859 members and 257 trawler owners affiliated as members. Therefore, it is essential to know the historical progress in functioning of society and its contribution in fisheries development of village. In this context, the present article gives insight into role and functioning of Versova multipurpose fisheries cooperatives society for the benefits of fish producers and fish consumers. The current article is based on historical facts of society composed through regular interactions and frequent visits to society. Established eight decades ago on the principle of co-operatives, today the VMVKSSL provides various forms of assistance to about 5000 member fishermen. Eight decades ago, the society stated with two shops for supply of industrial goods (sheaves, yarn, paint, oil tar) is now providing everything like supply of fishing gears, diesel, ice, insurance, marketing

¹Senior Scientist, ²Scientist & ³PG Scholars, ICAR-Central Institute of Fisheries Education, Mumbai

facilities, subsidy, loan to its fisher members. Presently society sales 72 per cent diesel and petroleum products followed by fresh fish and ice to its member. Even today, the society continues to be in good financial shape with turn over 13.15 crore and net profit of Rs.7.84 lakh, and providing materials to the fishermen at a modest cost. This shows that society is performing well along with fulfilling its members requirements. But after lockdown the sale and profit of society is continuously declining. It is noteworthy that the society has received 11 national awards till date due to its remarkable achievements in fisheries development in Versova.

Keyword: Versova, Fishery, Cooperative, Society, Development

Introduction:

A fishery cooperative, or fishing cooperative, is an association of fisher folks that is owned and controlled by fisher and their members are involved in certain activities from farming, catching, distribution, and marketing of fish through jointly owned and democratically controlled business. The cooperative societies in fisheries are working for the welfare of fish producers and fish consumer by providing various type of aids. In India large number of fisheries cooperatives societies are formed both in marine and inland sectors for the benefits of fish folks. Presently, there are one National Level Federation (Fishcopfed), 21 state level federations, 7 regional level federations, 132 district level federations and 21,741 primary cooperative societies functioning both in marine and inland fisheries sectors of India. And about 33,53,115 fishermen are the members of these fisheries societies (Fishcopfed, 2022). The fisheries' cooperative structure in India is broadly three tiered and it consists of a primary co-operative society at village level; a district or regional federation at middle level; and a state level cooperative federation at top level (BOBP, 1983).

Versova, originally named Vesave, is a small fishing village of the Kolis, situated to the north of the old Mumbai city (Gazetteer, 1982). It is a promising fishing centre in Mumbai of Maharashtra State located at the mouth of Malad creek and it is about 30 km to the north of Sassoon Dock fishery harbour. The existence of rich fishing grounds for both Demersal and pelagic nearby, resulted into spectacular growth in fishing activities in Versova. The shores of Versova creek are surrounded by thriving mangroves which support different kinds of marine life, especially crabs, molluscs,

fish and selfish (Kantharajan, *et al.*, 2017). The fishing harbour at Versova is generating wide range of benefits not only to fishermen of Versova but also various stakeholder involved in supply chain. In Versova zone, Penaeid and Non-Penaeid Prawns accounts for more than 50% of the landings, Bombay duck accounts for about 16%, Anchoviella shares more than 7% and Ribbon fish more than 6% of the total fish landings for the year 2010-11 (Versova fishery harbour, 2019). Kolis are the fisherfolk who harvest and sell their fish at Versova jetty at both wholesale and retail prices. They have their own cooperative societies of Versova fishermen, wherein they manage all the fishing activities (Choudhary, 2016). The fishery cooperative in Versova plays a very important role in fulfilling the needs of fishermen. In this contextual, the present article gives insight into functioning of Versova multipurpose fisheries cooperatives society for the benefits of fish producers and fish consumers.

Data and Methodology:

The information on various aspects of multipurpose fisheries cooperative society (Vesava Macchimar Vividh Karyakari Sahakar Society Ltd.) located in Versova village is gathered through personal visits. The basic statistical tools are used to analyse the data and drawing inferences on it.

Results and discussion:

Fishery in Versova:

Fishery is the principal source of livelihood in Versova village involved 3,000 active fishermen and employ about 5,000 people in auxiliary activities. Village engaged more than 300 trawlers and contributes approximately Rs 400 crore annually to the stakeholder's income (ToI, 2017). The village reported first in city in establishment of cold storage and ice factory. Mainly males are leading in fishing and wholesaling activity, however, retail marketing is dominated by women. Some peoples of village are involved in dry fish business and waste management activities also. Backward integration by converting fish waste into manure, poultry feeds as well as processing tiny fish which have no market is minimizing waste and improve profitability in Versova fish economy. The fisheries cooperative societies have a lion's share in the thriving fisheries industry in Versova village. Though there are three co-operative societies operating in the village, the Vesava Machchimar Vividh Karyakari Sahakari Society Ltd., is the largest among them with 4859 members and 257 trawler owners affiliated as members (table 1).

Cooperative societies in Versova:

Three fishermen cooperative societies are successfully functioning at Versova village. These are;

1. Vesava Macchimar Vividh Karyakari Sahakar Society Ltd., Hiraji Chikhale Smriti Bhavan, Versova Koliwada, Versova, Mumbai-400061
2. Vesava Machhimar Sahkari Society Ltd., Sahkar Mandir, Charch Road, Versova, Mumbai-400061
3. Vesava Koli Sahkari Sarvodaya Society Ltd., Tere Gally, Versova Road, Versova, Mumbai-400061

Vesava Macchimar Vividh Karyakari Sahakar Society Ltd.:

The Vesava Macchimar Vividh Karyakari Sahakar Society Ltd. (VMVKSSL) registered as a primary society in 1948, four years after its establishment in 1944. The cooperative movement was begun in 1944 with the cooperation of fishermen youth of Versova village. Fisher youth of Versova contributed Rs. 1100 and founded the *Vesava Koli Samaj Seva Sangh* in the year 1944. At that time there were stilt boats used to catch the fish. For this, two shops were opened on a cooperative basis to supply fishing tools like sheaves, yarn, paint, oil tar, chandrus (used to fill crack) etc. The foundation of the cooperative movement was laid by creating an ideal of cooperative principles in the Kolis of Maharashtra. Then on January 6, 1948, the '*Vesava Koli Samaj Seva Sangh*' was transformed into the *Vesava Macchimar Vividh Karyakari Sahakar Society Ltd.* At present 4859 fisher folks are the members of society including 1719 females (table 1). The Executive Board composed of 13 elected members including one president, one vice president and one secretary manage the functioning of society.

Table 1. Members of VMVKSSL

Particular	2019/20		2020/21		2021/22	
	No.	Per cent	No.	Per cent	No.	Per cent
Member	4929	100.00	5050	100.00	4859	100.00
• Male	3028	61.43	3092	61.23	3140	64.62
• Female	1901	38.57	1958	38.77	1719	35.38
Trawlers associated with society	276	-	276	-	257	-

Source : Primary Data

Major functions performed by VMVKSSL:

VMVKSSL is a multipurpose society perform functions like supply of fishing gears, diesel, ice, insurance, marketing facilities, subsidy, loan to its members, etc. The important functions of society are discussed below;

- a) Ice supply:** In 1964, through TCM scheme, an ice factory with a production capacity of 11 tons and cold storage facilities were built by the society. Now current production capacity is 20 ton per day. During 2021/22 the society vended 4172 ton ice of Rs. 1.55 crore to its members (table 2).

Table 2. Ice supply by society

Ice	2019-20	2020-21	2021-22
Sales volume (ton)	4436	3100	4172
Sales value (Crore Rs.)	2.13	1.39	1.55

Source : Primary Data

- b) Sales of industrial goods:** During 2021/22 the society sold industrial goods of Rs. 38.43 lakh to its members with minimal price (table 3). The society sales fishing gears, spare parts, mesh, rope, yarn of branded companies. The Society makes industrial goods available to its members by considering demand changes in different seasons.

Table 3. Supply of industrial goods by society

Industrial goods	2019-20	2020-21	2021-22
Sales value (Lakh Rs.)	54.36	42.55	38.43

Source : Primary Data

- c) Supply of petroleum products:** A diesel pump was set up to supply diesel to the fishing boats. The society supply 9.49 crore rupees diesel, grease, gear oil and 1.49 lakh rupees gas to its members during 2021/22 (table 4).

Table 4. Petroleum products supplied by society

Petroleum products		2019-20	2020-21	2021-22
Sales value	Diesel (Crore Rs.)	26.61	18.63	9.49
	Gas (Lakh Rs.)	1.26	1.32	1.49

Source : Primary Data

- d) **Fresh fish marketing centre:** Initially the society started buying and selling of fresh fish in Shivaji Chhatrapati market. During 2021/22 rupees 1.67 crore worth of fish was sold at the society's fresh fish sales centre in which society earned of Rs. 13.22 lakh profit (table 5). Fresh water fish from other parts of Maharashtra are also sold through this society.

Table 5. Fish sold at society fresh fish centre

Fresh fish marketing	2019-20	2020-21	2021-22
Sales value (Crore Rs.)	3.91	1.69	1.67
Profit (Lakh Rs.)	28.42	11.51	13.22

Source : Primary Data

- e) **Supply of grain ration:** The society sales kerosine, rice, wheat, various dal, salt, sugar, etc. through rationing shop to the members. During 2021/22 society sold ration of Rs.4.67 lakh with minimum price to its members.

Table 6. Grain distributed at rationing shop

Grain sold	2019-20	2020-21	2021-22
Sales value (Lakh Rs.)	6.37	0.63	4.67

Source : Primary Data

- f) **Facilitation in availing government schemes:** The society provide financial assistance for the development of fishermen through the National Cooperation Development Corporation. The society is active in reaching the scheme to the hardworking fishermen and making them benefit from it. Till date 14 fishermen groups have availed the benefit of this scheme through this society.
- g) **Insurance:** Fishermen's profession is entirely dependent on the whims of nature. Therefore, the society started the Fishery Boat and Sailor Accident Insurance scheme to protect the fishing industry. Fishermen are responding well to this scheme. Due to this, the fishermen have got a big support for this business and for the safety of the sailors on the boat. So far, nine fishing boats have sunk and been completely destroyed and fifteen sailors lost their lives. So, insurance benefit was given to their heirs. The society gives Rs. 1.75 lakh insurance to destroyed boats.
- h) **Subsidies on diesel:** The society works honestly on the subsidy received from the Maharashtra government on diesel and helps the

fishermen to get it. The efforts of the society have resulted in a sales tax reimbursement of Rs.5.66 crore from the Government of Maharashtra for the year 2021/22 to the fishermen on purchase of diesel.

Table 7. Subsidy received by fishermen

Year	2019-20	2020-21	2021-22
Subsidy received (Crore Rs.)	6.17	5.20	5.66

Source : Primary Data

i) Other functions performed:

- ✓ The society regularly follows up on developmental works like construction of roads, jetties etc. in Versova village. So, transportation of fish and inputs made easy.
- ✓ Till date, Rs. 14.33 lakh financial aid has been given by society to the various religious institutions, schools, flood victims, earthquake victims, storm victims, medical aid as well as disaster victims.
- ✓ The society encourages members students who have excelled in various academic fields by giving prizes.

Historical changes in development of society:

This cooperative society founded with an aim to supply fishing tools to fisher members on cooperative basis. Few years after the registration, society stated suppling rations on cooperative basis with minimal cost. Later as per the need of fishermen, society started functioning in diesel and ice supply by installing diesel pump and ice factory. Further society initiated the marketing activities for that they established fresh fish centre at Chatrapati Shivaji mandai Mumbai. Moreover, society is functioning in supply of industrial goods, transportation of diesel through tanks. The historical development of society shows that society moved from single to multifunctional for the welfare of fishing community during last eight decades (table 8).

Table 8. Historical development in VMVKSSL

S. No.	Year	Activity	Purpose
1.	1944	Foundation of Vesava Koli Samaj Seva Sangh	Two shops were opened on a cooperative basis to supply fishing tools
2.	1948	Registered under cooperative societies act	To become authorised society to supply fishing industry goods
3.	1957-58	Establishment of Grain section D-27	Cooperative ration shop
4.	1959-60	Installation of Diesel Section	Regular diesel and oil supply for engine boats
5.	1960	Installation of ice factory	Cold storage and ice supply
6.	1966	Establishment of fresh fish center at Chatrapati Shivaji mandai Mumbai	Platform for member fishermen for fish marketing
7.	1977	Spare part section	Supply of engine spare part and other fishing accessories
8.	1981-82	Transport section	1 diesel tanks for diesel transport
9.	2019-20	Transport section	One tata tempo 709, 2 diesel tanks for transportation

Source : Primary Data

Economics of VMVKSSL:

These types of societies are formed with the object of undertaking multifarious activities for the economic and social development of its members. To fulfil objective, this society work for arranging industrial goods, diesel, ice, market platform, insurance, transportation, etc., to its member at reasonable price. The total sale and profit earned during 2021-22 by society is given table 9. After fulfilling required expenditures to run the business and mandate of fisher member, the society runs its business on profit of Rs. 7.84 lakh. This shows that society is performing well along with fulfilling its members requirements. But after lockdown the sale and profit of society is continuously declining. The society sales 72 per cent diesel and petroleum products followed by fresh fish and ice to its member.

Table 9. Turnover of VMVKSSL

Particular	2019-20		2020-21		2021-22	
	Lakh Rs.	% Share	Lakh Rs.	% Share	Lakh Rs.	% Share
Sales (Receipts)						
• Diesel section sale	2660.70	89.77	1863.28	83.89	948.83	72.14
• Gas	1.26	0.04	1.32	0.06	1.49	0.11
• Industrial division sale	54.36	1.83	42.55	1.92	38.43	2.92
• Grain shop division D27 sale	6.37	0.21	0.63	0.03	4.67	0.36
• Ice sale and rent sale	212.66	7.18	139.24	6.27	155.16	11.80
• Fresh fish sale	28.42	0.96	168.65	7.59	166.74	12.68
• Other sale	0.00	0.00	5.33	0.24	0.00	0.00
• Total sale	2963.77	100.00	2221.00	100.00	1315.32	100.00
Expenditure	2919.94		2193.55		1307.48	
Net profit	43.83		27.45		7.84	

Source : Primary Data

Recognition to VMVKSSL:

Till date society received 11 national awards. The primary fisheries cooperative society receiving eleven such awards are considered the number one society not only in Maharashtra but also in whole country. The list of awards received by society is presented in table 10.

Table 10. Awards received by society

S r. No.	Name of award	Given by	Dated	Place
1.	JC Barvey Productivity First Prize	National federation of fishermen Co-operative Limited, New Delhi	1988	Lucknow
2.	Best Productivity Performance in Marine Fish Production in Cooperative Sector	National Productivity Council New Delhi	1992-93	New Delhi
3.	Best Productivity Performance in Marine Fish Production in Cooperative Sector	National Productivity Council New Delhi	1993-94	New Delhi
4.	Best Productivity Performance in Marine Fish Production in Cooperative Sector	National Productivity Council New Delhi	1997-98	New Delhi
5.	Best Productivity Performance in Marine Fish Production in Cooperative Sector	National Productivity Council New Delhi	1998-99	New Delhi
6.	Best Productivity Performance in Marine Fish Production in Cooperative Sector	National Productivity Council New Delhi	2 0 0 0 - 2001	New Delhi
7.	Best Productivity Performance in Marine Fish Production in Cooperative Sector	National Productivity Council New Delhi	2001-02	New Delhi
8.	Best Productivity Performance in Marine Fish Production in Cooperative Sector	National Productivity Council New Delhi	2002-03	New Delhi
9.	Best Productivity Performance in Marine Fish Production in Cooperative Sector	National Productivity Council New Delhi	2004-05	New Delhi
10.	Best Productivity Performance in Marine Fish Production in Cooperative Sector	National Productivity Council New Delhi	2005-06	New Delhi
11.	Jeevan Gaurav Award	Vasantrao Naik Pratisthan, Maharashtra	1998	Mumbai

Source : Primary Data

Conclusion:

The study enlightens the historical progress in functioning of VMVKSSL society and its contribution in development of fishing village. In the last 8 decades, there has been an incredible change in the functioning of the Cooperative Society. It established eight decades ago on the principle of co-operatives with few members, today the VMVKSSL provides various forms

of assistance to the more about 5000 member fishermen. The cooperative which started 8 decades ago for supply of only industrial goods (sheaves, yarn, paint, oil tar) is now providing everything like supply of fishing gears, diesel, ice, insurance, marketing facilities, subsidy, loan to its fisher members. Even today, after covid 19 shock, the society continues to be in good financial shape, providing materials to the fishermen at a modest cost. This is because of its multifunctional nature of service to its members. It is noteworthy that the society has received 11 national awards till date due to its remarkable achievements in fisheries development in Versova. Most importantly, society regulates floor price which ensure healthy competition in fisheries input supply market.

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Kerala State Cooperative Federation for Fisheries Development Ltd. (MATSYAFED): Paradigm Shifter from Welfare to Wealth

¹Akilandeshwari A., ²Shivaji Argade,

²Ankush Kamble and ³Sagar Wadkar

Abstract:

The fisheries cooperative movement in India started in 1913 to improve the socio-economic conditions of fishers in associated societies. As agriculture cooperative societies, the progress of fisheries cooperative societies is not uniform and satisfactory in all parts of the country. Most fisheries cooperatives face severe constraints and pass-through morbid conditions. In comparison with other apex cooperative federations, Matsyafed is performing better because of having well functional organisational structure, innovative strategies, multi-faceted commercial activities, unique fresh fish marketing solutions, farm production activities and eco-friendly aqua tourism facilities. Fresh fish marts and aqua tourism become instant hits across the state and aid in shifting the paradigm from the welfare of fisher folk to creating wealth for fisher folk, especially for the fisherwomen.

Keywords: Matsyafed, Fisheries cooperative, Fish marts, Aqua-tourism.

Introduction:

India is the world's second-largest aquaculture producer of fish. India contributes about 7.7% to global fish production, and the country ranks 4th in global exports of fish products. The fisheries sector has been identified as a 'Sunrise Sector'. It contributes about 1.24% to the Country's Gross Value Added (GVA) and over 7.28% to the agricultural GVA. The sector provides livelihood support to nearly 280 lakh people at the primary level and almost

¹PhD Scholar, ICAR-Central Institute of Fisheries Education, Mumbai – 400061

²Scientist, ICAR-Central Institute of Fisheries Education, Mumbai – 400061

³Advisor (Research & Study), National Cooperative Union of India, New Delhi-110016

twice the number along the value chain (Department of Fisheries. 2021). The total fish production during 2019-20 is 14.16 million metric tons (MMTs), with 10.43 MMTs from the inland sector and 3.73 MMTs from the marine sector (Handbook on Fisheries Statistics, 2020). The growth statistics of Indian fisheries depict a paradigm shift from marine dominated fisheries to inland dominated fisheries. The freshwater aquaculture sector has been identified as the fastest-growing agro-food production sector and has a massive potential to double farmers' income and provide food and nutritional security. Freshwater aquaculture has become the predominant source of fish protein (Golden *et al.*, 2017; Toufique and Belton, 2014). Fish is one of the most acceptable options for reducing hunger and nutrient deficit because it is economical and high in animal protein. It has enormous potential to raise revenues and bring economic prosperity to all parties involved. (National Fisheries Development Board, 2020).

Fisheries Cooperatives in India:

Collective action is intrinsically linked with uplifting individual and social capacities to act differently and challenge the distribution of power that constrains the capabilities of men and women (Pierre-Marie, 2018). The collectivization of fishers and fish farmers is the most effective institutional mechanism to address challenges in the production and post-production stages along the agribusiness value chain (Bolin, 2020). The fisheries cooperatives have the potential to sustain livelihood and increase the productivity and income of fishers and fish farmers (Katosi Women Development Trust and Uganda Fisheries and Fish Conservation Association, 2011; Tyagi *et al.*, 2013). Fishermen and fisherwomen need to be organized to address their issues and improve their socio-economic conditions. As a result, in 1913, the fishery cooperative movement in India began when the first fishermen's society was organized under the name of '*Karla Machhimar Cooperative Society*' in Maharashtra, followed by West Bengal and Tamil Nadu were set up the cooperative societies in fishery sector in 1918 (Mahanayak and Panigrahi, 2021).

Presently, there are 21 State level, seven regional levels, 132 district level and 21,741 primary level fisheries cooperative societies having a membership of 33.54 lakhs fishers and fish farmers in the country (Source: <http://www.fishcopfed.in/DataBank>). Fig.1 demonstrates that the Primary Fisheries Cooperative Societies (PFCSS) are significantly more in number (9,398) in the south zone in which Telangana is found to be the leading state

with the highest number of PFCSs (4,348), followed by Andhra Pradesh (2,347) and Tamil Nadu (1,355). The east zone in which West Bengal shares the highest proportion of PFCSs (1,433), followed by Chhattisgarh and Odisha. The northeast zone has a relatively lesser number of PFCSs (1, 498), in which Assam shares the highest proportions with 520 PFCSs, followed by Manipur (485) and Nagaland (267). Madhya Pradesh leads in the number of PFCSs (2, 290) in the north zone, followed by Uttar Pradesh (1, 011), while States like Jammu and Kashmir and Punjab each have only one PFCS.

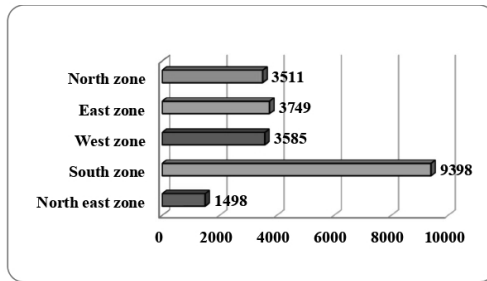


Fig.1 Zone wise number of primary fisheries cooperative societies in India

Fig.2 represents that Maharashtra has the highest number (36) of District Fisheries Cooperative Societies (DFCSs) that making the west zone lead in the number of DFCSs, followed by the south zone in which Andhra Pradesh was found to have the highest number (11) of DFCSs. Among the States of the north zone, Uttar Pradesh has 22 DFCSs. States like Madhya Pradesh, Punjab, and Rajasthan have only one DFCS. The State Fisheries Federations are more in the south zone, followed by the east and northeast zones. The regional fisheries cooperative societies exist only in Maharashtra (2) and Odisha (5).

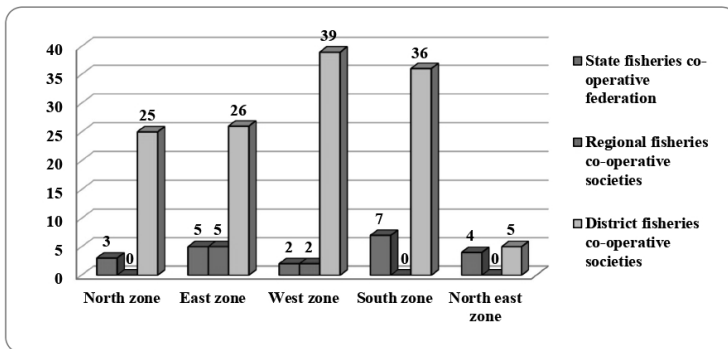


Fig.2 Zone wise State, Regional and Districts levels fisheries cooperative societies

Fig.3 depicts that the cooperative societies' membership is highest in the south zone, followed by India's east and west zones. Among the south zone states, Tamil Nadu stands first with the highest membership (6,79,117), followed by Kerala (4,60,486) and Telangana (3,02,002). Bihar is the leading state in the membership in fisheries cooperative societies with 4,10,007 members, followed by the state Odisha (1,38,143) and West Bengal (1, 31,578) among the east zone States. Among the West zone States, Maharashtra leads in the memberships in fisheries cooperative societies with 3,32,636 members, followed by Gujarat with 26,045 members. The State of Madhya Pradesh leads in the membership of cooperative societies with 85,731 members, followed by Uttar Pradesh with 54,521 members, and Himachal Pradesh (5,837) in the north zone. Among the northeast States, Assam has relatively more members (90,000), followed by Tripura (22,967) and Manipur (14,258).

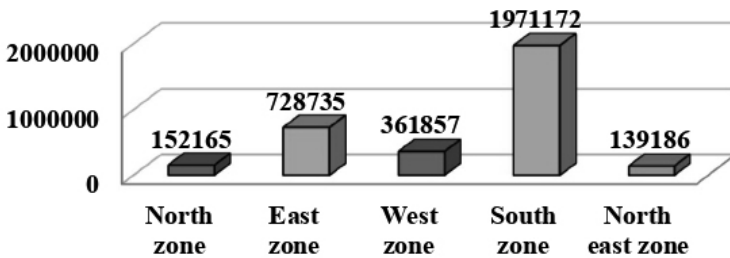


Fig.3 Zone wise number of members in fisheries cooperative societies

Literature Review on Fisheries Cooperatives:

Cooperatives in the small-scale fisheries sector are a possible way of maximizing long-term community benefits to deal with the threats of mismanagement, livelihood insecurity and poverty in the fisheries and aquaculture sector. But there are many socio-economic issues in cooperatives, especially in fisheries cooperatives, making them unproductive. Sreeranganadhan (2012) studied the role of cooperative societies in marketing fish and fish products in Kerala. Most of the fishers were threatened by irregular and relatively low-income levels and desired to quit fishing. He emphasized the need for the active involvement of cooperative societies to be strengthened to solve the marketing problems faced by fishers and fetch the best price for their fish and fish products.

Chandrashekar (2014) studied the problems and prospects of fishery cooperative societies in India. He mentioned that lack of institutional support was a major barrier to sustaining livelihood fishers despite having great livelihood potential in fisheries in India. Hence, fisher's cooperatives seemed to be the most appropriate institutional support to improve their socio-economic status. A cooperative marketing infrastructure needs to be developed to sell fish profitably and ensure a fair price for producers and consumers. Haldar and Saha (2015) studied the performance of fishermen cooperative societies in Tripura. They highlighted that the cooperative movement had made a great change in the lifestyle of fishers by providing employment opportunities and eliminating poverty in Tripura. They reported that the number of active fishermen cooperatives in Tripura decreased. The organizational mismanagement, lack of entrepreneurial leadership, and conflicts between the group members were the major issues obstructing fishery cooperatives' productivity in Tripura. Thakur (2015) found that the poaching of fish, law and order issues relating to the leasing of water bodies, lengthy lending procedures by financial institutions, excessive weed infestation in water bodies, the lack of a sufficient fish transit infrastructure, and dominance of some particular persons in decision making and intrinsic caste system were the major constraints prevailed in the fishermen cooperative societies of Bastar district of Chhattisgarh. Ambilikumar (2017) studied the performance of primary level Fishermen Development and Welfare Cooperative Societies (FDWCS) in Kerala. The study's main finding was that the FDWCS could not guarantee a reasonable price for the catch. A total of 54.17% of the societies did not provide microfinance to their members. Compared to men, most female members are unaware of the FDCWS schemes. The study highlighted that the fishermen joined cooperatives with many expectations, but the fisheries cooperatives did not satisfactorily fulfil their expectations. Ekramuddin (2017) urged to increase the number of fishermen cooperative credit societies. The fishermen need to be encouraged to benefit from this in the Birbhum district of West Bengal. He identified the major problems were poor marketing and tricky exploitation by the intermediaries. Krishna (2018) concluded that community-based management was the approach needed for the long-term sustainability and profitability of the fishery under fishermen cooperative societies. Sharma *et al.* (2018) studied the major constraints faced by fishermen cooperatives face in Southern Rajasthan. They found that the absence of floating nurseries, irregular supply of feed, lack of preservation and curing facilities, ignorance about rules and regulations and

lack of updated information about price were the major constraints faced by fishermen. Thrishma and Veerakumaran (2020) measured the financial performance of the Matsyafed in Kerala. Matsyafed paved the way for the integrated development of the fisheries sector and improved the social and economic well-being of the fishermen community in Kerala. Matsyafed has a strong short-term liquidity position and has a good inventory turnover ratio. The debt-equity ratio is higher than the rule of thumb (1:1). i.e., debt is higher than equity. They suggested that the Matsyafed must take certain measures to improve net profit and the welfare of the members. The reduction in the repayment of loans taken from the primary fishermen cooperatives by the fishermen is the major problem faced by Matsyafed. Mahanayak and Panigrahi (2021) revealed that the progress of fishermen cooperatives was not uniform in all parts of the country. Sporadic studies were conducted to study the functioning and management of fishermen cooperatives. Still, more studies need to be conducted to improve the productivity of fisher cooperatives throughout the country. The majority of fishermen cooperatives in the country face serious constraints and pass-through morbid conditions. Therefore, the use of modern fish production technologies, storage and marketing through cooperatives, transparency in the management of cooperatives, participatory decision making, access to timely credit facilities and suitable policy interventions need to be emphasized for the sustainability of fishermen cooperative.

With this backdrop to revitalize the cooperative system in India, the separate *Ministry of Cooperation* was created recently in July 2021 to provide an independent administrative, legal and policy framework for strengthening the cooperative movement in the country. Its aims to streamline the processes of 'Ease of doing business' for cooperatives and enable the development of multi-state cooperative societies with the mantra of "*Sahakar Se Samridhhi (Prosperity through Co-operation)*" (Source: <http://cooperation.gov.in>). Matsyafed is one of the most successful fisheries cooperative federations in India, striving hard to improve the socio-economic well-being of the fishers in Kerala through different interventions in fish production, procurement, marketing, and aqua tourism. The present case study aims to highlight the innovative practices of Matsyafed in fish production, procurement, marketing, and aqua tourism by handholding of the fisherfolk through credit facilities, technological innovations and capacity building.

Statement of Problem:

Kerala is the 12th largest economy, contributing to 28% of the total fish production in India. In 2019–20, the total fish production in Kerala was 6.80 lakh tons, out of which marine fish landings and inland fish production constituted 4.75 lakh tons and 2.05 lakh tons, respectively. The overall fish production has been decreasing since 2011-2012 as the marine fishery resources of the state have attained their optimal level of production. The fisher's population of Kerala in 2019-20 was 10.44 lakh constituting 2.93% of the state's population (Fisheries Handbook, 2020; Aquaculture Resource Book, 2021). The per capita income of Kerala in 2015-16 was ₹ 1,42,155, while that of fishermen was ₹ 68,781. The socio-economic conditions of the fisher community of the state are still in a deplorable state. The fishermen folk have always been entrapped in debt burden and strive to find income stability. They are highly dependent on money lenders and traders, leading to cyclical poverty (Thrishma and Veerakumaran, 2020). Hence, the sustainability of the fisheries sector and the livelihood of the fisher's dependents on the fisheries sector are at stake and need special attention. Kerala State is considered a pioneer in understanding the potential of fisheries cooperatives for improving the livelihood status of fishers. However, the cooperative movement in the fisheries sector was a failure and unable to trickle down the economic benefits to fishers. With this backdrop, The Kerala State Cooperative Federation for Fisheries Development Ltd. (Matsyafed) came into existence in 1984, intending to address the problems faced by fisher communities. Since its inception, Matsyafed has made considerable improvements in the life of fishers by escaping them from the vicious cycle of indebtedness and providing credit facilities, required inputs and equipment, and marketing facilities. Matsyafed provided the right of fish sale to fishers by reducing their exploitation by intermediaries. But, to which Matsyafed is functioning successfully to meet its objectives and sustain fishers' livelihood needs to be explored. The study describes the innovative schemes and practices of Matsyafed for improving fishers, increasing fisher's bargaining power over the price of their produce and financial performance of Matsyafed.

Case Study Methodology:

The Kerala State Cooperative Federation for Fisheries Development Ltd. (Matsyafed) is selected purposively as a case for the present study. Matsyafed registered office in Thiruvananthapuram (Kerala) and ten district offices provided the required qualitative and quantitative data. The

secondary information was collected from the published annual reports of Matsyafed, research papers, policy briefs, etc. This case includes details about Matsyafed, significant schemes, commercial and project activities of Matsyafed, aquaculture and aqua tourism activities, capacity building activities and financial performance of Matsyafed, including field observations and statistical data analysis.

Case Study Description and Analysis:

Matsyafed, the Kerala State Cooperative Federation for Fisheries Development Ltd., was registered on 19th March 1984 as an apex federation of primary level welfare societies in the coastal fishery sector with the mission of ensuring the socio-economic development of the fisher community and vision of maintaining productive and sustainable fishing with a partnership of Kerala Fisherfolk (Fig.4).

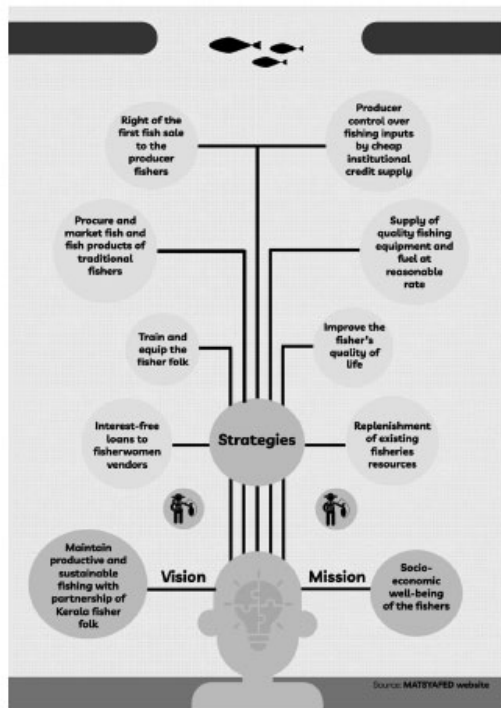


Fig.4 Matsyafed's vision, mission, and strategies

Fig.4 Matsyafed's vision, mission, and strategies

Matsyafed is an apex federation of 10 district offices, 51 cluster offices and 651 primary level fishermen development welfare cooperative societies consisting of 335 marine cooperatives, 198 cooperatives and 118 women cooperatives. The total membership in these societies is more than 3 lakhs. The paid-up share capital of the federation is ₹150 crores. There are seven divisions to carry out all the activities of the Matsyafed. The detailed organizational and functional structure of Matsyafed is depicted in Fig.5.

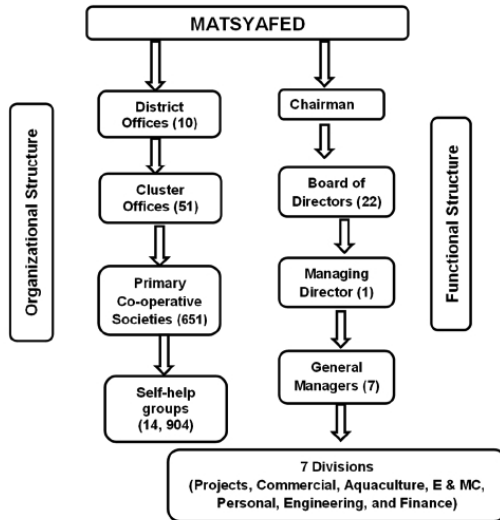


Fig.5 Organizational and functional structure of Matsyafed

Innovative activities of Matsyafed:

A) Organising beach level fish auction: To protect producer fisher's rights to direct fish sales at landing centres and save them from intermediary's exploitation, Matsyafed introduced a beach level auction system under the control of primary cooperatives. This approach ensured a fair price for fish, fast loan repayment, and fostered a habit of saving in the fisherfolk. The traditional sector, which accounts for around 40% of the total landings in the state, was the focus of the beach level auction. The implementation of the beach level auction lowers the exploitation of fishers by private auctioneers, standardising the auction system across the state and a significant increase in the income of the state's fishers. The quantity and the value of fish auctioned in beach level auctions (Fig.6) show the uptrend till 2013-2014. The beach level fish auction system was followed mainly by

small-scale fishers (Traditional and non-motorised boat fishing). After 2014, commercial fishing through motorised boats started dominating traditional fisheries regarding fish catch and the value of fish sold. Therefore, the downtrend may have started in the beach level fish auction system. The Matsyafed needs to intervene in standardising the beach level fish auction system by involving both traditional and commercial fishers to safeguard both interests.

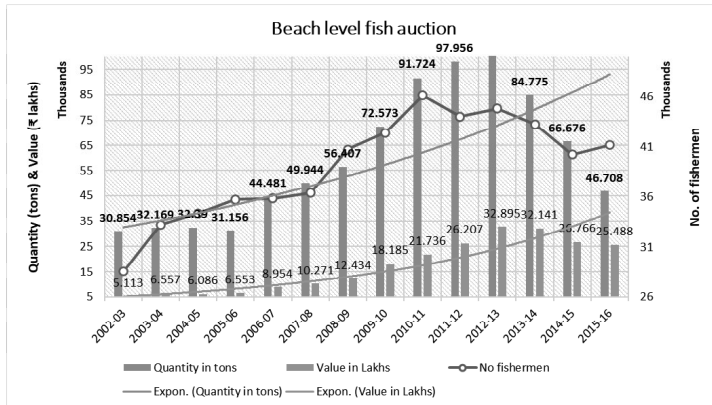


Fig.6 Quantity and Value of fish auctioned in beach level auction in tons and lakh (₹)

B) Integrated fisheries development activities: Since 1984, Matsyafed has been undertaking Integrated Fisheries Development Projects (IFDP) to support Kerala's traditional fishers through providing subsidised loans to purchase fishing implements (Craft, Outboard Engines and Webbing), infrastructure facilities for fish marketing and processing, working capital for fish vending and marketing, and the construction of office-cum-godown. Matsyafed has implemented seventeen Integrated Fishery Development Projects with the help of the National Cooperative Development Corporation (NCDC) since its foundation in 1984 with a total investment of 25246.521 lakhs, and maximum of Rs. 3457.71 lakh spent during IFDP III (Fig 7). The greater number of crafts had been motorized during IFDP III (1,962 crafts) with the cost of Rs. 1876.94 lakhs. Matsyafed OBM Division buys Suzuki and Yamaha outboard motors directly from Japan and Thailand and sells them to fishers through its Vyasa Store chain in Kerala's coastal districts. It also has ten OBM workshops throughout Kerala to handle engine repair and maintenance.

Total Investment under IFDP scheme

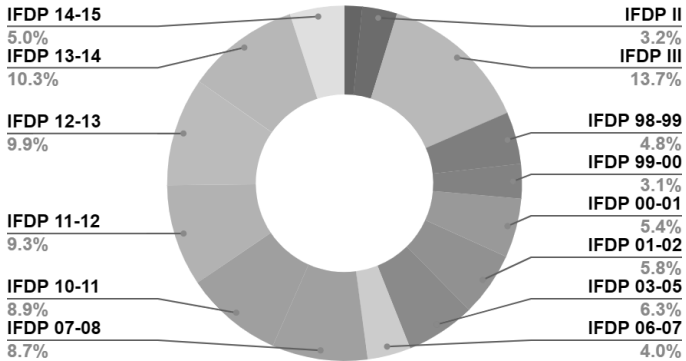


Fig. 7 Investment under IFDP scheme

The Matsyafed have directly aided over 1 lakh fishers and indirectly aided around 1.2 lakh fishers IFDP. During 2015-16, the maximum outlay, GoK (Government of Kerala) subsidy and loan are provided for the distribution of fishing inputs.

C) Modernisation/motorisation of country crafts: The scheme encouraged the motorisation of the existing non-motorised traditional country crafts to improve fishers' earnings by facilitating them to reach farther off fishing grounds and return to the shore with their catch at the earliest. A total of 8, 502 crafts have been motorised from 1988 to 2016, with a total subsidy released amount of Rs. 7, 42.95 lakhs. The highest number of crafts (947) was motorised during the year 1995-95 with a subsidy amount of Rs. 50 lakhs (Fig.8).

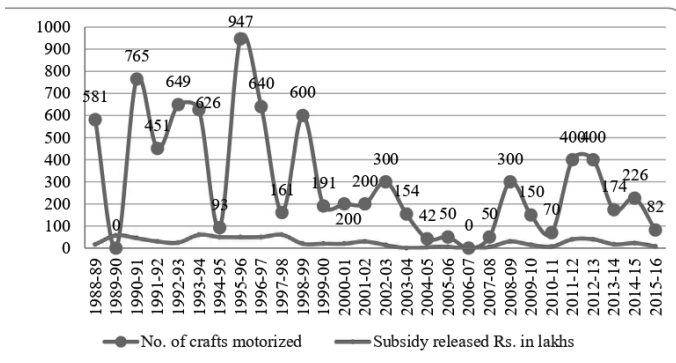


Fig.8 Number of crafts motorized, and subsidy released in lakhs (Rs.)

D) Interest-free loan to fisherwomen: Matsyafed has launched an interest-free loan scheme for women vendors in which the interest portion is borne by the Kerala State Government to prevent income erosion of women fish vendors due to the high rate of interest charged by private money lenders for their daily working capital requirement. Matsyafed provided Rs. 2798.50 lakhs to 30,000 women fish merchants to date.

E) Training and capacity building: Matsyafed regularly organises the training and capacity building programmes for fishermen, fisherwomen, employees of Matsyafed, State fisheries department officials, school, and college-going children of fishers, etc. The extension and training activities include awareness, entrepreneurship development, management development, skill up-gradation, career guidance to fisher's children, revitalising non-performing societies, women empowerment programs, etc.

F) Commercial activities of Matsyafed: The Matsyafed is actively involved in multi commercial activities. Matsyafed has three *fishnet factories* at Cochin (1984), Kannur (2011) and Thiruvananthapuram (2014). Matsyafed's net factories produce various nets, including nylon multifilament, monofilament, and polyethylene nets. The Matsyafed *chitin and chitosan plant* generates several grades of Chitin and Chitosan from prawn shell waste. The factory produces 60 tonnes of chitin per year. It is sold under the trade name 'Chitone,' an anti-fat compound made from prawn shells intended to reduce obesity and has been quite popular among the public. Matsyafed operates two *fish manure plants* in Thrissur and Kozhikode. The plants produce 10,000 tonnes of fish manure in a year and are supplied to plantation farmers. Matsyafed *ice and the freezing plant* is one of the largest ice and freezing plants, with a freezing capacity of 30 tonnes per day and a storage capacity of 600 tonnes. This unit's primary business focus is the processing and exporting tuna and other fish products to countries such as Thailand, China, Iran, Turkey, France, Spain, Oman, Dubai, Tunisia, Algeria, Sri Lanka, and others. The *Vyasa stores* that sell lubricants and fishing equipment ensure that fisherfolk in fishing villages have access to high-quality fishing equipment at affordable prices. The *common pre-processing centre* at Kollam engages in pre-processing activities. It also serves as a base for supplying fresh fish to Matsyafed's Fresh Fish Marts. Matsyafed set up the first Model *Hi-tech Fresh Fish Mart* in Thevara in Ernakulam district. Subsequently, Matsyafed has set up 30 fresh fish marts in Thiruvananthapuram, Kollam, Kottayam, Pathanamthitta, Ernakulam, Thrissur, and Kozhikode districts. Matsyafed formed women's self-help groups, and women members of these groups operate fresh fish marts. It employs more than 120 women and 30 men with earnings of

Rs. 8,000 - Rs. 12,000 per month per person, which has significantly improved the socio-economic status of these women and men (Source: <https://matsyafed.in>).

G) Production and aqua tourism activities: Matsyafed has three *brackish water prawn hatcheries* at Kannur, Kollam, and Malappuram with a production capacity of 30 million prawn seeds and one *freshwater prawn hatchery* at Thrissur, each with a production capacity of 20 million prawn seed. Matsyafed also standardised a technology to transport seeds under minimal stress conditions to fish farmers. The Matsyafed has three *fish farms* at Palaikari, Narakkal and Malappuram and one *ornamental fish farm* at Kollam. The estimated inland water area is 1.60 lakh ha, and brackish water is about 0.65 lakh ha, out of which 0.15 lakh ha are only developed for aquaculture practices. About 2.22 lakh fisherfolk are dependent on these water resources for their livelihood. *Eco-friendly aqua tourism* facilities are provided in the ambience of backwaters in Matsyafed fish farms at Njarakkal, Malippuram and Palaikkari (Fig.9). It includes pedal boating, row boating, angling of fish, ethnic food with fresh farm-reared fishes served in the canteen run by self-help groups and the opportunity to enjoy the picturesque beauty of nature and the tranquillity of backwaters (Source: <https://matsyafed.in>).

Funding sources and financial performance of Matsyafed:

The owned fund, borrowed fund, and grants & subsidies are the significant sources of funds for Matsyafed. The held funds comprise share capital and reserves. The borrowed fund includes only borrowings. Fig.10 illustrates that the share capital of Matsyafed has declined from 2013-14 with a compound annual growth rate of -2.45%. It might be due to the withdrawal of share capital by the Kerala State Government. Its reserves show an increasing trend with a CAGR of 10.99%. This might be due to the additional reserves and statutory funds maintained by Matsyafed during 2017-18 to 2018-19 (Thrishma and Veerakumaran (2020)). The compound annual growth rate is 10.33% for borrowings and 7.10% for grants & subsidies.

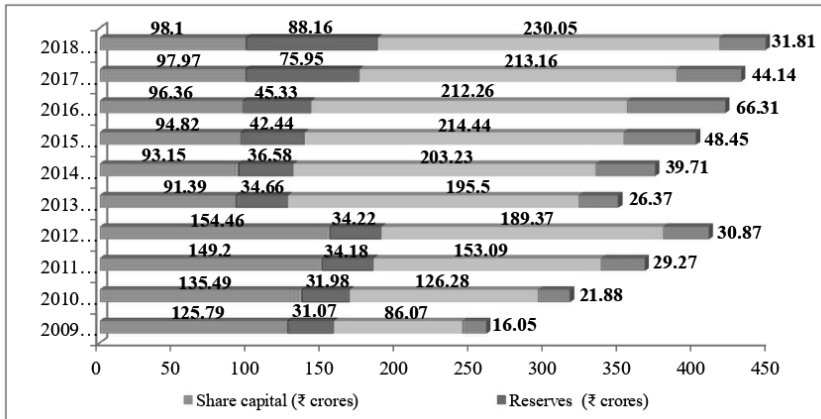


Fig.10 Funding sources of Matsyafed

In 2018-19, the current ratio (2.48) showed a fluctuating trend over the years but maintained a satisfactory level. The high quick ratio (2.15) is an indication that the firm is liquid and can meet its current liabilities. The inventory turnover ratio shows a fluctuating trend with a maximum (13.89) during the year 2017-18. The fixed asset turnover ratio shows a decreasing trend with a maximum during 2010-11 (11.30) and a minimum during 2015-16 (4.8). This indicates that Matsyafed has not efficiently utilised the fixed assets to generate sales. However, the fixed asset turnover ratio remained steady (5.14-5.85) from 2016- 2019. The working capital turnover ratio increased to 2.72 in 2018-19, indicating that Matsyafed has efficiently utilised the working capital to generate sales. The gross profit ratio and net profit show a downtrend with the value of 6.80 and 0.04 in 2018-19, respectively. The occurrence of the Ockhi cyclone in 2017-18 affected the net profit ratio of Matsyafed during 2018-19. The debt-equity ratio (1.15) of Matsyafed maintains a satisfactory level in 2018-19.

Suggested Fish farm diversification activities:

- a) **Fish-cum-poultry culture:** Droppings of 500 birds are enough to fertilize a one-hectare pond area. A high survival rate and faster growth can be achieved when a mixture of cow dung and poultry droppings is used in fish culture.
- b) **Fish-cum-duck culture:** Ducks fertilize ponds and increase dissolved oxygen by dabbling activity. Ducks usually consume tadpoles, mosquitoes, and dragonfly larvae which fishes do not consume. Another advantage is that ducks feed on snails, vectors of certain fish parasites. Duck houses can be constructed at the embankment or over the water

surface; hence, there is no need for extra space. Ducks are stocked @ 200-300 ducklings/ha of a fishpond.

c) ***Fish-cum-fruit and vegetable culture:*** Pond dikes and either side of sub-channel FAO, provide a suitable place to grow coconut, mango, banana, papaya, drumsticks, and vegetables.

Conclusion:

Like agriculture cooperative societies, the progress of fisheries cooperative societies is not uniform and satisfactory in all parts of the country. Most fisheries cooperatives face severe constraints and pass-through morbid conditions. Therefore, modern fish production technologies, storage and marketing through cooperatives, transparency in the management of cooperatives, participatory decision making, access to timely credit facilities and suitable policy interventions need to be emphasized to rejuvenate the fisheries cooperatives to make them more productive.

As compared to many other apex cooperative federations, Matsyafed is performing better. The well functional decentralised organisational structure, innovative strategies (right of the first fish sale to the producer fishers, integrated fisheries development activities, modernisation/motorisation of country crafts, interest-free loans to fisherwomen vendors, etc.), multi-faceted commercial activities (fishnet factories, chitin and chitosan plant, fish manure plants, ice and freezing plant, Vyasa stores and common pre-processing centre), unique fresh fish marketing solution (hi-tech fresh fish mart), production activities (brackish water prawn hatcheries, freshwater prawn hatchery, ornamental fish farm, fish farms and farm diversification) and eco-friendly aqua tourism facilities (pedal boating, row boating, angling of fish, etc.) are highlighting the success of cooperatives in the fisheries sector and making a difference in lives of fishers in Kerala. Fresh fish marts and aqua tourism become instant hits across the state and aid in shifting the paradigm from the welfare of fisherfolk to creating wealth for fisherfolk, especially for the fisherwomen.

Matsyafed has a robust short-term liquidity position and an excellent inventory turnover ratio, according to the financial performance study. The net profit of Matsyafed shows a fluctuating and downtrend over the past ten years. Reduction in the repayment of loans taken from the fisheries cooperatives by the fishermen and consequent increase in bad debts are the main problems faced by Matsyafed. To increase the share capital by increasing the number of member societies, the Kerala Government must

increase its share stake in Matsyafed. Matsyafed needs to find out the avenues for generating income from fixed assets, and they must focus on sustainable operations and net profit. Though the fisheries cooperatives perform well in the fish production and fishers' welfare activities, the business taking capabilities are lacking, thus it fails to sustain in long run. Matsyafed is encouraged to scale up the business activities in aquatourism and fish marts.

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PART 3





**Indian Society for Studies in Cooperation (ISSC)
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Brief Profile

Indian Society for Studies in Cooperation was registered in the year 1979 primarily to promote Research and Studies in Cooperation amongst the Universities. It has cooperative Institutions and individuals as members. Presently, its membership is more than 650 members, comprising of Institutional Donor Members, Individual Donor Members and Individual Life Members.

Society organizes Annual National Research Conferences every year in different parts of the country focusing on the important issues related to cooperation and allied sectors. At each of these Conferences, papers are invited on subjects selected for the discussions. Eminent Cooperators, Academicians, and Key administrators are invited as Guest of Honour and requested to deliver keynote addresses. These Conferences have been addressed by eminent persons like Dr. Manmohan Singh (Ex PM), Dr. V. K. R.V. Rao, Dr. B. Venkatappiah, Dr. V. Kurien, Dr. V. M. Dandekar, Dr. Nilkantha Rath and Padmabhusan Balasaheb Vikhe Patil others. ISSC has published research papers of last 36 conferences in book form.

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The studies, research, and teaching of:

- a) Cooperative Principles and Philosophy.
- b) Cooperative Policy development in India and abroad.

- c) Economic, Social, Political, & Administrative aspects of cooperation.
- d) Management of cooperative enterprises.

Activities:

- i) Undertaking, organizing, and co-coordinating research in fundamental and applied aspects of cooperation.
- ii) Organizing or collaborating in the organization of conferences, seminars, workshops, symposia, colloquia, and other educational programs at the State, Regional, National, and International levels.
- iii) Publishing journals, reports, papers, books, collection of readings, etc.
- iv) Instituting fellowships, scholarships, and prizes.

Membership:

The membership is open to both individuals and institutions interested in the study and research in co-operation. Individual members could be teachers, researchers, executives in cooperative institutions, officers in cooperative departments, etc.

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