

# **MAINSTREAMING CO-OPERATIVES: ASIAN PERSPECTIVES**

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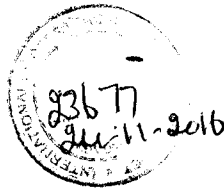
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# MAINSTREAMING CO-OPERATIVES: ASIAN PERSPECTIVES

Editors  
**Yashavantha Dongre**  
**D.S. Leelavathi**  
**M. Indira**



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**MAINSTREAMING CO-OPERATIVES: ASIAN PERSPECTIVES,**  
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## FOREWORD

I am pleased to know that the University of Mysore, in collaboration with IFFCO Foundation and International Cooperative Alliance is coming out with a publication containing selected Research Papers and Findings of the 8th Research Conference, held at Mysore University in November 2013, The theme of the conference was “Mainstreaming Cooperatives in Global Economy” and organized under the auspices of ICA-AP Committee on Cooperative Research, the Third Sector Research Resource Centre and the Department of Studies in Economics and Cooperation at the University of Mysore. The effects of the financial crisis of 2008 were still being felt in 2013. Despite massive monetary and fiscal stimulus by governments, the recovery in most countries remained feeble compared with previous post-war upturns. In developed countries the emphasis was on addressing issues associated with inadequate regulation and supervision of banks and financial markets. In most developing countries the impact was in terms of reduction in investment, fall in remittances and cut back in government spending which impeded the achievement of the Millennium Development Goals. Given this background, the conference was timely as it endeavored to explore ways and means of repositioning cooperatives in the global economic framework. The Research Committee of the International Cooperative Alliance - Asia Pacific was established with the core objective of promoting research on cooperatives in the Asia Pacific region. Since 2000, the Committee has been holding research conferences and endeavoring to facilitate quality research in all areas pertaining to the co-operative movement. The Committee has been publishing the findings of the annual conferences to help cooperatives understand the context in which

they are situated, the impact on their functioning and thoughts on the way forward. I would like to take this opportunity to thank the host of the conference –The Third Sector Research Resource Centre, the Department Of Studies in Economics and Cooperation of University of Mysore and IFFCO Foundation for their financial support and active collaboration in the successful organization of the Conference. I also extend my thanks and gratitude to the Chairperson and members of ICA-AP Committee on Cooperative Research, researchers and representatives of co-operatives for their active participation. I would like to thank Prof. Yashavantha Dongre, Prof. B.S. Leelavathi and Prof. M. Indira of University of Mysore, for their hard work and successfully handling of the Conference. I hope this booklet will be useful for young researchers to develop their cooperatives interests further.

October 2015

**Balasubramanian (Balu) Iyer**  
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## PREFACE

8th ICA-AP Research Seminar held under the auspices of University of Mysore and very ably coordinated by Dr. Y. Dongre, Coordinator, Third Sector Research Resource Centre, University of Mysore, during November, 2013 was a historic event in dialogue and discussion on Research Issues relating to the Cooperatives at the National, Asia Pacific and International levels. I had the pleasure of attending the Seminar. I found a great enthusiasm among the Researchers during the Seminar about the role that cooperatives play in the present socio-economic environment.

IFFCO Foundation, a Public Trust established by IFFCO and a Think Tank, with focus on Cooperative Development, has a great interest in Cooperative Research and has recently established a “Forum on Cooperative Research and Innovations”

We are happy that University of Mysore is coming out with the publication of the Research papers and findings of the Research Seminar and we have the opportunity to partner in this endeavour.

Academics, Researchers as well as others who have interest in the Cooperative System, are likely to benefit immensely from the Publication, which would also be used as a Reference material.

One of the major outcomes of the Seminar so far as IFFCO Foundation is concerned, is the establishment of the Forum through which a lasting relationship has been created between the University of Mysore and the IFFCO Foundation.

I would like to compliment the efforts of the University, especially those of Dr. Yashavantha Dongre and his colleagues who are bringing out the Publication of the Research papers and

findings of the Research Seminar. There is an urgent need for the intensive research on Cooperative System and Management and propagation of research findings for strengthening and revitalizing the Cooperative structure, which assimilates in itself the strength of democratic and equitable and inclusive socio-economic development.

**JNL Srivastava**  
Managing Trustee  
IFFCO Foundation

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## INTRODUCTION

**Yashavantha Dongre \***

**D.S. Leelavathi \*\***

**M. Indira \*\*\***

Co-operatives exist in almost all countries irrespective of their political and economic systems. The free market economies, the mixed economies and the centrally planned economies have all embraced co-operatives with their own justifications. The co-operative sector does vary in terms of its size and the operational areas in different countries, but almost as a rule they have always been instruments catering to the needy group of population. Co-operative sector has been supplying the necessities of life to its member community as much as it is providing opportunities for participation there by strengthening the democratic fabric even within the conservative political regimes. Their presence is wide and encompasses all types of requirements of people. However, their size and share of market as compared to investor owned and state owned institutions is not big enough.

Of late there has been much larger acceptance for the call of bringing the co-operatives to the centre stage of production and

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distribution activities in all economies. Globalization has created varied types of tensions and free market has from time to time created uncertainties and risks to the common populace. It is this situation that has made both policy makers and the common citizens to look for alternatives and co-operatives have been considered as the most humane and user friendly alternatives. Hence, the United Nations Organizations found the necessity of creating greater global awareness about co-operatives and declared the year 2012 as the International Year of Co-operatives.

The ICA-AP Research Committee, having decided to draw attention of researchers and the academia in general on the growing importance of co-operatives in the region, rightly chose the theme “Mainstreaming Co-operatives in the Global Economy” as the main theme of the 8th Research Conference held at the University of Mysore during 29th and 30th November, 2013. The Call for Papers provided clarity on what the conference seeks to achieve. It was noted that the period beginning from the second half of previous decade until now could be considered as a period of economic down turn and uncertainty. What peaked in 2008 as depression has continued to be prevalent as global economic slowdown. “At the present time, in the second half of 2012, following five years of financial turbulence the more developed economies of the world remain in a state of crisis from which there is still no apparent exit, and the developing economies are being impeded in their pursuit of the Millennium Development Goals. In many nations, governments are in retreat, cutting their social and public spending, leaving citizens even more vulnerable to economic turmoil. In others, economic power is shifting dramatically with consequential social impacts. A general movement of global power from West to East may be apparent, but there is still little sense of how political institutions are

to be reformed to cope with growing social unrest, economic stagnation and future insecurity.” Also noteworthy is the fact that amidst the devastating effects that the private sector and even the state sector faced during the period of recession, the cooperatives exhibited tremendous resilience and stability thus drawing greater attention as a form of business enterprise. “This situation calls for a relook at the role of cooperatives and exploring the new role the cooperative sector could perform. Given this background the seminar endeavours to explore the ways and means of repositioning cooperatives in the global economic framework”. This compendium presents select papers from out of about 31 papers presented in the conference that explore different dimensions of mainstreaming co-operatives.

The first paper by Yashavantha Dongre provides an overview of mainstreaming co-operatives. Originally presented as an introduction to the conference, Dongre’s paper outlines the development at the global level that has set the stage for co-operatives to play a major role and examines both the need for and challenges of bringing co-operatives to the mainstream. The paper argues that “there is both a need and an opportunity for the co-operatives to come to the centre stage. Availability of a co-operative alternative in all spheres of socio-economic activities, would be in the best interest of people. It is therefore, necessary that the ICA Blueprint be adopted as guidelines and co-operative identity should be ensured with a focus on enabling members’ economic and administrative participation, developing sustainable businesses, mobilizing capital through reliable sources and creating a legal framework that creates a conducive environment for the co-operatives to flourish”.

Srivastava in his paper “Co-operatives Unleashed” opines that “cooperatives have assimilated all the three dimensions of a

Corporation, i.e. as Economic Organization, as a Human Organization and as a Social Organization and as such are in a stronger position to develop and do not face the dilemma of the Corporate Sector". Having observed that "one of major requirements (for co-operatives to become mainstream organizations) is systematic change which provides improvement in member-satisfaction, creates internal checks and balances and while ensuring autonomy also ensures accountability", the paper outlines the need for co-operatives to move ahead with confidence and with a clear plan of action.

Akira Kurimoto draws our attention to mainstreaming co-operative research in the Asia Pacific region. His paper starts with the overview of predominant European/North American co-operative studies and then describes the changing environment affecting the Asian co-operatives in the economic, political and societal context. Further, the paper explains recent developments in the Asian co-operatives and demonstrates the potential of the Asian co-operative models. As a measure of strengthening the co-operative research in the region Kurimoto suggests that "it is imperative to build a close linkage between co-op practice and co-op studies at various levels and promote networking among researchers at national, regional and global levels".

The papers by Yuki Hagiwara and Sudha Kornginnaya deal with theoretical issues pertaining to the feasibility of co-operatives as a global alternative. In his paper "Core Values of the Co-operative Identity as Meta-universality: Beyond the Antagonism between Universalism and Pluralism", Hagiwara examines the dichotomy between universalism and pluralism by positing ICA as a global agency functioning in a globalized environment and evaluating the co-operative identity statement enunciated by ICA. He concludes that "the Co-operative movement for a sustainable society is a self-

critical praxis. A necessary condition to achieve this vision is the self-critical thinking". Sudha on the other hand develops a framework for the agenda of inclusive development through co-operatives and expresses concern that co-operatives (in India) have been essentially functioning only as economic enterprises and with this approach the idea of inclusiveness cannot be achieved. Sudha has substantiated her arguments through empirical evidences and has called for a change of attitude on the part of co-operatives to evolve as organizations of members with enough opportunities for member participation.

The above conceptual and theoretical papers are followed by diverse empirical studies that show case how co-operatives have the ability or otherwise, to become mainstream organizations. Anil Karanjkar's paper based on the case study of a Sugar Co-operative in Maharashtra in India is a good example of how through innovative measures co-operatives can both sustain and expand. This paper underlines that co-operatives need to focus on innovations in the key areas of the economy (such as alternative energy in this case) in order to be perceived to be important both by people and by the policy makers. A.K. Asthana in his paper "Global Warming and Cooperatives: Capacity Building of Farmers" draws our attention to yet another contemporary issue of global warming and narrates the co-operative efforts to educate farmers regarding the impact of global warming. In their effort towards becoming mainstream organizations co-operatives need to respond to some of the contemporary challenges such as facilitating agriculture without adding much to global warming, feels Asthana.

K. Ravichandran's paper focuses on business diversification strategies adopted by co-operatives in order to develop sustainable businesses. Based on the case study of co-operatives in the state

of Tamil Nadu in India, he illustrates how the SHG-Co-op linkage is an important diversification strategy that helped co-operatives to increase their business and viability. Though there are problems in such models, the author feels that co-operatives need to keep exploring new and local need based businesses that makes them relevant to local population. R. Elangovan's paper too is centered around Primary Agricultural Co-operatives in Tamil Nadu. He has applied the concept of 'Economics of Scope' and analysed the situation of PACS in the study area. Elangovan has demonstrated that PACS could achieve better economies of scope after the implementation of STCC reform and revival programmes.

Mahesh M uses Data Envelopment Analysis to measure productivity and effectiveness of co-operatives. Taking example of District Central Co-operative Banks and applying the DEA tool the author has found that the sample units are not competitive enough when compared to private commercial banks mainly due to lack of adoption of technology. Mahesh's paper indicates the need to integrate technology as a measure of mainstreaming co-operative form of business. Tatsuro Miyazaki brings in another example of innovation by illustrating the example of the role of Consumer Co-operatives in Japan in recognizing the Fishy Eco Label. This labelling is done as a step towards protecting marine life through safe fishing. Co-operatives as socially responsible organizations wish to promote this labelling but the labelled products do not seem to make a difference to consumers. Given this situation the consumer co-operatives are trying hard to promote Fishy Eco Labelling. Persistence is an important element for co-operatives while pursuing a socially important agenda, and hence this case study brings fresh ideas about the challenges involved in focusing on environmental sustainability while achieving viability in the business of co-operatives.

The last paper of this volume “Gender Dimensions of Development in Fisheries Cooperatives in Coastal Karnataka” by Renuka adds a gender dimension to the idea of mainstreaming co-operatives. Taking example of Fisheries Co-operatives the author shows how women are excluded from participatory roles in the fisheries co-operatives and how it becomes an impediment for the co-operatives to perform better. She has argued in favour of policy initiatives that provide greater role for women and feels that the co-operatives become more acceptable and can play a meaningful role only when women, who generally play a key role in many fishing related activities, should be given adequate opportunities to participate.

The readers would find that the papers in this volume address very different issues but have a common point of emphasis. The concerns expressed in the papers are about making co-operatives important players in the economy and society. While some have focused on the possibilities the others on the constraints. The researchers come from diverse backgrounds, focused on varied issues and used very different methods. However the common thread is the focus on exploring the ways and means of positioning co-operatives as noteworthy institutions within the socio-economic framework.

It has been a privilege to be associated with this venture and we have thoroughly enjoyed both organizing the conference and to be involved in the process of shortlisting papers and putting together this volume. We are grateful to ICA-AP for publishing this volume. IFFCO Foundation and University of Mysore have provided financial support both for the conference and for this publication and we are thankful to them. We thank G.N. Saxena, Chair person and Akira Kurimoto Vice Chair of ICA-AP Reserch Committee for giving us



this opportunity. M/S Guptha Offset Printers, Mysore have done a good job of printing work, which we appreciate. There are of course limitations, but we do hope that the papers in this volume will throw some light on the need for and strategies of mainstreaming co-operatives apart from providing a glimpse on the nature of research going on in the Asian region.



## **MAINSTREAMING CO-OPERATIVES: THE NEED AND THE CHALLENGE**

**Yashavantha Dongre \***

The ICA Blueprint for Co-operative Decade, an ambitious plan that sets a long term vision for co-operatives, seeks to make “the Co-operative form of business by 2020 to become: The acknowledged leader of economic, social and environmental sustainability; The model preferred by people; and The fastest growing form of enterprise” (ICA, 2013). This action plan put in place immediately after the UN International Year of Co-operatives in 2012 is an indication of growing importance of co-operatives to address the core issues that are bothering the global economy. The statement by the UN Secretary General that “Co-operatives are a reminder to the international community that it is possible to pursue both economic viability and social responsibility”,(Ba Ki-Mon, 2012) reiterates the belief that cooperatives need to get their rightful place in the world economy. Mainstreaming co-operatives is thus a conception that envisions bringing the co-operative sector as a major player in the global socio-economic sphere.

Co-operative movement evolved as a response to the shortcomings of a market economy that did not assure reasonable protection either to the workers or to the consumers. Even though much water has flown under the bridge since the days of the Roshdale Pioneers,

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market dynamics hasn't changed much. Globalization seem to believe in neo-liberal economic policies that puts private sector in the forefront. No doubt, private sector is innovative, creative and aggressive. But the sector is also greedy and pursues a self-serving path. The history of market upheavals from the days of the great depression of the 1930s up to the collapse of the global market during 2007-08 is enough indication that free market, in the absence of an effective constructive competitor from outside the main players of the market, tends to usher in miseries to people as well as the environment. "Whenever the market gets polarized, there is need for people's own initiative to protect their interest. Consumers across the world have in the past tried to evolve mechanisms that counter the sectarian interest served by market forces. Today, with the States exuding confidence in the market mechanism and the private interest ruling the roost, we seem have moved a full circle. In a sense, today we stand precisely on the same footing as we were at the time of emergence of the Roshdale experiment. A lot of things are indeed very different – our knowledge, technology, global governance systems, availability of alternatives and an internationalized production system. None the less, the basic issues remain the same – markets that serve only sectarian interest, large masses remaining impoverished, capital gaining advantage over labour and a State which seem to be increasingly working subservient to market. Therefore, going by the logic of cooperative endeavours, time is ripe for the cooperative movement to thrive better" (Dongre, 2006).

### **Increased Emphasis**

In the past couple of decades, there seem to be increased global awareness about co-operatives and initiatives that emphasized the role of co-operatives in the economy have been taken. The global initiatives towards mainstreaming co-operatives may be said to have begun with the efforts of International Co-operative Alliance, of

accepting and putting in place the Statement of New Co-operative Identity (ICA, 1995) which brought in a lot of clarity and global consensus in terms of determining the role of co-operatives in the economy. International Labour Organization deliberated at length about the relevance of cooperatives and need for promotion of cooperatives under the new global economic climate. We need to recollect that it was the ILO Resolution 127, passed in 1966 that made many a States to take statutory and facilitative steps to strengthen the cooperative movement. In 2001, ILO deemed it necessary to amend the resolution and initiated a lengthy discussion with member countries. Having collected views of all member governments and other bodies it finalized the new proposals and conclusions. This report asked the governments to take up “(a) the establishment of a policy and legal framework based on the cooperative principles (as stated in ICA Statement of Cooperative Identity); (b) the establishment of an institutional framework allowing for registration of co-operatives in a rapid and simplified manner; (c) the establishment of a policy and legal framework for the promotion of a vertical co-operative structure, according to the needs of co-operative members; and (d) the adoption of measures for the oversight of co-operatives on equal terms to those applied to other forms of enterprise.” ILO report was very clear that the State policy towards co-operatives should be such as to “(a) decentralize to the regional and local levels, where possible, the formulation and implementation of policies and regulations regarding co-operatives; and (b) limit the legal obligations on co-operatives to areas such as registration, audit, the receipt of licenses and the establishment of business reports to the same extent as is required by national law of any other form of enterprise” (ILO, 2001). The UNO discussed the matter related to the creation of enabling environment for the co-operatives in all the countries through the Report of the Secretary General on “Status and role of co-operatives in the light of new economic and social trends” (UNO, 2002). Having

substantiated the important role of co-operatives in the field of entrepreneurial development, financing, provision for social services, food security and eradication of poverty, this report holds the view that the states are duty bound to create environment conducive for co-operatives to evolve and operate. The report held that “recognition by Governments of the special character of the co-operative movement and the desirability of a successful partnership between it and the public sector” is very vital.

The above efforts have had their impact in terms of changes in national level policies and legal regimes governing co-operatives. For instance, the 97th Constitutional Amendment that made formation of co-operatives a basic right of citizens in India, has visible influence of the ILO and UN recommendations. It is reported that during the economic crisis of 2007-08, while both the private sector and the state sector were under tremendous strain and many of them collapsed or seen a sharp downturn, co-operatives world over shown tremendous resilience and stood the test of time. In fact co-operatives became a preferred choice for many of those who found the mainstream organizations not suitable to meet changing needs. It is these developments that made UNO to declare 2012 as the International Year of Co-operatives (IYC). Indeed the IYC contributed a lot in creating awareness about co-operatives and made governments of all nations, irrespective of their political ideologies, to take a serious note of co-operative sector in their economies. Now that the ICA has decided to continue the good work done during IYC through the International Co-operative Decade, the international institutional support for mainstreaming co-operatives is firmly in place.

### **Contemporary Roles Of Co-operatives**

Traditionally co-operatives have been viewed either from the perspective of ‘market failure’ or from the perspective of ‘agency’ theory. In most economically advanced countries the former, that of

meeting the unmet demand, was predominant. Sections of the society who for various reasons cannot access goods and services from mainstream organizations (that of State or Market) tried to create their own alternative structures and co-operatives were the most important among them. Whereas, among the newly independent countries co-operatives functioned more like agents of the State by receiving government patronage and delivering government services to people. Both these situations have now changed. The shifts in the economic, political and social dynamics along with the globalization policies have necessitated new roles. Analyzing these changing roles is important to underline the need for mainstreaming co-operatives.

### **Empowering people**

Globalized environment necessitates people, especially women and the other marginalized groups, to be equipped with greater skills and collective strengths. If not empowered, these sections are more likely to be marginalized further, which would bring down the possibilities of benefitting from the new opportunities emerging due to opening up of markets. “Co-operatives can be highly instrumental in enabling and empowering women and men to seize the opportunities created by globalization and providing a buffer against its downside. ... Co-operative organisations give members voice in national, regional and international debates. They are important advocates for a globalization that recognizes and respects the rights, aspirations, needs and identity of people” (Somavia, 2004)

### **Constructive Competitor**

The free market may seemingly create some degree of competition, but the private enterprises would certainly be innovative in overcoming the impediments of competition through cartels or predetermined market sharing. On the one hand the state withdrawal leads to non-availability of a competitor from a different ownership domain. On the other, the

private corporate may dominate the market and eventually the market may turn hostile to the consumers. It is often the case that private corporate or business houses may act reasonably, only when a competitor from a different sector is active in the market. The cooperatives need to provide such competitive setting. This is the role of the Constructive Competitor. Co-operatives need not become the monopolies or even the market leaders in terms of market share. But their presence should be good enough to maintain the balance in terms of price and quality. Co-operatives thus play the role of a constructive competitor ensuring that the dominant market institutions function within the parameters of normal market conditions.

### **Employment Generation**

Employment generation continues to be an important need for most emerging economies, while many advanced economies have started facing problem of unemployment primarily due to saturated growth and stagnant domestic consumptions. Innovative ways of generating employment is therefore needed in all parts of the world. It has been well argued that co-operatives are emerging as important instruments of employment generation (Evers, 1995; Kawaguci, 1998). In Spain where the youth unemployment rate is said to be about 50%, co-operatives like Mondragon are said to be both retaining and creating additional jobs even during recession (Mazzarol, 2012). Unemployed youth joining together and starting co-operative enterprises and displaced workers joining together and operating business through worker co-operative model are reported from countries like India as well (Dongre, 2007). The third sector institutions in general and co-operatives and social enterprises in particular are increasingly seen to be performing the important role of employment generation both in the post welfare states and emerging economies.

### **Environmental Sustainability**

Environment degradation has been a core issue of global concern all through the past few decades and protecting environment and

conserving bio-diversity have now become the most important challenges. Here again, it is beyond doubt that the fast degradation of environment was caused primarily due to careless industrializations and commercialization caused by the mainstream enterprises. Co-operatives, by nature inward looking organization that develop their businesses not based on market demand but on the needs of the members, have inherent qualities of respecting nature and conserving the eco-system. The principle of 'Concern for Community' one of the basic tenets on which co-operatives operate facilitates respecting and safeguarding the community interest. If the businesses of the future are to be more environmental friendly, then co-operatives are obviously a natural choice.

The above roles underline the need for co-operatives to be made a major player in all economies. It is for the obvious benefits that it would confer both in economic terms and in terms of sustainability that co-operatives need to be brought to the centre stage.

### **The Challenge**

Mainstreaming co-operative is an idea good in intent but challenging in practice. The domain of co-operatives is so vast and diverse, that there cannot be a 'one size fits all' strategy to achieve this goal. There are operational issues that need immediate attention.

The basic issue is about the present size of co-operative sector in the world. No doubt that almost all countries in the world have co-operatives and that co-operatives function in all sectors of the economy. However, when compared to the size of global economy, the co-operative sector is still very small. There is probably no economy in the world where the co-operative sector has an overall share of more than 10 percent of the economy. It is therefore imperative that mainstreaming co-operative in economic terms is a long road ahead. Clear cut strategic plans are needed and of course policy initiatives need to be in place to steadily increase the presence of co-operatives in all sectors of the economy.



Another critical issue is the capacity of the co-operative sector to compete with the dominant sectors. Many raise the issue as to whether co-operatives can compete (Bibby, 2014) many have valid argument to show that co-operatives are not a competitive option (Vandeplas et. al, 2012). Most of what we read, hear and see in the business world today is about the investor owned firms. There have been even examples of co-operatives getting converted into investor owned corporations (Bekkum and Bijman, 2006). Given this trend, how to ensure that co-operatives emerge as organizations that withstand and survive competition from private sector, let alone compete with a strength of making the mainstream organizations mend their ways. It therefore calls for a different strategy, the one based on full adherence to co-operative values and principles, to ensure that co-operatives are taken a serious note of by the dominant players in the market.

The present day economies are knowledge economies. Technology and services are the major drivers since most needs of the day centre around them. Unfortunately, co-operatives have a lesser presence in these two areas. Services, in particular financial services are an area where co-operatives have relatively notable presence but technology such as the ICT is a weak-link. It calls for a tremendous shift in attitude and presence of co-operatives to remain relevant for the needs of the present generation

Nonetheless, there is both a need and an opportunity for the co-operatives to come to the centre stage. Availability of a co-operative alternative in all spheres of socio-economic activities, would be in the best interest of people. It is therefore, necessary that the ICA Blueprint need to be adopted as guidelines and co-operative identity should be ensured with a focus on enabling members economic and administrative participation, developing sustainable businesses, mobilizing capital through reliable sources and creating a legal framework that creates a conducive environment for the co-operatives to flourish.

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## COOPERATIVES UNLEASHED \*

**JNL Srivasthava \*\***

I am very grateful to the ICA-AP Research Committee, G.N. Saxena, Director Cooperative Services, IFFCO & President of the Research Committee and the University of Mysore for inviting me to the 8th ICA-AP Research Conference. The theme of the Conference “Mainstreaming Cooperatives in the Global Economy” has a great significance in the current economic, political and social scenario. I complement the Research Committee for selecting the theme. The sub-themes reflect on critical dimensions of the main theme and I am sure, during the Conference after in-depth discussions, holistic recommendations would emerge on the main theme.

Even though the spirit of Cooperation has been in existence ever since the dawn of human civilization as the very birth of the social systems and organized economic activity depended on mutual cooperation, the Cooperation, as we recognize today, came into existence, after the Industrial Revolution started creating an exploitative capitalist society. International Cooperative Alliance (ICA) has a very long history and, in my opinion, the ICA is the oldest International organization which has such deep roots and such sound principles that it has survived very severe political, economic and social upheavals including the two world wars and the cold war. It is, therefore, a matter of privilege to attend a Conference organized by the Research Committee of the ICA.

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\* Indugural Address delivered at the opening plenary

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In today's context, let us look at the global economy and the emerging trends. One of the most important aspects of the global economy is that it is a knowledge economy. Knowledge is emerging as a key resource with knowledge workers as dominant force in the work force. Over a period of time, there has been a major structural change in the world economy; gradually the contribution of agriculture and thereafter of manufacturing has declined and services sector has taken over, leading to the dominance of the Knowledge Sector. The main characteristic of this economy is that it is borderless, it is already globalized, it is highly competitive, and the ease and speed at which knowledge travels, one has to be globally competitive. The new modes of trading, internet based trading, is acquiring more and more business gradually. Even in the Private Sector, we find a movement from Corporation to Confederations. A Confederation of the Public, Private and Cooperative Sectors is being created through joint ventures alliances and agreements. In the case of IFFCO itself, e.g. a Japanese company has created alliance to promote insurance, an Indian corporate created alliance to promote communication and Joint ventures have been set up abroad to create a linkage between supply of raw material and consumption of the fertilizer product. Outsourcing/ establishing overseas facilities has become an important part of business expansion. It is being said that IT revolution is disintegrating the monolith of business as more and more activities are being either outsourced or facilities are being created overseas. This is leading to movement of business activities in other countries to exploit cost or skill deficiency. A collaborative business eco-system is being created to access Specializations and companies are flocking in the cluster like technology parks, software parks where specialized business infrastructure has been established. Emergence of the City of Bangalore is a part of this process which has focused on software and business process outsourcing services and has been a leader of the IT revolution in the country and has also proved to be a preferred destination for multinationals and micro multinationals. The IT

revolution and the growth of the Knowledge economy have also led to disruptive innovations both in products and processes. There is a growth of dynamic specialization through connectivity and leveraged capability building. The Digital Technology and the Public Policy of Trade liberalization and Reforms are intensifying the competition of a global scale leading to challenge in business processes. In this background, how to mainstream cooperatives is most important challenge. It is obvious that cooperatives will have to become change agents through improvement in their products, services and production systems through innovations. In the historical background, we are aware that the cooperative system emerged in three streams, e.g. Consumer cooperatives in England to protect the interests of the consumers; Agriculture cooperatives in France to protect the interests of the farmers and Thrift & Credit Cooperatives in Germany to protect the interests of the artisans and craftsmen and for a long time, the Consumer, Agriculture and Credit Cooperative movements have been in the forefront. Agriculture cooperatives have still dominant position in emerging economies like India, China and others. However, the modern trends of economic growth call for major diversification efforts in the cooperative sector. There is a need of specialized cooperatives for specialized markets, specialized products and for specialized consumers.

Education and health are the emerging sectors in which cooperatives can start playing a very important role. In India, realizing this trend, the National Cooperative Development Corporation (NCDC) made changes in their Law to provide financial support for such service cooperatives including Educational Institutions, Hospitals and Tourism, etc. The modern economy has also provided increased role of women in workforce. This is leading to systems which encourage larger women participation. For mainstreaming, therefore, the cooperatives need to prepare themselves to face the challenges. Development of proper systems, diversification, specialized human resource and introduction of technology infrastructure would be most essential.

It is also worth mentioning that the biggest challenge for large companies is their social legitimacy. In the case of cooperatives, it is well defined. It is a part of cooperative principles. Cooperatives have assimilated all the three dimensions of a Corporation, i.e. as Economic Organization, as a Human Organization and as a Social Organization and as such are in a stronger position to develop and do not face the dilemma of the Corporate Sector. The Concept of Corporate Social Responsibility (CSR) is being promoted by Corporate Sector as a Voluntary effort. In case of India, the Indian Companies Act, 2013 is promoting it through legal provisions also. The Corporate Sector, therefore, has to learn from the Cooperative principles to achieve the social objectives as societal responsibility is accepted as part of the business strategy. In an integrated economic system, based on the specialization, the Public, Cooperative and the Private Sectors have to collaborate with each other. This model is already emerging as trust is getting built between various sectors of the Economy.

It appears to us that the Cooperative philosophy which professes that human life is precious and all life is equal, is a real role model for economic and social development in the long run. Even UN system has acknowledged it by declaring the year 2012 as “International Year of Cooperatives” and treats ICA as a permanent invitee to their social and economic council. However, the cooperatives face major challenge in the emerging world economy and must prepare themselves to face the challenge. Some of the dimensions highlighted would require deep study, analysis and research with a view to finding out innovative solutions for sustained growth and development.

An efficient, honest and ethical governance system is most critical for the political and social systems, especially for the cooperative sector, as it is stated to be a weapon for the weak and which has an abiding motto of One for All and All for One. A recent study quoted in “The Economist” of January, 2013 has reported that only 18 per cent people trust business leaders and 13 per cent political leaders. Obviously, this is caused by the governance deficit in the system. In

the case of cooperatives, good Governance would make adequate and proper delivery of services to the Members without hitch or hindrance. Even though cooperatives are member-owned, member-managed, democratic institutions, but many times, cases of lack of governance, mis-governance or mal-governance, are seen. In the Indian context, it has led to decline and fall of a number of large cooperative Institutions. In cooperatives, everything is a way of life and so has to be good cooperative governance. One of major requirements is systematic change which provides improvement in member-satisfaction, creates internal checks and balances and while ensuring autonomy also ensures accountability. Integrity and vigilance have to move together. It has been found that good management depends 80 per cent on good systems and 20 per cent on good leaders but it is only good leaders who create good systems. In case of Cooperatives, thus, good leadership is the most important requirement to improve cooperative governance. Since cooperatives are member-owned and member-controlled and therefore, eternal vigilance by such members with effective systems only can ensure a desirable level of cooperative governance providing very high level of services to the Members.

Innovation implies improvement in established product and services which outperform previous practices. In cooperatives, the most important is the service delivery innovation. The members demand more responsive customized and personalized services. In fact, cooperative itself is an innovative model which emerged after the Industrial Revolution which gave birth to a Capitalist Society. In the present time, when the cooperatives are facing competition both from the State Sector and the Private Sector, innovation becomes absolutely necessary. As the pace of economy and social changes quickens and new technologies are emerging, cooperatives have to be more ready for swift and sure footed response to provide tailored serviced to the members. Culture of innovation has to underpin the activities of the cooperatives which has to be a continuous process



leading to new services, new service delivery mode, development of new concepts and new systems. In the case of cooperatives which are member-owned and member-managed, it is easier to know the customer insight for the strategy, products and services provided by the cooperatives and need for innovations.

Many Cooperatives have introduced innovations in their activities which have been adopted by the Public and Private Sectors. There is an urgent need, however, for the cooperatives to adopt systems which will encourage innovations in the cooperative organizations. The sector requires an “Innovation and Research Unit” which should capture, synthesize and disseminate examples of innovations and best practices. It should be both at the ICA and at the National levels. Innovation hubs need to be created for the purpose. Cooperatives also need to create right conditions to encourage innovation and develop leadership for innovation in their organizations. They need to build the capacity and leverage the power of collaboration. Innovation has also risks attached with it as some of the new ideas may fail but this should be treated as an opportunity for learning. The employees of the Cooperative Organizations have to be provided suitable incentives for attempting innovation. The cooperative innovation network should comprise of academics, cooperative members, cooperative institutions, practitioners; it should create consciousness about the innovations through information and communication technology including the use of social media.

I have highlighted some of the key issues which I think, are on the horizon. I am quite sure, the Cooperative system is capable of facing it boldly and will take steps for sustained development of the cooperative sector at the Regional, National and International level. I hope, this Conference will throw some innovative strategies, which, with further research and refinement, would lead cooperatives to achieve greater heights in the 21st century.

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## MAINSTREAMING THE ASIAN CO-OPERATIVE STUDIES?

Akira Kurimoto \*

### Introduction

The scientific analysis of co-operatives requires adequate approaches of different disciplines. There exist some approaches which can be applied to co-operative studies in which a number of excellent works have been done by prominent researchers. However, a bulk of co-operative studies were predominantly initiated by the European or North American researchers and we are still placed under their strong influence. So I'd like to raise a question; how the Asian co-op studies can be a mainstream in view of the Asia's dominant share of co-op membership.

Asian co-ops had been dominated by the state-sponsored model which can be dated back to the Indian Co-operative Credit Societies Act of 1904. However, since the 1980s, Asia is in the midst of fundamental changes in the economic, political and societal context. Such drastic changes are increasingly giving impacts on the co-operative development in the region. The ICA Asia-Pacific initiated the Co-operative Ministerial Conference in 1990 to cope with such changes. The ICA Statement on Co-operative Identity was adopted as a global standard of co-operatives in 1995 while it was endorsed by the United Nations and the ILO in 2001 and 2002. We have to analyze the multifaceted aspects of co-op's transformation or inertia by collecting facts and figures.

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There exist the Asian co-operative models which are relevant to the other regions such as poverty reduction by Anand dairy co-ops, multi-purpose agricultural co-ops, strong member participation in consumer co-ops, multi-stakeholder involvement in medical co-ops and campus co-ops, micro finance and empowerment by credit unions and women's co-ops and so on. These models should be analyzed in detail and lessons must be drawn for the benefit of the worldwide co-ops.

This article starts with the overviews of the predominant European/North American co-operative studies. Then it will describe the changing environment affecting the Asian co-operatives in the economic, political and societal context. It will explain recent trends in the Asian co-operatives and discuss about the potential of the Asian co-operative models. Finally it will call for the intensive/extensive studies on co-operatives in Asia.

### **1. Predominant European/ North American co-operative studies**

There are several approaches of different disciplines that have been applied to analyze co-operative organizations but so far the European and North American researchers are playing the leading roles in a number of fields. Here I'd like to mention some examples together with prominent researchers in each field.

In the economics, Michael Cook applied the property right theory to explain how American agricultural co-ops had developed hybrid co-ops to attract investment including new generation co-ops. Henry Hansmann's seminal work *The Ownership of Enterprise* explained why co-operatives are widely used in agriculture, applying the transaction cost theory (contract cost vs. ownership cost). Abner Ben-ner's evolutionary economics deals with nonprofits and co-operatives. Roger Spear and Chris Cornforth applied the governance theory to co-operatives while Jacques Defourny, Jean-Louis Lavil

and Carlo Borzaga are gurus of social-solidarity economy and social enterprises. The game theory, network theory, resource dependence theory are also applied.

In the management theory, Peter Davis joined Tom Webb's Master Course of Co-operative Management to promote value based professional management. In the political science, Victor Pestoff has developed influential schemes of welfare triangle, co-production and co-governance. In the legal science, Hans Münkner pioneered the studies on co-operative laws and now edit the International Handbook on Co-operative Law together with Hagen Henry, Antonio Fici and Dante Cracogna. In the sociology, Jack Craig studied on member participation while Jurgen Habermas' public sphere theory was often referred to co-operatives position in the civil society. In the history, Ian McPherson, Johnston Birchall, Rita Rhodes had written national and international history while a number of historians joined in the Global Co-operative History Project led by Mary Hilson

There exist a number of research networks based on languages. The ICA Research Committee started as a platform of research/planning officers of consumer co-op federations in Western Europe in 1958 and transformed to the academic forum since the 1990s. It has regional committees in Asia, Latin America and Europe. CIRIEC is a network of researchers and practitioners in public and co-operative/social economy and organizes biennial research conferences on social economy. EMES is a research network for social enterprises in Europe. It is growing to be the international network and now intends to cover Asia. ISTR is a network for the Third Sector research including co-operatives and has extended an Asian network. IGT is a network for German-speaking researchers and provides platform for co-operative institutes attached to universities in Germany, Austria and Switzerland. RIESS is a research network for social solidarity economy in Franco-phone universities. EMNET, a research forum

of economics/management on network, attracts researchers on agricultural co-ops.

A number of research institutes specialized on co-operatives promote research and development. EURICSE in Trento is a focal point of worldwide co-operative research and closely collaborate with the ICA tapping resources from the EU and so on. It organized an international conference dedicated to the International Year of Co-operatives under the title of 'Promoting the Understanding of Cooperatives for a Better World' in Venice in March 2012. Co-operative College in the UK provides education and training for managers and leaders while Co-operative Institute in Cork University, Ireland specialized in agricultural and financial co-ops. Co-operative Institutes in Nordic countries had once influence but lost momentum since the 1990s. Co-operative institutes attached to German-speaking universities are active in economics and law. Co-op institutes in Barcelona, Valencia and Mondragon provides a forum for Spanish speaking researchers. In English speaking Canada, some universities in Victoria, Saskatoon, Toronto, Halifax etc. are leading co-operative studies worldwide while Franco-phone universities in Montreal, Sherbrook etc. are also active in co-operative research. In the USA, Center for Co-operatives attached to University of Wisconsin is one of the limited source of information on US co-operatives.

In Asia, there exist a number of co-operative colleges and institutes in Japan, Korea, Malaysia and India but their linkage is still very weak and could not so far make on impact on the global research community. The question is how we can build capacity and network in advancing co-operative studies.

## **2. Potential of Co-operatives in the Asian Context**

### **2.1 Low Visibility of Co-operatives in Asia**

Asian co-operatives started in the 19th century importing European models. Consumer co-ops were set up following the Rochdale model

while credit co-operatives were created to respond to usury adopting the Raiffaisen model. The Industrial Co-operative Law in Japan was enacted in 1900 to regulate all types of co-operatives while the Indian Credit Co-operative Societies Act was given by the British Empire in 1904 and became the prototype of the co-operative legislation in the developing world. In both cases, the government's top-down approach was introduced in a wide area in incorporation, governance and finance. Such an approach was applied by colonial powers, then succeeded by new independent states. Therefore, co-operatives became parastatal entities under almighty co-operative ministers/registerars.

Thus Asian co-operatives had been created under the strong Western influence brought by colonialism and through development assistance. They, however, evolved quite differently under the prevailing political and socio-economic circumstances. Largely protected from competition by licenses and trade restrictions and supported by subsidies and tax concessions, they had to accept stringent government controls. Now they are in the process of transforming to become more independent and autonomous organizations to fulfill their objective of serving member's interests, rather than the public good. In addition, there are a variety of self-help groups or pre-co-ops, which may grow into more formal co-operatives. In many industrial sectors, national representative bodies are operating and are affiliated with the ICA Asia & Pacific.

The government lacks the reliable statistics on the size of co-operative sector and socio-economic roles are not necessarily recognized by media and academia. So, generally co-operatives are not visible on the Asian political, business or academic scenes. Co-operatives still remain to be a subject of concern for a limited number of researchers, although co-operatives are well established and have grown to become influential economic entities in some sectors and/or countries. Furthermore, these organizations portray an enormous diversity in different countries/sectors reflecting the stages of

economic development, the levels of democratization and forms of governments, all of which makes any attempt at generalization very difficult.

Co-operatives are not visible even in Japan where co-operatives have been established in many economic branches. Agricultural co-operatives are ranked among the largest in the ICA Global 300 and had the strong influence in determining the agricultural policy while consumer co-operatives have 90% of membership and 40% of turnover of the European counterpart. However, institutional separation has hampered the effective collaboration and creation of the identity as a co-operative sector.

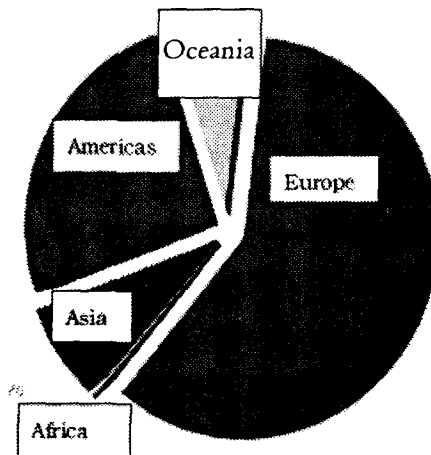
## **2.2 Potential of Asian Co-operatives**

Asian co-operatives have the predominant share: 57% of members of the ICA affiliates while their share in number of larger co-ops in the World Co-operative Monitor remains only 5%. However, given the huge growing population and the high growth rate in the past decades, and since it is forecast the Asian economy will occupy 50% of World GDP in 2050, they have a great potential to become the mainstream of the global co-operative movement, if they can grow in parallel with the economy as a whole. In this context, we have to address following questions;

- Can the Asian co-operatives become a mainstream in the worldwide co-operative movement?
- Can we develop Asian co-operative models which can be transferred to the other regions?
- What can Asian co-operative studies contribute to the advancement of Asian co-operatives ?
- How can Asian co-operative studies contribute to the advancement of Global co-operatives studies ?

**Composition of membership in the ICA affiliated co-ops (%)**

	1935	1960	1970	1986	1998
Europe	89	54	46	28	16.3
Asia Pacific	10	32	36.4	56.5	57.1
Africa	0	0	0.6	2	1.3
Americas	1	13	17	12	25.3

**Co-operatives in WCM Database****3. Changing Environment Affecting the Asian Co-operatives****3.1 Economic Change****From Backward Agrarian Economy to Growth Center**

A large part of Asia was colonized by Western powers from the 19th through/until the mid 20th century. It has been split by competing ideologies, which brought both Cold and Hot Wars after World War II. In addition, Asia has been characterized by its enormous diversity in political regimes, levels of development, religion and culture. Asia embraces both market and planned economies; both the highest income



nations and the lowest. Asia has been the cradle of ancient civilizations and the birthplace of all the world religions. Western power's 'divide and rule' policy had a lasting impact on further differentiation of religions and cultures. It was thus not realistic to talk about regional integration until the 1990s.

As a matter of fact, the Asian economy had been based on primary industries where farmers were doomed to live with very low productivity in populous areas with limited farmland. First, Japan accomplished the industrial revolution in late 19th century and rose to challenge the western powers. After the World War II it revived to become a major economic power through the export-driven industrialization under strong government involvement. The Four Dragons (later labeled NIES) including Singapore, Hong Kong, Taiwan and South Korea followed Japan's lead in the 1960s. Then ASEAN member countries took-off, transforming battlefields into markets by export-driven industrialization. Since the 1990s we have witnessed hyper-economic expansion in China, India, and Vietnam. It should be noted, however, that most of the "economic miracles" have taken place under authoritarian governments, which have all played pivotal developmentalist roles.

In 1997-98 many Asian economies faced the serious contagion of financial crisis starting from the crash of the Thai Baht, which resulted in 3-10 fold unemployment in those affected countries. The ensuing economic crisis led to an upheaval that brought about the fall of the Suharto government and forced Thailand, South Korea and Indonesia to turn to the IMF. But those countries recovered in a few years after implementing emergency relief programs and ruthless austerity policies, while Malaysia rehabilitated its economy without swallowing the IMF's prescriptions. The bulk of the existing co-operatives were affected by this economic downturn.

Asia is now seen to be the most vibrant growth center in the 21st century. Further expansion will no doubt face a number of bottlenecks

including limited resources and energy, environmental degradation, uncertain political stability, and the expanding gaps among people, but the region seems to have an enormous potential as an engine of the world's economy. Ex-Reagan administration trade official Prestowitz forecasts that China and India will become economic superpowers in 10-20 years focusing on trade and industrial policies while the U.S. will face economic decline under globalization with crushing trade and budget deficits, a zero savings rate, failing schools, dwindling investments in scientific training and research, a collapsing dollar and a debt-dependent economy. But such a power shift to the East will pose a challenge to whole world.

Asian nations started thinking about regional integration after witnessing the deepening and enlarging integration within the European Community. The financial crisis in 1997 urged Asian leaders to prompt this process when Japan proposed the creation of a new Asian IMF to help countries in the region, but the idea was rejected by the U.S. and received little support from China. Instead, the countries in the region launched a new forum called "ASEAN plus three" (10 countries + China, Japan, South Korea) to promote regular dialogue between finance ministers and central banks. In order to reduce customs and other trade barriers, negotiations amongst nations are underway to conclude a Free Trade Agreements. Now the American-led Trans Pacific Partnership (TPP) and the Regional Comprehensive Economic Partnership (RCEP) are competing while a perspective for 'East Asian Community' is still unclear.

### **3.2 Political Change**

#### **From Authoritarian Rule to More Democratic Governance**

In Asia, populous farmers have been overwhelmingly ruled by a few elites composed of royal families, bureaucrats or military generals. But economic growth resulted in the emergence and

expansion of the working and middle classes. They expressed dissent to the 'developmental dictatorship' that was often associated with military intervention in politics and urged a shift to more democratic governance. They pursued political reforms through the parliaments in some countries or mobilized demonstrations in the streets in other countries and succeeded in changing the political leaders in the late 1980s. For instance the Peoples Power revolution ousted the dictator Marcos from the Philippines. The persistent protest movement of workers and students led to the democratization of South Korea where the ex-presidents were deprived of power and even imprisoned. In these processes the traditional and new social movements played important roles. Thereby newly elected political leaders claimed themselves as coming from the people's movement.

The reality, however, cannot support the assumption that economic growth and the appearance of a middle class will lead to democratic governance. There exist gaps among new and old movements, competing sectionalism, and paternalism within the organizations. Popular movements have not been organized nor coordinated to promote more comprehensive political reforms and the democratization of the society at large. Another problem is the tradition of the state corporatism; administrations have pursued to destroy or exclude the independent labor movements while they created and supported pro-government trade unions. Such a shift from exclusion to inclusion can be observed in Taiwan, Singapore and other nations where states allowed partnering unions to enjoy a variety of privileges including social insurance systems for workers, while often denying the freedom of associations and human rights.

Furthermore, we have witnessed a stark contrast between Singapore and the Philippines; the former has been reluctant to adopt democracy despite being among the highest per-capita GDP (US\$20,895 in 2003) and having a robust middle class, while the latter

has accomplished western democracy despite being among the lowest per-capita GDP (US\$939) and lacking basic public services.

Politically, the end of the Cold War and globalization seems to be depriving the legitimacy of authoritarian rule, but there still exists stringent control over popular movements in China and Vietnam, while planned economies are giving way to a kind of market economy, which would invalidate all inclusive protection and regulation of many aspects of social and economic life. The emerging civic organizations at the grassroots' level are not without conflicts with the state and the party apparatus, but authorities are reluctantly encouraging the media to support their anti-corruption campaigns and they are admitting that there is a slow transformation of hitherto party controlled mass organizations into relatively independent ones.

Therefore it is premature to see a clear-cut unilinear perspective towards liberal democracy in Asia. We are still facing a mixed situation; there have been backlashes by military coup, setbacks by political disputes and takeovers by Islamic fundamentalists.

### **3.3 Societal Change**

#### **From Traditional Society to Emerging Civil Society**

The most visible dimension of social changes caused by rapid industrialization has been the unprecedented demographic shift from rural areas to large cities, resulting in the concentration of population and economic activities. It has often been accompanied with the formation of large-scale slums at the outskirts of capitals such as Delhi, Manila and Bangkok, while a large part of the depopulating rural areas have been deprived of social infrastructures to support basic human life. Therefore there is a growing gap between demand and supply of social services, especially in such deprived areas and the abandoned villages. In this process the historic extended family has been downsized and is giving way to the nuclear family, which

makes the domestic care of weaker members (infant, handicapped or elderly) more difficult. Hence communities and families are weakening their traditional ties, while a government's social safety net is yet to be installed.

Another dimension of the social changes is the growing capacity and role of women. In traditional societies, women have been subordinate to men in every aspect of life. They had no access to education, training or property. They were assigned specific roles within families and not allowed to make decisions about their own destiny. Such traditions were socially embedded and often justified as conforming to Confucian or other traditional norms. However, the growing middle-class families allowed more girls to have higher education in order to pursue careers. Now, female workers are becoming the indispensable workforce in more and more branches of industry. Many women wish to continue working but often clash with the traditional way of thinking based on gender division of labor that dictates that women should stay home to take care of families while depending on husbands' earnings. At the same time, we are witnessing an increasing number of female leaders in the newly created organizations while the established ones are still mostly dominated by male leaders and managers.

So-called 'Asian values' are also being challenged. This was a concept that came into vogue in the 1990s, predicated on the belief in the existence of a unique set of institutions and political ideologies, which reflected the region's culture and history. It typically encompasses some flavor of Confucianism, in particular loyalty towards the family, corporation and nation, the forgoing of personal freedom for the sake of society's stability and prosperity, and a work ethic and thrift. Its proponents, who tend to support Asian-style authoritarian governments, claim they are more appropriate for the region than the democratic values and institutions of the West. This concept began to lose currency after the Asian financial crisis; it

was criticized as contributing to crony capitalism. With the major social and cultural transformation that has been underway in the last decades, many agree that there should be room for democratic decision-making and a universally accepted values system.

Socio-economic globalization and the Internet have accelerated aforementioned changes. The middleclass, equipped with information beyond boundaries, have recognized problems, which were hitherto not addressed, and started expressing their voices to change the situation. We have witnessed proliferating civic initiatives in many parts of Asia.

Policy makers, at the same time, are affected by the discourse on restructuring the welfare state as in Western societies. The governments in many Asian countries are generally reluctant to increase public expenditures for social security and tend to resort to private service provisions. This is why governments in Singapore and Hong Kong are encouraging voluntary organizations and a viable third sector to deliver social services while cautioning not to slip into welfare states.

## **4. Recent Development Trends in the Asian Co-operatives**

### **4.1 State-sponsored Co-operatives in Transition**

In Asia, the colonial and post-independent governments promoted co-operatives to attain their goals of socio-economic development. The British Empire installed the Co-operative Credit Societies Act of 1904 in India that brought far-reaching impact to co-operatives in the region. It aimed to check farmer's enslavement to moneylenders and support Raiffeisen-style agricultural credit co-ops. Because there was no indigenous support for the co-operative idea, it had to be promoted by a specialized government agency headed by a registrar with supreme power. This 'classic British-Indian pattern' spread throughout the British colonies and became the proto type of co-operative legislation in developing countries.

The highly authoritarian approach by co-operative registrars or ministers was inherited by the new independent governments, which promoted co-operatives as engines for national development. As most Asian countries had been based on agriculture before they took-off for industrialization, agricultural co-ops were promoted as a way of modernizing rural economies. Birchall distinguished two phases in development. The first, lasting until around 1960, was characterized by a top-down, 'blue-print' based approach, with a new co-operative sector being organized by the state. In China, multi-purpose village co-ops achieved considerable success in the early 1950s, until they were turned into People's Communes by the decree, which led to catastrophic famine. In Malaysia, agricultural, non-agricultural and fishery co-ops were sponsored and controlled by different authorities. In India, co-operatives received tremendous boost after independence in 1947; the governments decided to promote all forms of co-operatives, contributing share capital, dispatching government officers as CEOs and setting up powerful development agencies. In Iran, multi-purpose agricultural co-ops were set-up and supervised by a central body with direct assistance from the government. The second phase from the 1960s onward was accompanied by a change of emphasis. Against a background of economic growth and rapid urbanization in some countries, co-operative were expected to become a major tool of rural development. To enable them to fulfill this ambitious role, widespread amalgamations between co-ops were brought about by government decree and/or state subsidies. In most countries, federal bodies were created with their leaders being nominated by governments. In this process emerged some powerful organizations including Zen-noh, Zenkyoren, Norinchukin Bank (Japan), NACF (Korea) and IFFCO (India).

But globalization and deregulation has given unprecedented impact to agricultural co-ops since the late 1980s. They have been placed under pressure from lowering trade barriers and increased

competition from foreign food imports. They have been exposed to competition in domestic markets as well, and lost their monopoly or dominant positions through a number of deregulation measures. They have faced government structural adjustment policies urging the withdrawal of public subsidies and preferential treatment for them, although governments did not necessarily give up control of co-ops. To cope with such situations and facilitate the necessary changes in co-operative legislation and policy, the ICA Asia & Pacific has convened biennial Co-operative Ministers Conferences (CMC) since 1990, while the UN's Co-operative Guidelines in 2001 and ILO's new Recommendation 193 on the Promotion of Co-operatives in 2002 set-out guidelines for government's co-operative policies to promote *co-operative autonomy and forge equal partnership*. But state withdrawal from control is occurring at different rates in different places. The ICA's critical studies on co-operative legislation and policy reforms revealed that the progress on implementation of the CMC resolutions was rather slow and needed to gather momentum in many countries, while government's control over co-ops has continued and is still prevalent in some countries placing them in a disadvantageous position in comparison with the private sector.

In contrast, the governments have given much less attention to urban consumer co-ops or financial co-ops, although registrars have exercised their dictating powers over them. In the consumer sector, the development has been very slow except for in Japan and Singapore. This has been attributable to their small size, weak member participation, shortage of capital, lack of managerial capacity and effective federative system. In some countries the shift from regulation to a market economy has brought both threats and opportunities; the Indian consumer co-ops faced stiff competition after losing their monopoly in trading basic commodities while Saigon Co-op established itself as a major supermarket chain in the last decade. In the financial sector, there are co-operative banks and



credit unions in many countries. They provide financial services to members ranging from micro credit at the grassroots to full-fledged banking services through regional and national networks such as CUSCAL, Australia. Also, there are strong insurance co-ops in Japan, Malaysia and Singapore.

## **4.2 Emerging Asian Models**

The Asian co-operatives had been created under the strong influence of the West. This does not mean, however, that it is just a copy of the European forerunners; rather it has evolved into an Asian entity adapting to the existing political regimes, socio-economic structures and traditional culture. It has even created distinct Asian models, which has given some impacts to other regions.

For example, the Amul dairy co-operatives in India provided a model to the development program that began in 1965 which was termed the 'white revolution'. Highly integrated at the village, district and state levels, and under members' control, they have proved the worth of the system, which offers every necessary service to small farmers. It is emulated by a number of countries in Asia and Africa.

Multi-purpose co-ops with combined economic and financial functions had been the dominant form of agricultural co-ops in Japan, South Korea and Taiwan. They were praised as co-operative communities catering to all aspects of farmers' economy and life by Dr. Alex Laidlaw while they are experiencing the impact of globalizations as mentioned before and these functions were separated into holding companies in South Korea.

Grameen Bank in Bangladesh was praised by the World Bank as a successful formula of micro credit and empowerment of poor women at the grassroots and awarded the Nobel Peace Prize in 2006. Its model is being diffused in many parts of the third world but credit

unions have provided financial services in much greater magnitude in many countries. They have been created by farmers, workers, traders and consumers based on the 'common bond' in communities, work places and religious organizations. They largely contribute to the poverty reduction and empowerment of women.

Consumer co-op's member participation based on neighborhood groups (Han) in Japan has been praised by the ICA leaders and some researchers. It was developed to outwit restrictions of prohibiting non-member trade and banking business by involving all customers as members and relying on their investment. The growing individualism has caused a challenge to which co-ops are adapting by shifting to individual home delivery. The trade union-based consumer/insurance co-ops and labor banks are thriving in Japan and Singapore.

In addition to these traditional types of co-ops, there are specific co-ops in Asia. Medical/health co-ops have been organized by users (Japan, South Korea, the Philippines, and Singapore) or providers (India, Malaysia, Mongolia and Sri Lanka) to provide medical services at hospitals and clinics. In many cases they are run as multi-stakeholder co-ops involving both professionals and beneficiaries. They proved to be effective providers of indispensable health services, which were otherwise not accessible to the local residents. University/college co-ops have been organized mainly by faculty members to provide textbooks, food, appliances and credit/insurance to them in more than 10 countries. Students are generally treated as customers but in some countries such as Japan they are encouraged to become full-fledged members and co-ops are run by multi-stakeholders to play even greater part in supporting campus communities. Women's co-ops have been formed exclusively by women in Malaysia, Indonesia India and Iran to encourage them to take leadership positions, which would be often difficult in co-ops of mixed membership due to the prevailing discrimination against women.

At the regional level the consolidation of co-operatives and credit unions is under way. The ICA established its first regional office in New Delhi in 1960. Today the ICA Asia & Pacific Region consists of 55 national organizations from 22 countries, accounting for 57% of co-operators in the world. The Asian Confederation of Credit Unions (ACCU) set up in 1971 covers 15 credit union centrals in 13 countries.

### **4.3 Breakthrough in co-operative legislation**

The transition from the authoritarian legislation to more democratic one is underway but in very slow pace despite efforts of the dialogues in the biennial Co-operative Ministerial Conferences and the Critical Studies on Co-operative Legislation and Policy Reforms undertaken by the ICA Asia Pacific since 1990. However, the International Year of Co-operatives (IYC) witnessed some breakthroughs in co-operative legislation in South Korea and India.

The Framework Act on Co-operatives (FAC) was enacted by consensus in the eve of the IYC and came into effect on Dec. 1st, 2012 in South Korea. Co-operative legislation and supervising ministries have been divided according to industries and there was no legal back up to workers co-ops, multi-stakeholder co-ops or social co-ops. FAC created a bypass enabling five citizens to set up co-ops of any kind except for financial services by submitting application to municipalities. These co-ops surpassed 2,500 in these 10 months. FAC also introduced a new category learning from the Italian legislation. The social co-operatives can facilitate integration of disadvantaged persons into a workforce if they are authorized by the Ministry of Finance. There co-ops numbered 78 as of September 2013.

The other stride was made by the Constitutional amendment in India assented on January 12th, 2012. The Central government issued official notification making it binding on the State governments

to introduce the amendment. It is to follow the ILO Recommendation 193, prompting to modify state legislation towards voluntary formation, autonomous functioning, democratic control and professional management of co-ops.

## **Conclusion**

Asian co-operatives had been set up and promoted more or less by the state as agents for national development, but now face the challenges of major transformation from under the wings of governments to autonomous entities in competitive economies. The International Year of Co-operatives has contributed to the visibility of co-operatives but we have to proceed to the Co-operative Decade both in practice and theory.

Herewith I'd like to suggest some issues to be tackled for building visible and viable co-operatives in Asia. Firstly, there is a need to establish a solid base of research and development activities at the national and regional levels. The lack of reliable statistics on co-operatives or a database on relevant legislations/policy matters largely hampers any intensive examination of the sector at the national level and comparative studies at the regional level. Cultural differences and language barriers have added difficulty to collaboration across borders. It is necessary to push the governments and co-operative federations to keep up such indispensable infrastructure in the ever-growing knowledge-based society.

Secondly, we have to map and showcase the best practices in the region. There seems to be numerous failures in the region due to institutional constraints, public intervention, lack of resources, improper governance and mismanagement. But certainly there exists success stories in each country mobilizing local human/financial resources and facilitating effective participation of stakeholders. We have to

investigate the reasons for success and failure in order to draw necessary lessons. In this process, we can enlist the best practices in satisfying peoples' needs and building sustainable communities, which will be showcased and disseminated to foster the sector.

Thirdly, there is great need to strengthen the liaison between institutions and sub-sectors at the national and regional levels. Although it is important to identify individual researchers, universities and institutes that are studying co-operative organizations based on their own priorities or interests, they must find ways to link-up with each other. The advent of the Internet has ameliorated the situation to a large extent, but national and regional networking has just started in the last decade. The ICA's first Asia and Pacific Co-operative Research Conference was organized in Singapore in 2000. The ensuing conferences were held biennially, but there is very limited participation and communication among researchers. In this regard, it is imperative to build a close linkage between co-op practice and co-op studies at various levels and promote networking among researchers at national, regional and global levels.



### Notes

1. Zen-noh was ranked No. 1, Zenkyoren No.2 and Norinchukin Bank No.12 in the 2006 ranking.
2. According to the EUROCOOP's statistics in 2010.
3. C. Prestowitz, *Three Billion New Capitalist: The Great Shift of Wealth and Power to the East*, Basic Books, 2005.
4. Hyuk-Rae Kim "Unraveling Civil Society in South Korea", D.C. Schak and Wayne Hudson (ed.), *Civil Society in Asia*, 2003, pp.192-208.
5. J.A. Camillieri, *States, Markets and Civil Society in Asia Pacific*, 2001,

- Y. Yamaguchi, "Reviewing Civil Society Problem from Asian Cases", *Contemporary State and Civil Society*, 2005.
6. Samiul Hasan and Mark Lyons eds. *Social Capital in Asian Sustainable Development Management*, Nova Science Publishers, Inc. New York, 2004, pp.1-2.
  7. Asian values from Wikipedia.
  8. Osawa, M. ed. *Ajia Shokoku no Fukushi Senryaku (Welfare Strategies in Asian Nations)*, Minerva Shobo, 2004.
  9. J. Birchall, *The International Co-operative Movement*, Manchester University Press, 1997, pp.163-166.
  10. *Ibid.* pp.167-177.
  11. P.V.Prabhu, *Third Critical Studies on Co-operative Legislation and Policy Reforms*, ICA ROAP, 2004, pp.1-19.

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**CORE VALUES OF THE CO-OPERATIVE IDENTITY  
AS META-UNIVERSALITY:  
BEYOND THE ANTAGONISM BETWEEN  
UNIVERSALISM AND PLURALISM**

**Hagiwara, Yuki \***

**Introduction**

It is often said that one of the characters of the contemporary society is globalization<sup>1</sup>. Almost all the areas in the world are affected by its wave. This means activities of Co-operative movements all over the world are under its influence. The function of ICA (International Co-operative Alliance) today itself shows the contemporary movements are in the context of globalization<sup>2</sup>. Many movements in various areas are connected with each other beyond the boundaries, and their actors participate in the activities of ICA. Therefore considering the relationship between ICA and the movement in each area will lead to a question on the relationship between universality and plurality.

The ICA Statement on the Co-operative Identity<sup>3</sup> and Blueprint for a Co-operative Decade<sup>4</sup> issued by ICA defined what the Co-operative identity based on its core values is. The purpose of this paper is to discuss philosophically and sociologically why these values are necessary for the Co-operative movements today. How can the movements be effective in the contemporary society where plurality in each area is often made much of in relation to globalization? To discuss these questions, theories of environmental ethics and sociology on the relationship between universality and plurality are referred to.

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The ICA Statement on the Co-operative Identity defines that core values of the Co-operative identity are as follows: self-help, self-responsibility, democracy, equality, equity, solidarity, honesty, openness, social responsibility, and caring for others<sup>5</sup>. According to Blueprint for a Co-operative Decade, participation and sustainability are also important core values to structure how Co-operatives are owned, governed, managed and evaluated. There are seven principles to put these values into practice<sup>6</sup>. It has been said having the Co-operative principles is a great advantage to show that the business models of Co-operatives are fundamentally different from other ones<sup>7</sup>. However, the blueprint mentions if the Co-operative principles are applied or not varies from one jurisdiction and legal system to another. They will fit well to some areas, but will not to others. In the latter cases, here can be seen a conflict between universality and plurality. If core values are universal, what is the meaning of universality in this context? How will they work effectively to support various Co-operative movements?

### **Reflexive Modernization**

Before discussing the relationship between universality and plurality, it is necessary to know why plurality is often made much of today. According to a British sociologist Anthony Giddens, the origin of antagonism between universality and plurality is modernity. Modernity first appeared in Europe and modernization can be seen all over the world today as a result of globalization<sup>8</sup>. He criticizes the term postmodernity. It usually means the end of modernity or the situation where modern values and systems have declined<sup>9</sup>. On the contrary, he argues modernity is in the phase of radicalization and universalization (Giddens, 1990, 3).

However, universalization of modernity is paradoxical. The decline of European hegemony is a result of globalization which has been

brought about by universalization of modern civilization coming from modern Europe (Giddens, 1990, 51). Yoichiro Murakami, who is a historian of science, calls this phenomenon a paradox of modern civilization<sup>10</sup>. He points out modern civilization intended to universalize its characters to other areas and had institutions to put it into practice (Murakami, 1994, 83). Great economic power, development of means of transportation, science and technology, and so on were its driving force. As a result of its universalization, people in other areas became conscious of their own cultures and began to declare their plurality under the influence of globalization (Murakami, 1994, 235)<sup>11</sup>.

A keyword to understand this paradox is reflexivity. Reflexive or self-referent behaviors are those that refer back to the very people who are performing them (Kaplan, 1986, 1)<sup>12</sup>. Social phenomena are also reflexive. It is more accurate to say that reflexivity of people and that of society are linked with each other. The more modernization radicalizes through the process of its universalization, the more modern European hegemony will be threatened. Therefore a view of the world as marked by unicity can coexist with that as a place of others (Robertson, 1992, 145)<sup>13</sup>. In other words, globalization and localization, or universalism and pluralism are two sides of the same coin. This is called glocalization<sup>14</sup>.

A character of globalization is dis-embedding. Its definition by Giddens is the lifting out of social relations from local contexts (Giddens, 1990, 21). Dis-embedded tradition is a modernized one, and it connects the local and the global. People find their traditions as threatened ones in the context of globalization as mentioned already. In this way, they redefine their traditions. This phenomenon is called reflexive modernization. Generally speaking, local knowledge in each area will be analyzed by experts academically through the process of reflexive modernization and will be used beyond the boundaries (Beck, Giddens & Lash, 1994, 84)<sup>15</sup>. Traditions in modern society are different from those in pre-modern society because they are dis-embedded ones, though people do not necessarily understand this fact<sup>16</sup>.

## Social Linkages Theory

The relationship between nature and human beings may also change through the process of dis-embedding. People introduce new technologies, which can be a cause of environmental destruction, to achieve a more convenient lifestyle. Ulrich Beck, who is famous for risk society theory, points out that sciences are confronted with their own products, defects, and secondary problem(Beck, 1986, 254)<sup>17</sup>. This is another aspect of reflexive modernization<sup>18</sup>. However, it does not necessarily mean universalization of environmental destructions is equal to the homogeneity of reflexive modernization. Its process is various in each area. Beck says that this theory does not deal only with the decline of the Western model and the key question is how it relates to the different types of modernity in other areas of the world (Beck, 1999, 2)<sup>19</sup>. Therefore analyzing the situation with a pluralistic perspective is necessary.

Shuichi Kito argues that many theories of environmental ethics are based on universalism<sup>20</sup>. The basic view of universalism is norms must be universalistic to achieve a consensus-building beyond interests and cultural boundaries (Kito, 2000, 61). Norms based on it tend to be paternalistic and deal with every case in the same way, though the relationship between people and nature varies from one to another<sup>21</sup>. On the contrary, pluralism makes much of individuality of each area. However, Kito points out that pluralism tends to affirm the present situation uncritically and deny the opinions of people who want modernization (Kito, 2000, 67)<sup>22</sup>. How can people analyze their truism self-critically without falling into static pluralism?

Social linkages theory proposed by Kito is useful to consider this matter. Its aim is to analyze how people relate to nature in each area. He focuses on the relationship between socio-economic linkages (economic aspects) and cultural-spiritual linkages (cultural aspects)<sup>23</sup>. They had been usually inseparable in pre-modern society, but they

were separated through the process of modernization (Kito, 1996, 126-127). This change was a cause of serious environmental destruction in modern times, because traditions lost the ability to maintain environmental sustainability<sup>24</sup>. The decline of pre-modern traditions is an aspect of reflexive modernization through the process of dis-embedding, as Giddens defined<sup>25</sup>.

For example, those permitted to enter commons were the members of the concerned community. Only the members could harvest wild plants and mushrooms there and sell them. Harvesting them was not only an economic activity but also a cultural event. This is called minor subsistence, which occupies an intermediate position between subsistence and play (Kito, 1996, 151)<sup>26</sup>. Minor subsistence shows how the relationship between people and nature in the concerned area is. In other words, the one in pre-modern society embodied how socio-economic linkages and cultural-spiritual linkages were inseparable at that time<sup>27</sup>. This inseparable relationship guaranteed environmental sustainability<sup>28</sup>. However, environmental destruction easily occurs in modern society. Two linkages are no longer inseparable as a result of modernization. Unspecified people can harvest as much as they like because of dissolution of traditional community as a basis of commons<sup>29</sup>.

## **A Frame of Reference**

What Kito says mentioned above does not mean the good old days should be recovered<sup>30</sup>. He does not think people should change their lifestyle into that of indigenous people making much of their traditions which are different from those in modern society (Kito, 1996, 139-140)<sup>31</sup>. The aim of social linkages theory is to give people an opportunity to reconsider how they can change the contemporary situation, that is, how two linkages can become inseparable again to

achieve environmental sustainability. This is a frame of reference as meta-universality which does not show one unique solution (Kito, 2000, 69)<sup>32</sup>. Meta-universality is different from universalism, because the latter works as uniformed criteria excluding plurality of each area. *The former does not deny plurality, but it shows a frame of reference which people should refer to so that they can avoid static pluralism in their decision-making process.*

Investigating their future, people analyze the reasons and processes which lead to the present conditions by referring to this theory<sup>33</sup>. They should reconsider the relationship of two linkages when they try to make a decision. This is a proposal of dynamic pluralism focusing on the dynamism of decision-making process, not static one (Kito, 2000, 68). However, how and to what extent they achieve environmental sustainability is different from area to area. This means that making much of plurality of each area is not equal to allow people to develop without considering environmental sustainability. They should discuss and learn with each other in the process of decision-making (Kito, 2000, 69)<sup>34</sup>. Environmental sustainability as an inseparable relationship of two linkages is a value which should be shared beyond areas as a frame of reference in decision-making process.

The similar idea can be seen in the evaluation system called Co-operative Comprehensive Evaluation (CCE) developed by Co-op Kobe in Japan<sup>35</sup>. CCE is a system to evaluate the activity of Co-operatives based on two axes. The one is Co-operative basic values, and the other is the management base. The aim of this system is to analyze the relationship among two axes by totaling elements mentioned below statistically (Tsuda, 2000, 3). The former refers to The ICA Statement on the Co-operative Identity which shows core values of the Co-operative identity. Co-operative basic values defined by Co-op Kobe are as follows: honest & caring services, participation & democracy, social responsibility & fairness, and autonomy, solidarity &

improvement<sup>36</sup>. While they are mainly related to philosophical ideas of Co-operatives, management efficiency and future potential, which belong to management base, are important to consider how to evaluate Co-operatives as enterprises<sup>37</sup>. Both of them are necessary to analyze Co-operatives comprehensively.

These evaluation indicators are broken down to various evaluation items which are used whether or to what extent ideas as indicators are achieved<sup>38</sup>. Evaluation indicators will fit to every Co-operatives, but evaluation items will not because they are organization-specific and closely related to the activities of Co-op Kobe (Tsuda, 2000, 6)<sup>39</sup>. In this point, a character of CCE is similar to Blueprint for a Co-operative Decade, which mentions the Co-operative principles are applied or not varies from one jurisdiction and legal system to another. Both CCE and the blueprint show universality of basic values, but institutions, laws, and evaluation items which are necessary to achieve ideas and to evaluate whether or to what extent they are achieved may not necessarily fit to some areas<sup>40</sup>.

## Conclusion

The important point of the examples mentioned already such as social linkages theory and CCE is how the relationship between universality and plurality should be taken into consideration. Core values are not the ones deduced systematically from specific philosophical ideas, but have elaborated through the long histories and various experiences of Co-operatives all over the world (Maruya, 2006, 4)<sup>41</sup>. In this sense, it can be said these values are universal, but which does not mean they should work as uniformed criteria excluding plurality of each Co-operative. They should be meta-universality as frames of reference which do not show one unique solution. How and to what extent Co-operatives can and should achieve values is different from area to area<sup>42</sup>.

The antagonism between universalism and pluralism can be relativized in this way. It is difficult for people to question what is self-evident for them without a universal indicate to compare their own situation with that of others (Kito, 1998, 53)<sup>43</sup>. Decision-making and evaluation will be dynamic with a frame of reference<sup>44</sup>. Though it is important people make much of plurality of each area, rampant development without careful consideration to core values under the pretext of plurality should not be permitted<sup>45</sup>. From the view of dynamic pluralism, plurality of each area coexists with core values of Co-operatives as meta-universality. If core values work like universalism as uniformed criteria, it will be difficult to avoid the situation where these values conflict with plurality of each area.

The purpose for which people create co-operatives is to meet members and community need (Robb, Smith & Webb, 2009, 5)<sup>46</sup>. Core values of Co-operatives show how people should act as the members of Co-operatives. As Background Paper to the Statement on the Cooperative Identity<sup>47</sup> explains, one of the main reasons for preparing The ICA Statement on the Co-operative Identity was to reflect the variety of Co-operatives and to articulate the norms that should prevail in all Co-operatives. Why Co-operatives need the norms? According to Declaration towards the 21st Century<sup>48</sup>, the Co-operative movement never achieves a state of perfection because it is always torn between its ideals and what the contemporary world requires. The Co-operative identity based on core values will be a driving force for people taking part in the movement<sup>49</sup>.

Moreover, they have a responsibility to change their own behaviors to realize a sustainable society in this process (Kurimoto, 2010, 239). The Actors of the Co-operative movement have to get the ability of self-criticism through its process. In other words, the Co-operative movement for a sustainable society is a self-critical

praxis<sup>50</sup>. A necessary condition to achieve this vision is the function of core values is regarded as a frame of reference which supports their self-critical thinking and can be shared beyond areas in spite of their plurality.



### *Notes*

- 1 Anthony Giddens defines globalization sociologically. According to him, it is a process to strengthen a social relationship where all people in the world are connected with each other. (Giddens, 1991, 64)
- 2 ICA is a non-profit association established in 1895. It represents 272 Co-operative federations and organizations across 100 countries at this time. For further details, see its website. <http://ica.coop/en>
- 3 <http://ica.coop/en/whats-co-op/co-operative-identity-values-principles> (accessed November 8, 2013)
- 4 [http://ica.coop/sites/default/files/media\\_items/ICA%20Blueprint%20-%20Final%20-%20Feb%2013%20EN.pdf](http://ica.coop/sites/default/files/media_items/ICA%20Blueprint%20-%20Final%20-%20Feb%2013%20EN.pdf) (accessed November 8, 2013)
- 5 This definition shows the Co-operative identity consists of these values and principles.
- 6 The Cooperative principles are as follows: (1) voluntary and open membership, (2) democratic member control, (3) member economic participation, (4) autonomy and independence, (5) education, training and information, (6) co-operation among Co-operatives, and (7) concern for community.
- 7 It is also said the Co-operative models provide “comparative advantages, but no magic formula for success.” (Birchall and Ketilson, 2009, 9)
- 8 When did the modern times start in Europe? According to Giddens, it started in 17th century. Scientific Revolution, which is regarded as the origin of modern science, occurred in this period. On the other hand, say that the birth of modernity is related to secularization by the Enlightenment in 18th century (see Murakami, 1994). The order and the body of knowledge which had been under the influence of Christianity



were secularized. However, which theory is more persuasive is not important here. The purpose of this chapter is to describe how the structure of society changes through the process of modernization.

- 9 One of the most famous definitions of postmodernity is the one by a French philosopher Jean-François Lyotard. He defined it as a situation where meta-histories which had justified modern histories declined (Lyotard, 1988, 34). Giddens mainly criticizes this definition.
- 10 The strict meaning of civilization can be found only in modern Europe if it is defined from the view of history of science (see Murakami, 1994). A character of European modernization is secularization by the Enlightenment. They claimed the ruler of the world was not God but human beings. They thought human beings could control and use nature as they liked. According to Oxford English Dictionary, the birth of the English word civilization was in 19th century. Civilization means not only development of human life but also urbanization. City is an environment as a result of artificial control of nature. Modern European people tried to control nature artificially and thoroughly. Urbanization was its result, and environmental destruction was its byproduct.
- 11 Of course some people don't necessarily refuse the fruit of civilization, but serious problems such as environmental destruction may occur as a result of modernization.
- 12 In this sense, people who perform the behaviors are, at the same time, the objects of the behavior (Kaplan, 1986,
- 13 Roland Robertson criticizes Giddens. Giddens says that there are no others who are not under the influence of globalization (Giddens, 1990, 175). In other words, all the people and their lives are related to globalization. Robertson points out cultures of particular societies are the result of their interactions with other societies in the global system (Robertson, 1992, 113). Each tradition will be redefined in the context of globalization. However, Giddens does not think each tradition will inescapably be ruled over by modern civilization. On the contrary, he says globalization is not a one-way phenomenon like imperialism and the reaction by others may be inevitable (Beck, Giddens & Lash, 1994, 96-97). He exaggerates all the traditions in the world are under the

- influence of globalization. As mentioned above, the exaggerated aspect of globalization by Giddens is different from that of Robertson. Both of them are important to understand the characters of globalization.
- 14 Glocalization is a relationship between action and reaction (Miyanaga, 2000, 20). Localization as a reaction is a result of globalization as an action. Moreover, the action of localization can be a cause of the reaction of globalization.
  - 15 Giddens explains a character of modern society is an expert system. As a result of dis-embedding, people needed a new system instead of pre-modern traditions which had maintained social order for a long time. The expert system in modern society is based on science and technology and experts maintain it (Giddens, 1990, 27).
  - 16 After dis-embedding, redefined traditions will be re-embedded into the local context. Re-embedding is the reappropriation or recasting of dis-embedded social relations so as to pin them down to local conditions (Giddens, 1990, 79-80).
  - 17 Once People understood nature as something given, ascribed, and to be subdued, but side effects of the societalization of nature is the societalization of the destruction and threats to nature (Beck, 1986, 107). This situation is called risk society.
  - 18 Beck also explains dis-embedding is a character of reflexive modernization. However, his definition is different from that by Giddens. Beck distinguishes modernization from reflexive modernization. "If simple (or orthodox) modernization means, at bottom, first the dis-embedding and second the re-embedding of traditional social forms by industrial social forms, then reflexive modernization means first the dis-embedding and second the re-embedding of industrial social forms by another modernity"(Beck, Giddens & Lash, 1994, 2). As quoted already, Giddens explains reflexivity is a character of modernization in general. Traditions have changed reflexively through the process of dis-embedding and re-embedding.
  - 19 Beck calls it pluralization of modernity as an aspect of reflexive modernization.

- 20 As discussed already, universalism does not necessarily function well in the contemporary society. However, it is also true this is a character of globalization as a counterpart of localization.
- 21 Paternalism as a character of universalism has also been criticized from the view of bioethics. It is said that informed consent between doctors and patients and the right of self-determination are important. Once John Stuart Mill said, "The only purpose for which power can be rightfully exercised over any member of a civilized community, against his will, is to prevent harm to others" (Mill, 1910, 73). This is called harm principle, and applied to bioethics as a basis of the right of self-determination.
- 22 Of course it does not mean opinions of people who want modernization should always take priority over those of others.
- 23 Many theories of environmental ethics were based on anti-anthropocentrism. However, neither anthropocentrism nor anti-anthropocentrism is useful to analyze the backgrounds of environmental problems in each area from various angles. Therefore Kito focuses on the relationship between people and nature instead of the dichotomy between anthropocentrism and anti-anthropocentrism (Kito, 2000, 64).
- 24 Kito says the situation two linkages are inseparable is a kind of ideal type (Kito, 1996, 126). Therefore this theory does not mean environmental destruction never occurred in pre-modern society.
- 25 The past was honored in pre-modern society and tradition was "a means of handling time and space, which inserts any particular activity or experience within the continuity of past, present, and future, these in turn being structured by recurrent social practices" (Giddens, 1990, 37).
- 26 This definition is based on that by Takeshi Matsui from the view of environmental folklore (Matsui, 1998, 248). Minor subsistence is neither a main one nor even a subsidiary economic activity. However, people have a passion for minor subsistence though it will have little effect on their daily life even if they discontinue such kind of activity. Kito explains the reason they do not discontinue minor subsistence is it includes cultural-spiritual aspects.

- 27 Of course the relationship of two linkages is not necessarily static in pre-modern society. As Giddens mentions, tradition is a mode of integrating the reflexive monitoring of action with the community (Giddens, 1990, 37). However, reflexivity in pre-modern society was different from that of modern society. Reflexivity at that time was largely limited to the interpretation and clarification of tradition (Giddens, 1990, 37).
- 28 This means the binding force of tradition. Giddens distinguishes tradition from custom in this point. The former has binding force which has a combined moral and emotional content (Giddens, Beck & Lash, 1994, 63).
- 29 Tradition is no longer a binding force in modern society. People adopt "tradition as a lifestyle decision (Giddens, Beck & Lash, 1994, 78-79).
- 30 Social linkages theory is completely different from romanticism in this point. Kito points out not only environmental destruction but also environmental movements in modern society are the symbols of separation of two linkages (Kito, 1996, 131). Romanticism praising the beauty of nature and pre-modern values first appeared in Europe as a counterpart of the Enlightenment. It was strongly supported by people taking part in environmental movements in the eastern United States in 19th century. However, their lifestyle had already been urbanized. They made much of only cultural-spiritual aspects of nature and ignored socio-economic ones.
- 31 He does not think indigenous people refusing modernity should keep their lifestyle forever (Kito, 1996, 140).
- 32 Assuming that there are two theories A and B, a meta-theory is the one explaining the relationship between A and B.
- 33 Needless to say, there may be various theories as frames of reference. Social linkages theory is one of them.
- 34 This is a reflexive process and an attempt to put what Giddens mentions as a character of modern society into practice subjectively. He says that social practices are examined and reformed in the light of incoming information about those very practices, constitutively altering their character in modern society (Giddens, 1990, 38).

- 35 The history of the development of a method of CCE is as follows (Kurimoto, 2010, 234-235): Co-op Kobe started designing its own evaluation system and set up a study team in 1993. This team launched the method in 1996. Co-op Kobe published the first CCE Report for the period 1995-1997 in 1998. Reports were published every three years. For further details, see (Tsuda, 2000, 28-31).
- 36 According to Naonori Tsuda, who was a main member of a study team, the most important one for Co-operatives is honest & caring services (Tsuda, 2000, 3).
- 37 Management efficiency is a short-term evaluation index, and future potential is a long-term one (Tsuda, 2000, 4).
- 38 Evaluation items of honest & caring services are shopping convenience, economic benefits, product availability, product safety & reliability, and reception of customers. Those of participation & democracy are participation to decision-making, participation to implementation, participation in daily activities, reflecting members' views, and employees' participation. Those of social responsibility & fairness are involved in social welfare, involved in ecology issues, liaison with community, fair governance, and fair treating of employees. Those of autonomy, solidarity & improvement are solidarity among Co-ops, members' solidarity, members' education, employees' education, and Co-ops' autonomy. Those of management efficiency are profitability, productivity of capital, productivity of labor, financial stability, and efficiency of operations. Those of future potential are financial resource base, organization base, growth potential, investment in asserts, and human resource base. (Kurimoto, 2010) was referred to on the occasion of the translation of indicators and items from Japanese to English in this paper.
- 39 For example, such as store operation, solidarity among Co-ops, and so on can be seen in some Co-ops, but not in others (Tsuda, 2000, 6).
- 40 As Hagen Henry points out, how to translate the Co-operative identity into Co-operative law is also important (Henry, 2013, 5).

- 41 However, the validity of these values should be reconsidered as time goes on. Reishi Maruya points out Co-operative members in Japan are not necessarily interested in solidarity because some of them do not think they need it (Maruya, 2006, 14). He assumes the background of this tendency may be income increases of the members, that is, many of them are no longer the low income class who needs solidarity (Maruya, 2006, 13). Of course, granting that this analysis is valid, it does not mean solidarity should be abandoned immediately.
- 42 Similarly, CCE can be used as a frame of reference to evaluate activities of Co-operatives in various areas. Though CCE is organ-specific, it was meant to facilitate comparative analysis with other Co-operatives or Non-profits (Kurimoto, 2010, 236).
- 43 Local residents often get a wider point of view through the communication with a researcher such as an environmental sociologist as the outsider (Kito, 1998, 55-56). A theory presented by the researcher functions as a frame of reference in this case.
- 44 Moreover, as mentioned above, a frame of reference itself should be reconsidered constantly. Maruya, who was a member of a study team of CCE, proposes that. According to him, it should be reconsidered whether autonomy, solidarity and improvement should be treated as one indicator. Autonomy and solidarity have been two sides of the same coin, but improvement includes other elements (Maruya, 2006, 7-8).
- 45 Kito criticizes environmental sociologist analyzing movements by local residents cannot necessarily show what residents should do from now on without universality to evaluate movements (Kito, 1998, 55).
- 46 Businesses exist for people, not the other way around (Robb, Smith & Webb, 2009, 5).
- 47 <http://www.uwcc.wisc.edu/icic/issues/prin/21-cent/background.html>  
(accessed November 8, 2013)
- 48 <http://www.uwcc.wisc.edu/icic/issues/prin/21-cent/declar.html>  
(accessed November 8, 2013)
- 49 Of course, it is not realistic to think Co-ops alone can solve many of the

problems communities face, but they have the potential to empower people to act for sustainable communities in partnership with Non-profits and local governments (Kurimoto, 2010, 241).

- 50 Kito says that a researcher should reconsider a frame of reference through the process of mutual interaction with local residents (Kito, 1998, 56). Similarly, a frame of reference of Co-operative movements also should be reconsidered self-critically.

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# MAINSTREAMING CO-OPERATIVES IN THE GLOBAL ECONOMY THROUGH INCLUSIVE MISSION - SOME CONCERNS

Sudha Kornginnaya\*

## 1. Introduction

The rapidly changing economic landscape in India has impacted the functioning of the primary cooperatives, who were running only as economic enterprises to the total exclusion of inclusive social goals. The gradual withdrawal of the Government support, regulatory restrictions and the economic turmoil on the one hand and the various crisis that the cooperatives face on the other, have weakened their power of resilience and posed the spectre of insecurity in the future (Taimni, 1993). Replication of corporate culture and the economic preponderance over association objectives has led to the marginalization of the disadvantaged in the process, reflecting in the disconnect between the meaning and the purpose of the cooperatives. Hence it is imperative for the cooperatives to achieve economic prowess with the social aim to establish their socio-economic relevance in the market economy (Sudha, 2007). Lack of touch with the members and the consequent 'democratic deficit' have compelled the cooperatives to reassert their distinct identity and cooperative difference (Birchall, 2004). It is time for the cooperatives to redefine their functional goals with the inclusive mission to leverage the institutional advantage in order to survive the economic downturn and to mainstream in the global economy. In view of the above, the present paper discusses the need for

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inclusive mission in the primary cooperatives in India. An empirical survey conducted for the purpose explains the various factors impeding the inclusion of the marginalized members in cooperative activities and discusses some policy implications towards this end.

The rest of the paper is organized as follows: Section 2 provides literature review. Section 3 explains the research method. Section 4 elucidates the need for inclusive mission in the primary cooperatives in India. Section 5 delineates the various factors impeding the inclusion of deprived members in cooperative activities. Section 6 outlines the policy implications and section 7 concludes the paper.

## **2. Literature Review**

The concept of inclusion is viewed in diverse ideological perspectives by different cooperative practitioners and theoreticians. For the purpose of this study the review is organized into two themes 1. Conceptual framework 2. Status of inclusion in primary cooperatives.

### **2.1 Conceptual framework**

The concept of inclusion though coined recently, was prevalent in the philosophy of cooperation developed by several early cooperators such as Robert Owen, Charles Fourier, Raiffeisen, Rochdale Pioneers and great radicals that include Karl Marx and Engels (cited in Saxena, 1974). The concept had its origin in the evolution of cooperative doctrine that has broad social base and seeks to transform the society through peaceful means whereby the suppressed, exploited and the weak fight the existing socio-economic evils. It has released millions of small folk from the poverty and oppression. The cooperative philosophy combined within its fold the most enduring principles of democracy, voluntary social support, equity in distribution and liberal socialism to advance the cause of social justice (Allen,

1963; Bogardus, 1952; Hall and Watkins, 1937; ICA, 1967; Lambert, 1963; Mehta, 1965; Namjoshi, 1977; Prakash, 1994; Sinha 1970). The association element of a cooperative places premium on the equality, mutuality, unity, self-help, group solidarity and human dignity and seeks the good of all (Fauquet, 1951; Hall and Watkins, 1937; Krishnaswami and Kulandaiswamy, 1992; Warbasse, 1947).

The International Co-operative Alliance (1995) defines a co-operative 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”. Both sets of values- the organizational and ethical values adopted by ICA at its Congress in 1995, if applied properly, co-operatives are the befitting inclusive organizations. “Peace, social justice, freedom and solidarity are the pillars of co-operation” (Barberini, 2007, 15). The various values and the principles of cooperation are the inclusive precepts underlying the concept of inclusion.

## 2.2 The status of inclusion

The Cooperative experiment model created by both the Rochdale Pioneers and Raiffeisen recorded a brilliant success. Their success was much attributed to the principles and the sound practices adopted by their members underlying the member centrality, equity and equality. In the words of Professor Paul Lambert (as cited in Winfred and Kulandaiswamy, 1980, 4), a noted authority on Cooperation, “the originality of the pioneers lay partly in the way they combined the principles and gave them their final form and partly in the outstanding success with which they put them into practice”. In the past, the co-operatives formed by the members out of volition have successfully implemented cooperative values and the tenets of equality that are basic to the inclusive practices as compared to the cooperatives in the present context.

Some scholars have conducted evaluation studies on member participation that are fundamental to their inclusion in the cooperative

activities. The empirical studies were conducted by Ganesan (1969) to analyse the extent of member participation in the agricultural primary credit societies and by Krishnaswami (1976) on democratic control and management in the agricultural cooperative credit structure, both in the inland district of the State of Tamilnadu in India. Their studies revealed that the illiteracy, caste hierarchy, their socio-economic disparities, lack of enlightenment, lack of member relation practices and poor attendance of members in the meetings have undermined the vitality of democracy and inclusive participation of members.

Agvekar and Borude (1992) have conducted a study on the multi purpose village cooperatives in Ratnagiri district of Maharashtra, to find out the extent of member participation and the causes for the same. The study reveals that borrowing by the members has declined due to unfavorable attitude towards their own cooperative society. Members lack interest in the cooperative affairs and have no trust in the management due to their discriminatory, exclusion and corrupt policies in sanctioning loans. The study also discloses that the borrowings from the commercial banks/friends/relatives and moneylenders are preferred to borrowing from the cooperative societies. Studies on similar areas in different cooperatives reaffirmed that equality and democracy is a myth due to member exclusion leading to their poor participation (Choudhary, 1998; Krishnamurthy, et al., 1988; Rajagopal, 1992; Tripathi and Verma, 1994).

Thus a large body of extant literature focuses on the principles, values of cooperation and association element of the cooperatives that fosters the equality of opportunity for the members needed for their inclusion in the primary cooperatives. So the cooperative philosophy embodying the values and principles are equated to the inclusive precepts. Empirical studies are also conducted on the nature and effectiveness of democracy, participation of members in a specific kind of cooperatives in a particular region, with their peripheral findings of socio-economic disparities and caste differences. There has been a dearth of research with empirical evidence on the participatory

inclusion of members drawn from the primary cooperatives in different sectors irrespective of their nature and kinds. Hence this study attempts to bridge the gap by examining the need for the inclusion in the cooperatives and analyzing the various factors impeding the inclusion of members in all kinds of primary cooperatives.

**3. The Methodology:** The study is both explorative and descriptive in nature. Both primary sources with field observations and secondary sources are used in the study. Descriptive statistics and factor analysis are used for the data analysis. On the basis of the inventory of literature and the data obtained from the Office of the Deputy Registrar of Cooperative Societies of the District, the researcher has chosen different primary cooperatives in Dakshina Kannada District in the State of Karnataka having diverse socio-economic conditions and demographical factors. The empirical study is confined to the primary cooperatives working in seven sectors in Dakshina Kannada District in the State of Karnataka in India. They include Agricultural Credit, Dairy, Multi Purpose, Banking, Producers/Marketing, Fisheries and Large Adivasis Multipurpose Societies (LAMPS). Exclusively women cooperatives and mixed cooperatives are included in the survey. A total of 100 people inclusive of office bearers, employees and ordinary members are interviewed. However, care was taken to select representative sample to include gender, literacy, age, occupation and location.

#### **4. Need for Inclusive Mission in the Primary Cooperatives in India**

The first principle of Voluntary and Open Membership states: "Cooperatives are voluntary organizations, open to all persons able to use their services and willing to accept responsibilities of membership, without gender, social, racial, political or religious discrimination" (ICA, 1995, 1). The cooperative, being a voluntary organization, formed

by the members, of the members and for the members, is an inclusive organization by definition, values, principles, structures and functions. The members are not mere shareholders or users but owners of the whole organization and are bestowed equal rights of voting, participation in decisions and equal rights of control over the collective assets (Krishnaswami, 1978). The members of a cooperative gain control for just being the human beings. This right of equality and democracy which the members enjoy is the essence of their inclusion and should be prioritized in the cooperatives (Sudha, 2013).

Cooperative Movement does not intend to meddle with various religions or political differences that now exists in the society, but to provide a common platform to join together the means, the energies and the talents of all for the common benefit of each that strengthen the common bond (Bonner, 1961). It is this common bond, which is a bottom line of the cooperative business, makes the cooperative survive, thrive and prosper. If some cooperatives have survived the economic crisis, it is due to their socio-economic resilience based on the common footing of inclusion that has overcome all the socio-economic, cultural, political and geographical barriers.

The women's cooperatives organized by SEWA and the Anand pattern of dairy cooperatives in India are the testimonies of cooperative inclusion as they are commended for overcoming the barriers of caste, class and power and for the socio-economic empowerment of the poor. However, the democracy and the respect for human rights underlying the inclusion process is wanting in many primary cooperatives in India. Though the cooperative legislation and the structural adjustments foster cooperative autonomy, the deep rooted vested interests, political interference and factions have waned the spirit of inclusion leading to the local, regional and national conflicts. Hence there is a dire need to revisit the cooperative functioning with more focus on the member inclusion in order to strengthen the cooperative identity and reinforce the credibility to re-establish the cooperative relevance to the community.

### 5. Factors Impeding the Inclusion of Members in the Cooperative Societies:

During the field survey, a semi-structured questionnaire was administered to a sample of hundred respondents comprising leaders/office bearers, employees and members, drawn from the primary cooperatives in seven different sectors in Dakshina Kannada District in the State of Karnataka in India. An attempt is made to explore the factors hindering the inclusion process based on the responses given by the respondents in the surveyed primary cooperatives. The study unearthed the important factors (14) and are coded with five points Likert scale. Factor analysis is applied on the responses of the respondents and fourteen factors are explored in the study that impede the process of inclusion. In order to test the suitability of the data for factor analysis, the correlation matrix is computed and examined. The results indicated that there are enough correlations to justify the application of factor analysis. Data are tested by Bartlett's test of Sphericity and Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy (MSA) (Table 1). KMO measure value for individual variables is found to be sufficiently high for all the variables. Overall MSA is found to be 0.623 (greater than 0.50) that indicates between 0.50 to 1.00 the appropriateness of the sample. Bartlett's Test of Sphericity showed statistically significant number of correlations among the variables, i.e.  $p < .001$ , which indicates that our data is suitable for factor analysis (Approx. chi-square = 257.908,  $df = 105$ , significance = 0.00).

**Table No.1**  
**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.623
Bartlett's Test of Sphericity	Approx. Chi-Square	257.908
	df	105
	Sig.	.000

Factor analysis is performed on 14 items with Principal Component Analysis as the extracted method followed by Varimax Rotation using



Table No.2 indicates the fourteen variables using the level of importance attached to each variable in the Rotated Component Matrix. The fourteen variables are grouped under four derived factors depending upon Eigen values of each factor and are shown in the Table No. 3. The factors are as follows:

The first factor explains 15.586% of variance and includes components- political factions with factor loading (0.741); Government policy (0.660); Department dictum (0.641); and indifference towards discrimination (0.584), which denotes 'Systemic factors'; The second factor 'Management Factors' contributes 12.403 % of variance and consists of components such as only economic considerations with factor loading (0.680); Favouritism and vested interests (0.620); internal rivalry(0.614); and lack of inclusion(0.536). The third factor contributes 11.563% of variance and consists of components – objective paralysis with factor loading (0.688); lack of competence building activities(0.628); lack of welfare measures/information (0.510); which denotes 'functional factors'. The fourth factor denoted as 'Factors related to Members', contributes 9.552% of variance and consists of variables-lack of enlightenment with factor loading (0.811); and member apathy (0.731); and lack of member participation(0.611).

**Inference:** The study unearthed the fact that the compliance of cooperative principles such as voluntary membership and member economic participation have helped the surveyed cooperatives to fulfill the twin requirements of capital mobilization and financial inclusion to some extent. However, participatory social inclusion is a neglected concept due to some factors (as perceived by the respondent members) which are explained hereunder:

The cooperative is a reflection of the system in which it functions. "Like other institutions, co-operatives tend to take their character and features from the general environment in which they exist" (Laidlaw, 1980, p.43). In most of the primary cooperatives (72%) in the research study, political factions and the Government play their

dominant role creating discord among the members that are detrimental to the inclusive culture of the society. They set the rules, values and operational system robbing off the vital say of the members thereby subduing the importance of the participatory inclusion. Disruptive Government policies in terms of high rates of taxes, Government nomination to Boards, impending threat of dilution of the roles of PACS to business correspondents, lack of level playing field to the cooperatives have posed the spectre of severe uncertainty. Though the leaders had been clamouring for the de-officialization and de-politicization, the deep rooted political factions and the vested interests in the management have created an environment of exclusion, exploitation and deprivation, waning their spirit of equality and democracy in the locale. Consequently the commitment of the leaders is channelized towards internal rivalry, favouritism and satisfying their personal goal of reaching the higher echelons rather than towards the common benefits of the poor and marginalized members who form the larger segment of the membership base. The social responsibility activities and member welfare measures that promote cooperative relationships among people were not ratified by the Cooperative Department in 40% of the surveyed cooperatives spread across fisheries, women multi-purpose and agriculture sectors. Though these cooperatives have the economic strength, they were subjected to Departmental objections and government interference depriving of their financial and democratic autonomy and thus undermining their inclusive social goal.

In the area and the span of the current study, the Government of Karnataka has initiated a slew of inclusive measures through legislative interventions for the emergence of self reliant, member centered cooperatives. The Karnataka Co-operative Societies (Amendment) Act, 2012 was enacted that ensures an inclusive mandate for the cooperatives in terms of Access to information {Sec 19A}, Quorum for the annual general meeting {Section 27(4)}, Member participation

{ Section 27A } and Board composition { Section 28A }. In the current study, 35% of the societies from the Producers, Women's multipurpose, fisheries and dairy sectors have complied with the provisions relating to the quorum and Board composition prior to the enactment of the Act. However, all the surveyed societies have now complied with the above statutory requirements, although they have encountered some problems. The fact is that the Government's selective and gradual withdrawal of financial subsidies and the policy support from the different types of cooperatives due to changing socio-economic, political factors fraught by the structural adjustments have adversely affected the hitherto supported primary cooperatives (fisheries, LAMPS and producer sectors). The cooperatives which were found indispensable to provide government programmes to the poor and the deprived have now dispensed such activities due to change in their roles. However, these cooperatives are now devising the new inclusive strategies to mobilize both members and the capital required for their self-reliance (Women multipurpose, Banking, Agriculture and Producer sectors).

The very act of cooperation fulfills socio-economic inclusion whereby the members neither need extraneous assistance to resuscitate themselves from poverty nor they need public support to unshackle them from deprivation or exploitation (Jha, 1998). However, currently the objective paralysis and the consequent aberration in the performance of their roles have been the root cause of exclusion in the cooperatives. The equity, equality, mutuality, democracy, which are the basic pillars of the cooperatives underlying participatory and social inclusion is relegated to the backseat. The preponderance of business considerations over social concerns and predominance of "self interest" over collective interests have undermined the importance of inclusive agenda. Indifference towards discrimination and poverty, which has been entrenched in the social and economic structures of the society, also persists in the cooperative functions of

many of the surveyed societies. There are many instances of conflicts caused due to factions arising out of members' political, status, caste and class differences.

All the primary societies across different sectors prioritize the objective of profit maximization, negating their association concept that differentiate them from the other economic enterprises. Both the cooperatives and the Cooperative Department consider the economic performance as an essential criteria for their survival, growth and success. The market milieu and the acute competition have compelled the different types of cooperatives (LAMPS, Agriculture credit, Producers, Marketing, Multi-purpose Sectors) to shift from their traditional business to banking functions, depriving the A class members from availing the basic services they seek. The agrarian structural shift from operational farming to realty activities in the urban and suburban area, the Government's corrupt practices that have impaired the livelihood of the tribal members of LAMPS, lack of infrastructural support, acute competition by the private firms, frequently changing Government laws, subservient role of the primary cooperatives to their federation at the District level and control over the profit (25%) by the latter are some of the factors that have created the objective aberrations leading to the primacy of profit motive over the social cause of joint action of the members.

Access to equality of opportunity, social justice and members' participation and control are the vital planks on which the cooperatives ought to build themselves. They are the hallmark of good cooperative management and governance. However, barring few exceptions, besides fulfilling the statutory compliance of the rules for the Board composition, majority of the cooperatives (70%) under study, are dominated by the resource rich, high status, upper caste and politically influential people in the Board. In some of the cooperatives (40%) in Agriculture credit, Banking and Producers/Marketing sectors, the same people have their hegemony over the management for more

than 10-15 years. Members from the minority community are hardly represented in the Board in 35% of the surveyed societies. In the LAMP societies poor, uneducated and disadvantaged are totally marginalized in the management committees as they belong to non-creamy layer among their tribes. The level of socio-economic status, political ties and the caste still determines the place of members in the management and indicate their level of inclusion.

Barring few exceptions, the members of the cooperatives are lacking education, training, communication and information initiatives organized by the functionaries of their Apex organization. Inclusive welfare activities are organized as social responsibility measures and financial inclusion initiatives are either conducted as a statutory compliance or as a business development plan. As a result, members are unaware of their rights, responsibilities and the benefits of cooperation. They lacked the knowledge of cooperative fundamentals, practices and significance of participation. They are ignorant of cooperative aims, functions and principles. Inaccessibility to information, communication and education is an index of deprivation reflecting in the exclusion of members, which is prevalent in most of the surveyed primary cooperatives. Inert responses given by 55% of the respondent members revealed the fact that members' participation is limited only to trade nexus and their interest is limited only to avail the services of the cooperatives. Lack of time, interest and lack of exposure to any significant competence building initiatives and member welfare programmes in the primary cooperatives have deterred the inclusive spirit of the respondent members. The sense of equality is also affected by the socio-economic inequalities of the members. All these denote the fact that the potential of establishing the social relevance through inclusive measures that the primary cooperatives hold in the market economy continues to remain untapped due to the minimal focus on the inclusion of members in varied dimensions in their own organization.

## 6. Policy Implications

The study findings have important implications for cooperative policy planners and the managements of primary cooperatives to devise inclusive strategies for all the members, which is the need of the hour. Member inclusion in the management and all other co-operative activities through participatory democracy should be the legal mandate for the primary cooperatives. This will ensure member centrality and governance leading to enhanced member accountability. It is nevertheless the task of NCUI and the Government to set the well defined policy and guidelines for the same. Government should provide conducive legal, administrative and operating environment to strengthen appropriate governance structures that enable them to support inclusive mission and to improve economic efficiency. The Cooperative Department should permit the primary cooperatives to initiate welfare schemes, competence building activities, member inclusion and member relation programmes. Government interference, vested interests, political domination in the management should be restricted, which will safeguard the interests of the disadvantaged and the underprivileged members. Adhering to the cooperative principles should be statutorily followed that may help the cooperatives to fulfill inclusive objectives. Regular education and training programmes at the primary cooperative level are paramount for the deprived members to enlighten them of their rights, duties and the significance of their participation in the cooperative activities.

## 7. Conclusion

This paper explains the need for member inclusion in the cooperatives in participatory social dimensions. Primary cooperatives are basically inclusive organizations by principles and functions. But our findings reveal that concept of inclusion is given a lip service and it is followed only to the extent of statutory compliance of the provisions enacted in the Cooperative Societies (Amendment) Act,

2012. The study reveals fourteen variables, grouped into four factors, which impede the process of inclusion in the cooperative societies. They include systemic factors, management factors, functional factors, and factors related to members. Analyzing these factors and surmounting these aberrations is very crucial and is a big task ahead of the primary cooperatives for ingraining the inclusive mission and for improving the conditions of the multitude of poor, marginalized and the deprived members. If this mission is achieved then the cooperatives will secure the reinforced long term faith of the members required for mainstreaming in the global economy.



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## **POWER GENERATION : A NEW AVENUE FOR CO-OPERATIVES**

**(Model Established by a Co-operative Sugar Factory in Maharashtra)**

**Anil Karanjkar \***

### **Introduction**

Energy plays a central role in economic activity and inadequate or inequitable access to efficient, low-cost and sustainable energy affects the livelihood of hundreds of millions of people. Rapidly rising fossil energy costs for farm inputs, local transport and agricultural machinery pose a major challenge to small farmers' households. About one billion rural people in Asia depend solely on traditional energy sources.<sup>1</sup> The collection of biomass – mainly fuel wood – which is the main source of rural household energy, is primarily the responsibility of women and girls. This is a big burden on their time, energy and health, thereby depriving them of other economically productive work opportunities.

Easy and affordable access to an efficient and sustainable energy source can also open up opportunities for small-scale rural industries which currently accounts for less than 10 percent of total rural energy demand. The negative health, educational and income implications of the lack of access to such an energy source is undermining progress. The inadequacy of the prevailing top-down, supply-side approach to rural energy development has highlighted the need for decentralized, stand-alone and renewable energy sources.

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## **Power Sector in India**

Since its structured growth post-Independence, Indian power sector has made substantial progress both in terms of enhancing power generation and making available power to widely distributed geographical boundaries. The installed generation capacity in the utility sector has increased to about 1,81,500 MW at the end of August 2011.

The Indian power sector is largely coal based with the total Installed Capacity comprising of 99,503 MW (55 %) coal based, 17,706 MW (10%) gas based, 1200MW (1%) diesel generation, 38,206 MW (21%) hydro, 4,780 MW (2 %) nuclear and 20,162 MW (11%) from renewable energy sources<sup>3</sup>. Nuclear energy option attached with high economic & social cost as evident in case of Japan. In the present scenario, where price of fossil fuels is shooting up and there is shortage and non-availability of coal, renewable energy sources appears to be a promising development. The thrust on distributed generation and increasing awareness for cutting greenhouse gases emissions increases the need of processes like cogeneration, solar energy & other non-conventional sources. Also it helps in controlling pollution from fossil fuels. In India, development of Renewable Energy Sources is being accorded special emphasis in view of their inherent advantages. The Installed Capacity from Renewable Sources has grown to 20,162 MW in June 2011 comprising 3,226 MW in State Sector & 16,936 MW in Private Sector<sup>4</sup>. The sources of renewable energy are wind, Bio-gas, Cogeneration and solar energy. All these sources produce clean and green energy with recyclable waste. The capital investment is very small and local community participation is very much possible.

## **Energy co-operatives**

Energy co-operatives are fast emerging as an innovative way for local communities to gain access to renewable energy generation. Over the last few years, several such initiatives have been successfully

launched in the UK—with new schemes opening in a number of cities including London and Bristol. The first initiative took place, 30 years ago in Costa Rica, with four rural energy cooperatives that produce and distribute power in response to demand from rural areas. These cooperatives are effective because they are able to apply local funds directly towards either isolated grid systems or extensions of the national grid. Costa Rica's energy cooperatives are able to survive without subsidies, regulations, or other forms of government support. Energy Cooperatives are owned and operated by the energy users and community members themselves. The cooperatives hold periodic public meetings at which leadership decisions are made as well as decisions about electricity pricing. With high community involvement and consequently high cost recovery for energy investments, cooperatives can be a solution to common energy challenges such as ineffective regulation and electricity theft through illegal connections to the grid. In Western Europe, Denmark's historic leadership in decentralised renewable energy has come from cooperatively-owned and managed wind turbines powering local homes and businesses. Now Germany is rapidly forging ahead with 600 resco-ops appearing in the past three years.

### **Role of Sugar industry in rural development**

The sugar industry supports the livelihood of millions of people – not only smallholders and estate workers but also those working within the wider industry and family dependents. Around 160 million tons of sugar is produced every year. The largest producers are Brazil (22%), India (15%) and the European Union (10%)<sup>8</sup>. Sugar is one of the most valuable agricultural commodities. In 2011, its global export trade was worth \$47bn, increased from \$10bn in 2000. About 80% of global production comes from sugar cane (which is grown in the tropics) and 20% comes from sugar beet (grown in temperate climates,

including Europe). There are six states accounting for 94 percent of the total sugar production in India with Maharashtra and Uttar Pradesh leading with 27 percent and 30 percent of the total production.

## **1. Socio-Economic Significance of Sugar Industry**

The sugar industry sustains the livelihood of 6 million agricultural and 0.5 million skilled and semi-skilled industrial worker's families as well generate significant employment in ancillary and allied activities. The area under sugarcane hovers around 5 million hectares which is around 3% of the gross cultivable area in the country. In fact, sugar manufacturing is one of the largest agro based industry in the hinterlands of the country. The turnover of the sugarcane & sugar related economic activities is in the range of Rs.80-85 thousand crores per annum, out of which around Rs.55-60 thousand crores accrue to the sugarcane farmers of the country.

## **2. Significant part of global production and consumption**

The Indian share in global sugar production has risen from 5% to 15% in the last five decades. In the same period India's share in global sugar consumption has gone up from 5% to 13%. Country is now the second largest sugar producer in the world.

Farmers aspire for increasing yields, higher cane prices and timely payment of cane prices to drive higher economic profit at the farm side. For minimizing crop risks, farmers aspire for effective extension services, crop off take assurance, accessibility of timely finances and improved harvesting and transport infrastructure.

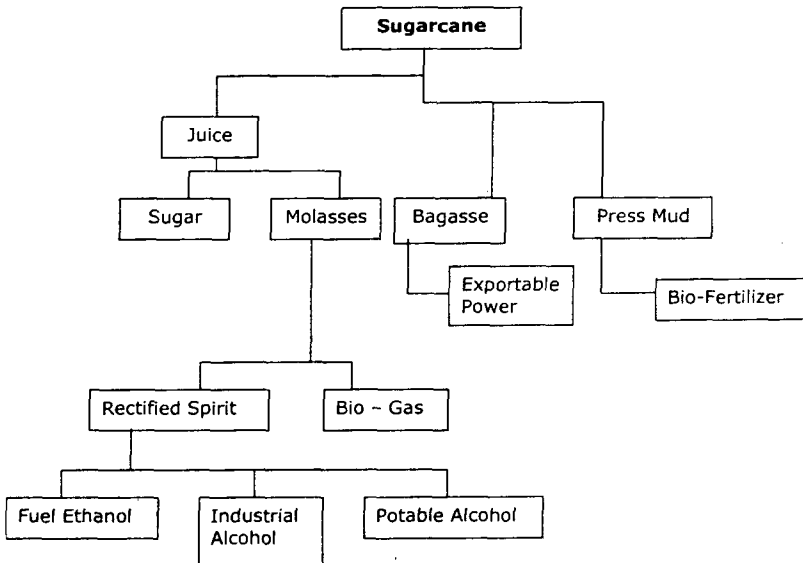
The Indian sugar sector is composed of three distinct categories - public mills, private mills and cooperative mills. Public mills account for around 6 percent of the total mills in operation while the private mills account for approximately 40 percent and the cooperative mills account for approximately 53 percent.<sup>10</sup>

### 3. Sugar Mills : India's power factory

In India, Sugar mills have become energy factories. A sugar mill not only produces sugar but also is generating power as a by-product. Gradually, the sugar industry is also emerging as a substantial source for meeting a part of the ever increasing energy needs of the country through the co-generation of electricity and the ethanol, which are renewable/green sources of energy and these developments hold the potential of converting sugar mills into huge energy complexes with passage of time. Though the contribution of these activities to the turnover of the industry at the moment is only around Rs. 10-12 thousand crores, over long term, the sugar industry has the potential to meet up to 20-25% of the total motor-fuel (Petrol) requirements of the country, and can therefore, become a substantial partner in reducing imports.

The juice from both sugar cane and sugar beet is extracted and processed into raw sugar. The Sugar is produced with following byproducts.

#### Sugar By Products



Each of it is used as raw material for power generation. The molasses & Bagasse, both are very polluting and harmful to discharge in environment. However, when further processed, these become much enriched raw material for energy/fuels. Bio-fuels offer an increasingly popular alternative to increasingly costly fossil fuels. Sugar industry is one industry which operates in rural part and produces these extensive raw materials for bio fuels. In case of ethanol it is directly mixed with fuel (Petrol).

Bagasse, a residue of crushed sugarcane used in sugar mills is the principal fuel used to raise steam in sugar mills. With the technological innovations, the high pressure steam generated in boilers can in turn be used to rotate the turbo generator blades to produce electric current. The process employed here to generate power is called cogeneration which essentially implies the production of two forms of energy, electricity and heat. The power thus generated can be used for meeting the requirements of the sugar mill and the surplus can be fed into the grid.

Bagasse based cogeneration for exportable power is an emerging trend in the sugar industry. Bagasse generated by a sugar mill enables the mill to export power after meeting its captive power and steam requirements. The realization from the exportable power is dependent on the long term power purchase agreements with government and power companies. Cogeneration also has proven revenue potential in Clean Development Mechanism (CDM) based carbon credits. The present exportable power generated by the sugar industry is 847 MW.

### **The Case: Dr. Babasaheb Ambedkar Cooperative Sugar Factory (SSK)**

Osmanabad district is a draught prone area and one of the under developed districts of Maharashtra. Agriculture is the main source of survival while Energy deficit is a major problem for irrigation. Energy deficit is around 8-12 hrs. per day. To improve local electricity grid

strength and minimize power deficit there is intense need to develop decentralized power projects in rural areas. Osmanabad district has very good solar radiation of 4-7 kwh/m<sup>2</sup> throughout the year. Clean & green energy is need of society. These aspects motivated SSK for innovating 1MW solar power project. Dr. Babasaheb Ambedkar Co-operative Sugar factory having 9764 farmer members decided to own and set up Mw Solar plant in 2010

Dr. Babasaheb Ambedkar S.S.K. Ltd is established in 1998 and started crushing in 2001 under the leadership of Shri. Arvind J. Gore. There are 9968 members (shareholders) from 150 villages in the surrounding. The sugar mill holds 310 acres of land; 125 acre is reserved for agricultural R&D programs. The sugar factory, though is located in draught prone area of Maharashtra, it has shown significant achievements in the fields such as lower cost of production, minimum expenses on salary and nonproductive items, capacity utilization and sugar recovery. Factory has won an award for technical efficiency by State Government. The factory is totally computerized. All field offices are connected to factory through GPRS system. Farmers are connected to factory via mobile phones by providing individual updates like cane weighment & cane bill. SSK has the vision of becoming Power Factory; hence, factory's erection & commissioning is done with machinery compatible with cogeneration power. This has saved enormous conversion cost & time. Now, SSK is using its own power for its process and operations and the surplus power is exported to strengthen grid. SSK has contributed to socio-economic development of Osmanabad district of Maharashtra by paying highest cane rate to cane farmers and providing them educational facilities. SSK has established College of Agriculture for overall agricultural development of the region and degree & diploma courses in agriculture are conducted. The Rajarshee Shahu Trust for socio-economic growth of members; Rajarshee Shahu Credit Society for



financial assistance/ inclusion of rural masses ; Primary School for children of employee & workers and laboratory for soil analysis / testing lab for farmers are some of the other socio economic activities SSK has started. It has established number of farmer clubs to spread awareness & educate farmers of Good Agriculture Practices & latest development in technologies. SSK is managed by 400 employees. SSK has established along with sugar factory various by- products / energy generation projects with total investment of Rs.200 cr. These are Sugar Plant 4500 TCD / Day, Co-generation Plant 16 MW, Distillery & Ethanol Plant 30,000 L / Day, Bio-gas Plant 1.2 MW and 1 MW solar power plant. This gives turnover of Rs. 270 Cr. Per annum, presently. SSK has taken loan from cooperative banks upto 31st March, 2017. However, factory has repaid all the loans in 7 years in advance i.e. 31st March, 2010. The total sugar cane crushing with sugar production & no. of units of electricity generated are given in Appendix I. The projects of SSK are described briefly below :

### **1. Sugar Plant**

Establishment : - Year 2001 Area : - 5800 sq.mtr. Crushing Capacity :- 2500 MT/Day, extended to 4500 MT/Day Manufacturing Process :- Double Sulphitation Sugar Production :- 70000 MT / Year Boiler : - 32 Ton 45 Kg/cm<sup>2</sup> 3 nos. Power House : - 2 nos. 3 M. W. Turbine

### **2. Distillery Ethanol Plant**

Establishment : - Year 2010 Installed Capacity : - 30,000 L/Day Fermentation Technology : - Hiferm Continuous Fermentation Distillation Technology : - Multipressure Vacuum Distillation Distillery Products : - Rectified Spirit, Extra Neutral Alcohol, Absolute Alcohol, Fuse Oil, Bio-Gas, Bio-Compost.

During the current financial year, the total production of ethanol is given in Table No.1. The net profit generated is Rs.275.50 lakh (2011-12).

**Table No.1: Distillery Produce for 2011-12**

Sr. No.	Particular	Figures in Lakhs
1	Ethanol	16.81 Bulk Liter
2	E.N.A.	857.93
3	Rectified spirit	14.98
4	Impure Spirit	0.12

The 33 KV electricity generated by SSK is attached with Keshegaon Electricity Sub-Station. Due to technical difficulties the sub-station was not able to take the power. Hence, SSK has joined with Ujani Sub-Station for better export of electricity.

The detailed income expenditure statement of Cogeneration is given in Table No. 3.

**Table No.3 : Income-Expenditure of Cogeneration (2007-2011)**

Sr. No.	Particular	2007-08	2008-09	2009-10	2010-11
1	Total Income	282.15	1137.02	1447.57	1772.07
2	Total Production Expenditure	210.27	503.48	763.48	983.29
3	Net Profit	71.88	633.54	714.02	788.78
4	Cash Profit	185.37	744.29	887.29	950.45

#### 4. Bio-Gas Plant

Bio-digester Capacity : - 9100 M3 Digester feed : - Distillery waste Spent wash 350 m3 Bio Gas Production : - 1440 M3 /Day Methane Content in Bio-Gas: - 55 to 60 %

#### 5. Gas Based Power Generation

Capacity : - 1.2 MW Fuel : - Bio-Gas / Methane

#### 6. Solar Power Plant

Establishment : - Year 2010 Plant Capacity : - 1 MW Power Generation : - 1.5 million units / year Technology : - Poly Crystalline PV Scheme : - JNNSM by Govt. of India / MNRE Plant By : - TATA - BP

Grid Connected Solar power project was totally a new concept of Indian power/energy sector till 2010. It is dream for pollution free environment for our next generations. The unique feature of this innovation is that this 1MW Solar Project is the first grid connected project by a Co-operative. Mr. Arvind Gore, Chairman, Mr. Raturaj Gore, Consultant, & 9764 members supported the cause to invent 1 MW solar project in their sugar factory. The power generated by project is supplied to the local grid at Keshegaon village. The power is generated during day time and it helps improving local electricity grid strength reducing power shortage and losses due to transmission.

The vision of developing solar power project at Keshegaon is to utilize high solar radiation available in the area to meet energy deficit in order to supply power for irrigation & households. Pollution free power project was major aspect for initiating project. Solar energy is solution to rural energy demand due to its scattered population and unavailability of electricity grid.

Revenue generated will be distributed to farmers. Along with power project a renewable energy education, demonstration and training centre is set up to create awareness about clean & green energy. Solar awareness will assure at least 1 solar application in each rural home.

Since Grid Connected Megawatt level Solar power project was totally a new concept in Indian Scenario, there was not much technical assistance available in the industry. Also being a pilot project, there was no data available for Indian conditions regarding generation of power and sustainability of project. Due to lack of awareness of solar power project, it was a difficult task to convince the feasibility of the project to management, government, financial institutes and other governing bodies.

The cost approved by Ministry of New & Renewable Energy was Rs 17.61 cr. The timeline allowed by Ministry was 12 months. But the project was completed in Rs. 14 cr. within period of 6 months on 31st July, 2011. Project is developed on 5 acres of land. PPA (Power Purchase Agreement) is for 25 years. The project is running

successfully and average units generated per day is 4300 units. CUF of project is around 19%. SSK is receiving revenue from power sales on monthly basis.

### **Economic impact of SSK project**

The solar power project will help awareness about use of clean & renewable energy for various applications to boost overall use of solar products & solar projects to increase employability of solar industry.

### **Standard of living**

Clean and green solar energy will create pollution free environment to all the people of society. Distribution of revenue generated to our 9,764 farmers, through this project will improve their economic power. Improvement in electric power grid by supply of solar power will help for better irrigation and overall agricultural growth of farmers.

- 1) SSK is helping members for Micro Irrigation of the sugar fields. SSK has given financial help for setting up Micro-Irrigation Systems like sprinkler and drip irrigation. SSK is providing green fodder to its members as well certified seeds along with transport.
- 2) SSK has provided Accidental Insurance to its members Rs.50,000/- each has been provided to the family of members with fatal accident.
- 3) SSK is selling power generated to Maharashtra State Power Distribution Company @ Rs.18.41 per unit. The agreement has been made for the next 25 years for this purpose.
- 4) For women empowerment SSK has established 70 Self Help Groups.
- 5) Through Rajarshi Shahu Trust, SSK has established a Charitable Nursery, Intercrop Fruits Cultivation and so far supplied 91,290 sugarcane samplings.
- 6) For Organic Farming SSK has started Vermiculture Project since 2005.

- 7) SSK is conducting Training Programmes for farmers and women in best agriculture practices, food processing and small scale industries.
- 8) SSK is running Rajarshi Shahu Primary school from 1st to 5th Standard.
- 9) SSK has established 65 Farmer Clubs with the support of NABARD to study the environment for agriculture according to region and its fruits research, technology, processing and marketing facility to enrich the farmers.
- 10) First Indian Sugar Factory which started informing sugarcane rates to the farmers by SMS.
- 11) The SSK is the only Sugar Factory in state of Maharashtra, having largest number of Women Members and Schedule Caste Members.

### **Income of the rural people**

The revenue generated (Approx. Rs. 2.75 Cr. Per annum) by 1 MW Solar plant will be distributed to our 9764 members of rural area for next 25 years. (PPA is for 25 years at a rate of 18.41 Rs/unit). Consistent power supply for irrigation will increase agricultural income of farmers.

### **Environmental conservation**

Clean & green solar energy will reduce  $\text{CO}_2$  in environment and help create pollution free environment to all the people of society. The 1 MW solar projects prevent 1400 ton of  $\text{CO}_2$  emission in the air per year. This innovative project is also free from sound and water pollution.

### **Conclusion**

Solar power projects are definitely replicable since solar radiation is very good in most parts of the country. Solar energy is eternal unlike other sources of energy and also a green energy. Any individual or organization can set up solar power plant either

for captive use for grid connection as per individual capacity and requirement. Especially for rural areas where private industries are reluctant to invest, poor people can come together and form cooperative organization like this to develop new solar projects of their own. This will surely decentralize industrialization towards villages and more & more power projects come up in rural India which will be owned by local people. Cost of Solar project has been reduced by 50%, in last 7-8 years. This cost may further decrease if more investment is observed in this field. The project can be completed within 1 year. Solar power has a potential to fulfill all the power requirement of India.



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**DR. BABASAHEB AMBEDKAR CO-OPERATIVE SUGAR FACTORY LTD, ARVINDNAGAR, KESH  
CO-GENERATION PLANT GENERATION DETAILS**

SEASON	CRUSHING DAYS	CANE CRUSHED MT	SUGAR PRODUCTION QTLS	RECOVERY%	CRUSHING RATE	NO OF DAYS	POWER GENERATION KWH
2001-02	104	219368.601	260750	11.93	2134.110	104	5922936
2002-03	126	361424.376	490900	11.32	2889.950	126	9577736
2003-04	78	189006.868	192525	10.19	2441.423	78	5103162
2004-05	---	---	---	---	---	---	---
2005-06	134	272088.871	306450	11.30	2044.820	134	7882420
<b>PHASE - I OF CO-GENERATION PLANT INSTALLED CAPACITY 6 MW &amp; EXPORT 2 MW WAS COMMISSIONED C</b>							
2006-07	210	635714.094	764390	12.02	3032.625	210	16279744
<b>PHASE - II OF CO-GENERATION PLANT INSTALLED CAPACITY 16 MW &amp; EXPORT 5 MW WAS COMMISSIONED</b>							
14/01/2008							
2007-08	185	515638.510	674155	13.07	2792.266	267	27778044
2008-09	94	216311.976	245245	11.13	2310	120	1729941

# **GLOBAL WARMING AND COOPERATIVES: CAPACITY BUILDING OF FARMERS**

**A.K. Asthana \***

## **Introduction**

Global warming is one of the most debatable issues of 21st century involving politicians, policy makers, academicians, researchers, pressure groups and enlightened citizen from all over world. Global warming refers to an increase in average global temperature. Evidence suggests that globe is getting hotter. Temperature recorded around the world as well as scientific study of tree ring, coral reefs and ice cores indicates that average global temperature has been risen substantially since last 150 years(IPCC,2007).The impact of global warming is spatial and across the regions, sectors and social groups. Numerous country-centric studies have been conducted to identify how climate change might impact in particular region or sector (Smith et al.,1998, O'Brien,2000). The objective of these assessments is to measure the positive and negative consequences of climate change. The goal is to identify climate sensitivities and vulnerabilities with emphasis on regions, sectors, ecosystems and social groups within each country (Parry and Carter,1998). Extent of vulnerability is variable as each region, sector, ecosystem and social group has its own characteristic resilience system. Bio-physical vulnerability and social vulnerability are two major concerns. Bio-physical vulnerability refers to physical condition of landscape and its impact on human and bio-diversity (Liverman,1994). Amongst the regions, developing nations

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are more vulnerable than the developed nations. It is due to the fact that most of the developing nation's economy is predominantly agrarian and these nations are near to equator and fall in warmer part of globe. Temperature in these nations is already close to or beyond threshold after which further warming will reduce the agriculture output.

Agriculture is on the forefront of vulnerable sectors. The threat of climate change is real for agriculture sector. Global warming has its ugly manifestation in uncertainty of rain, unpredictable weather pattern, extreme temperature and increased incidence of cyclonic event. Many integrated assessments of climate change seek to determine whether the net impact of climate change is positive or negative for a given sector such as agriculture (Alcamo et al.,1998). There is growing consensus that anthropogenic greenhouse gases (GHGs) emissions have contributed to climate change and such trend will contribute unless dramatic mitigation measures are adopted (Houghton et al.,1996)

Several studies have examined the impact of climate change on global agriculture trade, highlighting impact on yield, commodity price and import and export for individual countries(Fischer et al., Reilly et al.,1994). Changes in atmospheric condition has occurred through built up of GHGs. GHGs trap out-going long wave radiation and bounce it back to earth surface. Carbon dioxide (CO<sub>2</sub>), Nitrous Oxide (N<sub>2</sub>O) and Methane (CH<sub>4</sub>) are three major GHGs. While most of the increase in global temperature is due to Carbon dioxide (CO<sub>2</sub>) emissions from fossil fuels, land use and agriculture also play significant roles in built up of concentration of GHGs. Overall, land use change (predominantly in the tropics) and agricultural activities globally account for about one-third of the warming effect from increased GHGs concentrations (Cole et al.,1997).

Ricardian models that statistically examine the relationship between contribution of temperature and precipitation to agricultural productivity conclude that agricultural productivity first improves as temperatures

go from cold to warm, then deteriorates going from warm to hot (Mendelsohn and Schlesinger, 1999). According to Ricardian Model, India will experience 38 per cent loss in agriculture productivity when global warming will increase and loss of 29 per cent when global warming will not increase further (Cline, 2008).

This paper is designed to explore the plethora of issues concerning with global warming and agriculture. The paper is divided in to four sections besides introduction. Section I will explore the genesis of United Nations Framework Convention on Climate Change (UNFCCC) and its tumultuous journey till date. It will focus on the contentious issues of global warming and also stress to implement the less technology intensive practices to mitigate the global warming at the least cost. Section II will explore the dynamics of agriculture and global warming to highlight the co-relation between these two and identify the key areas which can help policy maker to identify the mechanism which has potential to reduce global warming. Section III will delineate the policies, agencies and strategies to mitigate the global warming through agriculture and cooperative institutions by capacity building of farming community. Section IV will contain conclusion of paper.

### **Section I: International Initiatives for Reducing Global Warming**

The first major international initiative in tackling global warming was taken in Rio de Janeiro, Brazil in 1992. 192 nations adopted United Nations Framework Convention on Climate Change (UNFCCC) whose treaties were non-binding nature. Signatory nations were referred as “Parties to Conventions” and each annual conference since 1995 was technically termed as “Conference of Parties”(CoP). A major breakthrough of UNFCCC came on 11 Dec 1997 when 187 signatory countries except United States of America signed Kyoto Protocol and agreed to reduce their GHGs emission by 5.2 per cent

of the 1990 level by 2012, which is terminal year of Kyoto Protocol. Despite Kyoto Protocol global GHGs emission has increased by 14.6 per cent between 1990-2009 (Narain,2009)

The negotiations amongst the nations revolved around four key issues; green technology transfer, mitigation, adaptation and finance. At Bali conference in 2007, developing nations had agreed to take appropriate action at national level to cut emission of GHGs including the strengthening of the “adaptation fund”. This fund was meant to provide adequate funding to developing nations to implement their own mitigation and adaptation programmes to tackle climate change. But during the 15th conference at Copenhagen, these two contentious issues became bone of contention between developed nations and developing nations. Since transfer of green technology and finance are complicated issues to resolve, so the future strategy to handle global warming should lay emphasis on alternate mitigation mechanism that is less technical intensive and require less investment. Since the developing nations are more vulnerable to global warming than the developed nations so it is in interest of developing nations to ponder on the alternate mechanism to reduce the net emission of GHGs from different sectors. Amongst the economy of developing nations agriculture sector is more vulnerable to vagaries of weather. Agriculture has potential to both contribute to the concentration of GHGs emission and reduce the GHGs load from the environment.

During Copenhagen conference India announced that it is committed to reduce carbon intensity by 20-25 per cent from 2005 level by 2020. In India present GHGs emission is 0.8 tones per capita. A study conducted by World Bank on India indicated that emission cut in India is 20 per cent below the world average. Emission cut target during 12th and 13th five year plan require massive amount of fund. An indicative study of power sector revealed that capital cost alone in setting up cleaner power grid would rise by 15-25 per cent. So also in case of India, finance will be major challenge in reducing

GHGs emission. A survey conducted by Nielsen company and Oxford University Institute of Climate Change revealed that concern for climate change in India has increased by 1 per cent in last two years. Majority of Indians believed that main responsibility for solving climate change lies with government (ToI,2009)

## **Section II: Dynamics of Global Warming and Agriculture**

Agriculture lands have significant impact on earth's carbon and nitrogen cycle. Carbon dioxide, nitrous Oxide and methane are part of earth's natural cycle of carbon and nitrogen. During agriculture activities, these three GHGs are released in atmosphere increasing their concentration.

It is widely accepted that carbon dioxide released by burning of fossil fuel is the most important GHG. But conventional tillage practice in agriculture also produces significant carbon dioxide emission by lowering the organic carbon content of the soil. As per FAO estimate cultivation of about 1.8 million sq km of arable land to produce corn, soybean and wheat release 18 million tones of carbon dioxide annually (Steinfeld,2006). Another estimate of FAO indicates that agriculture related deforestation may emit 2.4 billion tones of carbon dioxide into atmosphere annually (Steinfeld,2006a). Global atmospheric concentration of carbon dioxide has increased from 280 parts per million (ppm) in 1750 to 379 ppm in 2005 (IPCC,2007). Although the global warming potential of carbon dioxide is assigned one, but its role in global warming is significant for two reasons. First volume of carbon dioxide released in atmosphere is significant and second once released it remained in atmosphere for at least 100 years.

Agriculture has unique capacity to reduce the concentration of GHGs released by own. It can be carried out by storage of carbon in plants (photosynthesis) and in soil on land (sequestration). Both activities are together referred as "carbon sink". Carbon sink plays a significant role in global carbon dioxide cycle in the way that only about 50 per cent

carbon dioxide released from fossil fuel is accumulated in atmosphere(IPCC,2001). Carbon sequestration tends to increase soil carbon for 20 to 30 years, after which soil carbon tends to stabilize and then there is no storage of carbon dioxide in soil(CAST,2004). Agriculture has unique distinction of off-setting the emission of GHGs by other sectors. It can reduce GHGs emission by providing bio-fuel. Substitution of 5 per cent of bio fuel for fossil fuel has great potential to reduce the emission of carbon dioxide by energy and transport sector in India.

Characteristic of modern agriculture is the huge increase in nitrogen supplied by mineral fertilizer, animal manure and nitrogen fixing crop like soybeans to boost crop productivity(Mosier et al.,2001). Excess nitrogen in agriculture soil influences emission of nitrous oxide to atmosphere. Global nitrogen cycle has been more disturbed than any other, even carbon cycle(Pollan,2006). Nearly all the crops grown in the industrialized nations including corn and soybeans are nitrogen-saturated(Smil,2000).

As agriculture tends to be more productive in crop yield, emission of nitrous oxide becomes inevitable. But nitrous oxide is another potent GHG with global warming potential of 296 i.e. 1 tone of nitrous oxide has warming effect of 296 tones of carbon dioxide, so its release should be minimized. It can be achieved by efficient use of nitrogen in agriculture. Using nitrogen more efficiently means supplying nitrogen as much as plant needs. In addition to application rate, timing is also important in efficiency of fertilizer use. Winter application of fertilizer results in high residual nitrogen in soil making it more prone to release in atmosphere. Efficient use of nitrogen also involves applying the nitrogen close to active root to increase its use by plant and reduce its release to atmosphere. Thus control of amount of nitrogen fertilizer, its timing and placement of fertilizer near the root minimize the nitrous oxide emission.

Methane in soil is produced by bacteria, termed methanogens, which function under strictly anaerobic (oxygen-free condition)

condition. In agriculture, flooded soil such as those used for rice cultivation and other cultivated wetland crops give emission of methane. Apart from wetland, livestock like cows, sheep, goats and camels are also source of methane emission. Methane is produced in the digestive tract of these animals. This is termed as “enteric fermentation”. Methane is also very potent GHG with global warming potential of 23 i.e. 1 tone of methane has warming effect of 23 tones of carbon dioxide, so its emission should be minimized. Enteric fermentation is directly related with feed quality and digestive efficiency of the animals, there is scope of improvement in it and reduces the emission of methane. Manure produced by livestock emits methane and/or nitrous oxide during storage and later its application to soil. The rate and type of these emissions are highly dependent on the storage condition and characteristics of the manure. Storage under anaerobic conditions produces methane and suppresses nitrous oxide. On other hand piled storage manure promotes emission of nitrous oxide and suppression of methane.

All three GHGs are highly co-related with agricultural activities and impact on net GHGs concentration.

### **Section III: Policy Framework**

India needs environmental space to continue economic development. Development of economy is highly co-related with carbon dioxide emission. During Copenhagen conference, India has set a high target of emission cut. To achieve twin objectives, nation needs to strike a balance between development process and environmental commitment. Fast growing service sector and industrial sector will contribute to concentration of GHGs in process of development. But this evil can be off-set by agriculture sector by adopting right kind of practice which support carbon stock and reduce emission of methane and nitrous oxide. There are multiple factors affecting emission and sequestration process of GHGs in agriculture.

Some practices that increase the emission of one GHG may decrease emission of another GHG. So in agriculture the best practice should be adopted that increase carbon sequestration and increase the efficiency of agriculture inputs at same time. GHG emission policy should address both carbon stock in soil and emission of nitrous oxide and methane to achieve the best overall mitigation result.

Mitigation of emission from industry and service sector requires green technology and substantial investment. Mitigation of emission from agriculture requires relevant agriculture management practice and technology that can be deployed quickly and at the cost that are relatively low than other GHGs emission reduction options. This can be achieved by sustained education and training to farming community so that farmers can contribute towards easing global warming by knowledge management. In Bali conference it was agreed upon by the nations that mitigation action would be supported by capacity buildings in a measurable, reportable and verifiable manner, besides technology and finance (Bhusan,2008)

India can well tackle global warming problem by capacity building of farming community and adopting environment-friendly farming practice. In the seventh schedule of Indian constitution, agriculture including research and education is included in state list and implementation of treaties, agreement and convention with foreign countries is included in central list. So federal government and state governments need synchronization of their policies and role for formulating a GHGs mitigation policy for tackling global warming.

There may be suitable policies to make practices that increase soil carbon and efficient use of agriculture inputs but it should be remuneratively attractive for the farmers to adopt it. Farmers can be compensated by state or federal agencies for adopting practices that increase potential for carbon stocking, reduce GHGs emission and popularize agro-forestry. Farmers can pool their less productive land for agro-forestry and take financial assistance for aforestation

under clean development mechanism. Certified emission reduction generated can fetch monetary gain to farmers besides reducing GHGs emission.

#### **Section IV: Conclusion**

According to Ricardian model India is poised to lose 30-40 per cent due to global warming. Being a developing nation with predominant agrarian economy, its susceptibility of climate change is very high. It can not jettison the development to protect the environment. But it can use best practice of agriculture for carbon sequestration and reducing the emission of GHGs from agricultural activities. It needs a remunerative and attractive policy, coordination between centre and state and a credible institution for handling of global warming using cooperative institutions in the agriculture sector. It will lessen dependency on green technology and requirement of huge investment. National Cooperative Union of India has manpower and infrastructure to contribute towards capacity building of farming community to adopt such agriculture practice that reduce GHGs emission and increase carbon sequestration.

#### **Notes**

Ricardian model - Family of Ricardian model relating to agriculture capacity to temperature and precipitation, usually in a nonlinear fashion, on the basis of statistical estimates from farm survey or village level data across varying climatic zones. The classical economist David Ricardo developed the theory that the value of land depends on the difference between its fertility and that of the least fertile land just brought into cultivation at the margin. The seminal Ricardian agriculture impact model argued that statistical regression relating land values to climate differences could capture the impact of climate on agriculture productivity and thus be used to calculate prospective effects of global warming.



Greenhouse Gases Emission – Release of gases from the burning of fossil fuels for residential, commercial and industrial purposes and to power transport vehicles.

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# **BUSINESS DIVERSIFICATION STRATEGIES OF PACS: A STUDY ON PACS- SHG LINKAGES IN SALEM DISTRICT, TAMIL NADU**

**K.Ravichandran \***

## **1. Introduction**

Agriculture is an important sector of the Indian economy and contributes 14 percent of the nation's Gross Domestic Product (GDP). About half of the population still relies on agriculture for their livelihood. Among the several inputs that are necessary to bring improvement in agricultural production and productivity the availability and access to adequate, timely and low cost credit from institutional agencies is of great importance (GoI, 2012-13, 1&17).

The process of institutionalization of agricultural credit had a small beginning through the enactment of Cooperative Credit Societies Act 1904, which paved the way for organizing Primary Agricultural Cooperative Credit Societies (PACS) (Ravichandran, K and M.Revathibala, 2008,10). After independence, based on the recommendations of the All India Rural Credit Survey Committee 1954, the Government of India paid much attention for to the organization of PACS throughout the country.

The agricultural cooperative credit institutions have been developed into two broad structures viz., Short-term and Long-term Cooperative Credit Structures, which meet the different forms of credit needs of the cultivators and others in rural areas. The Short-term Cooperative Credit Structure (STCCS) consists of 32 State

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Cooperative Banks at State level, 370 District Central Cooperative Banks (CCBs) at district level and about 93000 PACS at village level as on 31.3.2012. However, the pattern of STCCS is not uniform across the country (RBI, 2013, 6). These institutions cover more than 99 per cent of Indian villages and 71 per cent of rural households in the country (GoI, 2009,16).

PACS are the base level institutions on which the whole STCCS is built. These societies, functioning at grass root level, have direct contact with the agriculturists and meet financial and non-financial requirements for agriculture and allied activities. However, despite their outreach and volume of operations, over the years, the financial health of the PACS deteriorated significantly (GoI, 2008, 71). Consequently the share of PACS in agricultural credit at all India level fell from 62 per cent in 1992-93 to 22 per cent in 2007-08 (Sharad N.Bansal et.al, 2012,42), and to 17 per cent in 2011-12 (RBI, 2013,10).

## **2. STCCS in Tamil Nadu**

In Tamil Nadu the policy of the State Government has always been that the strengthening of the Cooperative Societies is necessary for the development of agriculture and economic prosperity of the people, especially the weaker sections. Cooperative Credit Structure<sup>3</sup> in the State is the largest institutional credit delivery system in terms of reach and network (Government of Tamil Nadu, 2011-12,3). In Tamil Nadu the STCCS is three-tier and consists of 4530 PACS<sup>4</sup>, 23 CCBs and at the top Tamil Nadu State Apex Cooperative Bank. On an average a PACS covers four revenue villages.

Recognizing the role of PACS in rural credit market in mitigating the distress of farmers the Government of Tamil Nadu took several measures and reforms especially since 2005 - 06 onwards to strengthen the management of PACS and to improve their viability. These measures and reforms can be categorized into three areas namely, a) diversification measures, b) cost control measures and c) consolidation measures (Government of Tamil Nadu, 2011-12, 16).

Due to these support and patronage from State Government there is growth in the business performance and operational viability of PACS in Tamil Nadu. At present the PACS have been facilitated to provide about 20 loan products, 5 marketing services, and host of other services which includes running of common service centres, agri clinics, agro service centres and Fair Price Shops under Public Distribution System. It was found that the total deposit mobilized by PACS has increased from Rs. 343983.64 to Rs. 468235.77 during the period between 2008-09 and 2010-11. The total loan outstanding also has increased from Rs. 630685.07 to Rs. 1101384.54 (Table -1). Consequent to these developments out of 4,534 PACS functioning in the State, 1033 are on profit, 1654 are on current profit (Government of Tamil Nadu, 2012-13,8).

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**Table -1**  
**Business Performance of PACS in Tamil Nadu**

(Rs. in Lakhs)			
Year	No. of functioning PACS	Total Deposits Outstanding	Total Loan Outstanding
2008-09	4531	343983.64	630685.07
2009-10	4531	401476.67 (16.7)	865327.79 (37.2)
2010-11	4532	468235.77 (16.6)	1101384.54 (27.3)

**Source:** Compiled from the records of Office of the Registrar of Cooperative Societies, Chennai for various years.

**Note:** Figures in brackets are percentage of change over the previous year

### 3. Statement of the Problem

Systematic diversification is an integral part of any organization to become dynamic to the requirements of its stakeholders and the environment. In the case of cooperatives they suffer from inherent inertia and therefore all out effort is necessary to make them dynamic. While examining the factors that led success of sugar cooperatives, Apte (1996) identified that among others diversification also served as the key factor. There were umpteen numbers of cases of cooperatives that were highly successful in the 1950s and 1960s but due to their failure to keep pace with the changing times, they lost their financial viability and were sick. Hence, Katar Singh and RS Pundir (2000, 38) identified diversification as one of the challenges faced by the cooperatives. Generally business organizations find four alternatives for growth. They are viz., market penetration, market development, product development and diversification

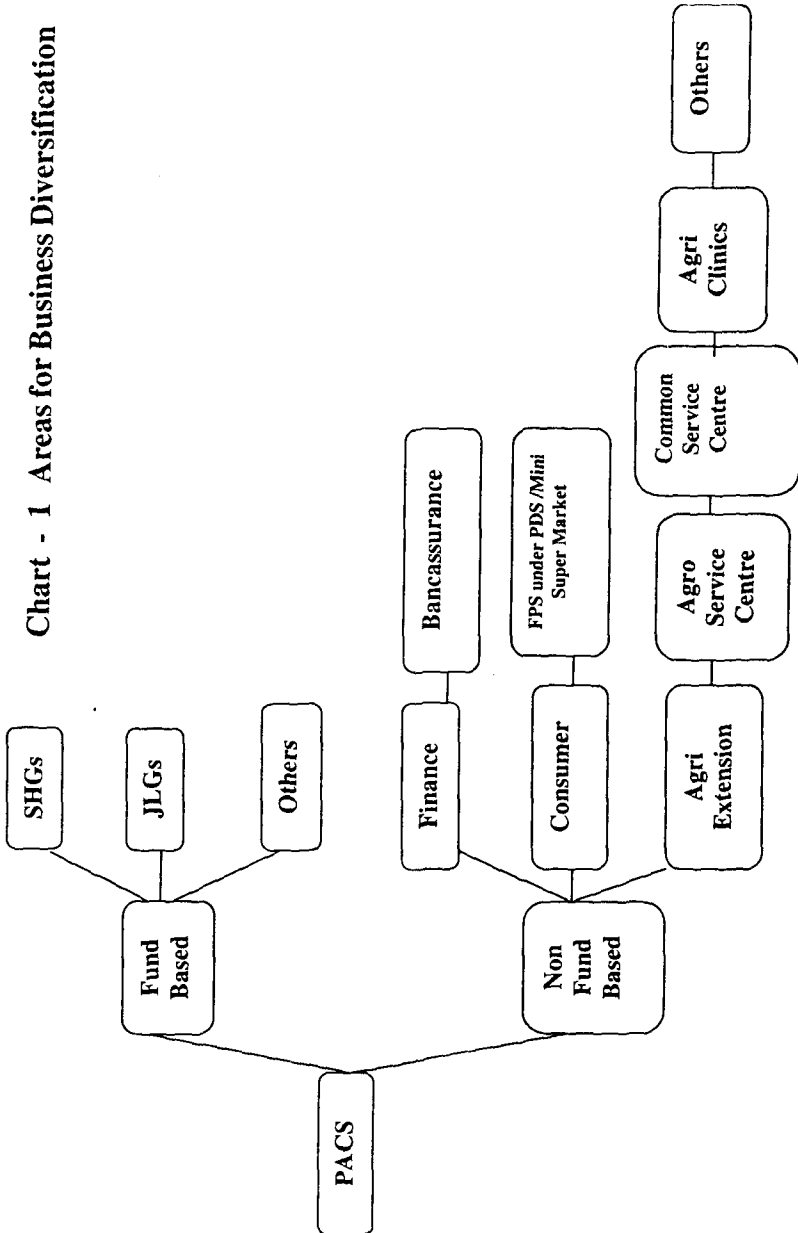
A business organization should weigh these four alternatives and select any one or more of these, depending upon its particular circumstances which affect long – range planning. It must be emphasized, however, that the diversification strategy is quite exclusive of the first three because, unlike these which use the same technical, financial and marketing resources as are used for the original product-line, diversification generally requires new skills, new techniques and new facilities. Therefore, it almost invariably leads to physical and organizational changes in the structure of the business organization which means a distinct break with its past experiences (Nanjundaiah, R and S.Ramesh, 2001,277-278).

In Tamil Nadu, till recently, PACS were allowed to function as credit agencies only. It was found that dependence on a single source of income with the limited scope of operation was the main reason for the lack of viability. Further, it was also realized that the PACS can offer a variety of services to the members and thereby bring a transformation in the rural economy (Government of Tamil Nadu, 2011-12, 16). Therefore, the Government of Tamil Nadu encouraged PACS to diversify their functions through fund based and non-fund based approaches. The prominent diversification strategies adopted by PACS in Tamil Nadu are given in Chart-1

Among these diversification strategies, SHG – Bank linkage programme is a major fund based diversification strategy for delivering financial services to the poor in a sustainable manner (GoI, 2008, 77). The rationale behind the financial services component in PACS-SHG linkage is to build an efficient and viable livelihood system by providing access to adequate and low cost credit and other financial services in time. Forming SHG through thrift and finance related instruments and thereby strengthening their livelihood system has been a multi layered task. The formation of group is led by felt need of the members. Inculcating savings habits among members, lending to groups, monitoring



**Chart - 1 Areas for Business Diversification**



the financial transaction between members and their group, promoting entrepreneurial culture among the members based on the potential of the area, recovery of loans in time, relending, making the members to obtain loan individually from PACS, issuing insurance cover to members and their cattle and rendering other services so as to developing the livelihood of the members is a complete package. PACS are appropriate institutions for promoting SHGs due to their spread and proximity to the poor and weaker sections.

However, cooperative credit and banking institutions have started to link SHGs very lately in India (Malcolm Harper, et al., 2004, 2 & Rewa Misra, 2008,6). In Tamil Nadu also after seeing the achievements of Commercial Banks and NGOs in this field of activity PACS have been facilitated by the Government and financing bank to enter in to this field of activity.

In this context it becomes necessary to analyze the issues at micro level viz., what is the level of performance of PACS in promoting SHGs among rural women in rural Tamil Nadu? How SHG linkage as diversification strategy do increases the flow of institutional credit? What are the advantages perceived by PACS and SHG members? And what are the emerging issues in PACS – SHG linkage at micro level? Finding answers to these and other related issues become necessary so as to strengthen the PACS-SHG linkage thereby ensuring the continuous delivery of financial services to those who are depending only PACS for their financial requirements. Hence, the present study is undertaken entitled 'Business Diversification Strategies of PACS: A Study on PACS – SHG Linkage in Salem District, Tamil Nadu'.

#### **4. Objectives of the Study**

This study has the following objectives.

- 1) To analyze performance of sample PACS in SHGs linkage as a diversification strategy,
- 2) To understand the perceptions of employees and members of SHGs on PACS – SHG linkage and

- 3) To identify emerging issues in PACS–SHGs linkage with special reference to access to institutional credit

### **5. Significance of the Study**

The Social Inclusion and Financial Inclusion architectures will be incomplete without the development of small farmers, marginal farmers and women. Compared to the network of Commercial Banks and Regional Rural Banks, the PACS are strategically located across the country. On an average there is one PACS for every six villages (GoI, 2008, 69) while the relative figure for Tamil Nadu is 1:4. Irrespective of their outreach there has been lot of criticism leveled against the PACS as they could not provide access to institutional credit to the disadvantaged farmers and the women during the past (Ravichandran, K,2011,183). World Bank evaluations showed that although the ground level cooperative credit has increased since 2006, the share of marginal and small farmers has not increased to the same extent, and the borrowing membership has actually been declining. It is the PACS that hold substantial promise in their ability to deliver to disadvantaged groups and women farmers, and these deserve focus and strengthening (Bina Agarwal, 2011, 10 and GoI,2011, 10). The present study thrown light on all these and other related issues and suggested suitable strategies for the development of PACS as appropriate agencies to protect the interest of the farmers, poor and the disadvantaged.

### **6. Methodology and sampling**

It is an empirical study and hence survey method was followed. Both primary and secondary sources of data were used. In Salem District there are 207 PACS functioning, which are administratively covered by four Deputy Registrars. All these PACS have promoted SHGs. By adopting convenient sampling procedure two PACS from each Deputy Registrar's Circle was selected for the study. Hence, the sample size is eight PACS. Both primary and secondary sources of data were sourced by administering a structured and pre tested interview

schedule for PACS. Also, Focus Group Discussion technique was adopted to enlist adequate data and information for the study. The period covered by the study was from 2008-09 to 2012-13.

## **7. Salient Findings of the Study**

The salient findings of the study are presented under two broad heads viz., PACS – SHG linkage practices in Tamil Nadu and Performance of sample PACS in Salem district in SHG linkage.

### **7.1 PACS-SHG Linkage Practices in Tamil Nadu**

In India initially Bank – SHG linkage had been in three models viz., Bank – SHG linkage (Bank itself promoting SHGs), Bank – NGO – SHG linkage (NGOs acting as facilitator), and Bank – NGO - SHG linkage (NGOs acting both as facilitator and financial intermediary). However, now in the context of Micro Finance, generally there are two types of Bank - SHG linkage models exist. They are viz., Bank - SHG Linkage Model: This model involves the SHGs are financed directly by the banks viz., CBs, RRBs and Cooperative Banks. Bank - MFI Linkage Model: This model covers financing of Micro Finance Institutions (MFIs) by banking agencies for on-lending to SHGs and other small borrowers. Generally cooperatives (both CCBs and PACS) in Tamil Nadu follow Bank – SHG linkage model

Again in the case of PACS – SHG linkage there are two models exist across the State of Tamil Nadu (Ravichandran K, 2012, 42). They are:

#### **1) SHG Members' Livelihood Model**

Developing the SHG Members' livelihood is the base of this approach. In this approach PACS took sufficient time in mobilizing the group, convening regular meeting, sensitizing the SHG members on the importance of group approach etc. Hence, PACS restrict itself in number of groups to be formed. The formation of group is led by felt need of

the members and not by the annual target. Inculcating savings habits among members, grading their performance, lending to groups, monitoring the financial transactions between members and their group, promoting entrepreneurial culture among the members, recovery of loans in time, relending, making the members to obtain loan individually from PACS, issuing insurance cover to members and their cattle, and rendering other services so as to develop the livelihood of the members is the basic objective of this approach. Very few PACS in Tamil Nadu are following this approach. This approach gives equal importance to access to credit, utilization of credit, entrepreneurial activities and recovery of loan.

## **2) PACS Business Centred Model**

In this model again two approaches exist. They are (1) Target Approach and (2) Umbrella Approach. Those PACS which are following the Target Approach consider that this is complete approach and all efforts must be taken at society level since SHG linkage is a Government Programme and hence the target given should be accomplished. These PACS aim at achieving the target by organizing SHGs, mobilize savings, and giving credit linkage. When the Government wanted to introduce other development programmes these PACS will switch over to new programme for getting the work already done on SHG linkage and all their energies will be tuned towards achieving the target of the new programme. Further, for some of these PACS there is no difference between SHG and JLG. Hence, the problem of NPA is inbuilt syndrome. Majority of PACS in Tamil Nadu are following this approach.

In the case of Umbrella Approach, some PACS consider that SHG linkage is a business chance to diversify their lending portfolio so that the business risk is diversified. So these PACS try to organize more number of SHGs in their area of operation, mobilize savings, periodically

rate their performance, give credit linkage, recover the dues in time and do relending wherever it is required. A sort of aggressive behavior exists in this model, wherein the access to institutional credit is made easy to rural women. At the same time PACS never compromise on ensuring proper recovery of loans. Though group stands as a security, every individual member is invited to PACS while lending and recovery of loan. Every effort has been taken to ensure that the transactions between PACS- SHG are transparent and known to all the members of SHGs.

**Table - 2**  
**PACS-SHG Linkage – Progress in Tamil Nadu**

Performance Indicators	Rs. in Lakhs)		
	2008-09	2009-10	2010-11
No. of functional PACS	4531	4531	4532
Total deposits outstanding	343983.64	401476.67	468235.77
Total Loan outstanding	630685.07	865327.79	1101384..54
No. of PACS which has given credit linkage to SHGs	3066 (67.7)	3241 (71.5)	3363 (74.0)
No of SHGs linked	78875	86549	90176
Deposits mobilized through SHGs	6197.24	7239.93	8848.96
SHG Loan outstanding	219483.29	285298.44	365589.94

*Source:* Office of the Registrar of Cooperative Societies, Chennai.

Note: Figures in brackets are percentage to total PACS

At present more than 70 per cent of PACS in Tamil Nadu have given credit linkage to SHGs by following either one of the model stated above (Table-2). The number of SHGs formed and given credit linkage increased from 78875 to 90176 during the period between 2008-09 and 2010-11. The total SHG loan outstanding as on 2010-11 was Rs. 365589.94 lakhs,

which is more than 33 per cent to total all loan outstanding. The total loan issued for 95233 SHGs as on 31.3.2012 was Rs. 482.70 crore (Government of Tamil Nadu, 2012-13,13). The target fixed for 2012-13 was Rs.500 crore. Also the total deposits mobilized through SHGs increased from 6197.24 lakhs to Rs.8848.96 lakhs during the same period. From the above analysis it is found that the performance of PACS in SHG linkage during the past three years has been an opportunity for diversifying the business of PACS, while ensuring access to institutional sources of credit to rural women in Tamil Nadu.

## **7.2 Performance of sample PACS in Salem District in SHG linkage**

PACS as a financial institution can reduce its portfolio risk through geographic diversification, customer diversification and product diversification (Ramon C. Yedra, 2007, 28). The sample PACS adopted certain fund based and non fund based strategies, they are viz., linking SHG and JLG, running Fair Price Shops (FPS), agro service centre, common service centre and doing fund transfer, and bancassurance. These diversification strategies are chosen by the sample PACS from the list of business diversification strategies suggested by the Registrar of Cooperative Societies, Government of Tamil Nadu for maintaining financial viability of PACS. The sample PACS considered these diversification strategies for adoption and implementation due to:

- 1) Through these diversification strategies the sample PACS could able to meet the emerging needs of the their members / customers in their area of operation
- 2) Sample PACS's core competencies could be fully deployed on these selected strategies
- 3) Both the permission from the Cooperative Department and financial assistance from the Financing Bank were made easy
- 4) During this period the Integrated Cooperative Development Project was in progress in this district, which also contributed for the diversification strategies adopted by the sample PACS.

Among these diversification strategies, PACS – SHG linkage is both customer diversification and product diversification. PACS could not go far geographic diversification as their area of operations are restricted. The performance of sample eight PACS in SHG linkage is given in Table -3.

The sample PACS in A.N.Pudur and Kadayampatti have performed well in forming and linking more number of SHGs compared to other PACS. Further, in these two PACS the number of women covered through SHGs is more than the number of 'A' class members.

**Table - 3**  
**PACS and SHG Linkage**

*(Figures in numbers)*

Deputy Registrar's Circle	Total No. of PACS in the Circle	Name of the sample PACS	Year of establishment	No. of 'A' Class Members	No. of SHGs Promoted	No. of individual members with the SHGs	Average number of member per SHG
Attur	38	Narasingapuram	1921	7347	28	448	16
		Gangavalli	1952	3969	14	231	16
Omalur	61	Nangavalli	1912	6116	214	2782	13
		Kadayampatty	1909	3004	302	3624	12
Salem	71	A.N.Pudur	1916	4296	435	6528	15
		Kuppanoor	1950	2784	170	2886	17
Sankagiri	37	Konganapuram	1935	8035	7	72	10
		Kasthuripatti	1950	1767	6	78	13

Source: Compiled from the records maintained by the sample PACS



**Table-4**  
**Sample PACS and SHG Linkage**

Year	A.N. Pudur PACS				Kadayampatti PACS			
	Deposit mobilized from SHGs	Total Deposit mobilized	Loan outstanding with SHGs	Total Loan outstanding	Deposit mobilized from SHGs	Total Deposit mobilized	Loan outstanding with SHGs	Total Loan outstanding
2008-09	0.75 (0.05)	1463.74	313.73 (18.81)	1667.52	3.00 (0.55)	542.91	1.03 (0.10)	998.18
2009-10	1.00 (0.06)	1624.68	392.50 (19.99)	1963.42	3.60 (0.50)	709.88	5.68 (0.43)	1303.83
2010-11	1.25 (0.06)	1922.13	479.77 (21.01)	2282.65	6.70 (0.85)	783.66	69.06 (3.95)	1744.40
2011-12	2.80 (0.12)	2261.53	300.86 (11.29)	2664.05	8.20 (0.92)	886.56	168.05 (7.69)	2196.94
2012-13	4.10 (0.16)	2467.95	388.92 (12.59)	3089.32	10.15 (0.99)	1026.48	248.70 (8.49)	2928.57

These two PACS follow Business Centred Model with Umbrella Approach and have been successful, while the other four PACS follow Business Centred Model with Target Approach and hence could not make any dent on this line of diversification. Based on this trend, for an indepth study two PACS were selected. They are A.N.Pudur PACS and Kadayampatti PACS. The performance of these PACS were analyzed with two broad indicators, viz., deposit mobilized through SHGs and Loan outstanding against SHGs. The performance of these PACS is given in Table-4.

It was found that in the case of A.N.Pudur PACS though the deposit mobilized from SHGs constituted less than one per cent of the total deposit mobilized in real terms it increased from Rs.0.75 lakhs to Rs.4.10 lakhs during the study period. Also, though the share of SHG loan outstanding in the total loan outstanding has come down from 18.81 per cent to 12.59 per cent, the actual Ground Level Credit flow increased from Rs.313.73 lakhs (2008-09) to Rs.479.77 lakhs (2010-11) and stood at 388.92 lakhs (2012-13).

In the case of Kadayampatti PACS, though the deposit mobilized from SHGs constituted less than one per cent of the total deposit mobilized in real terms it increased from Rs.3.00 lakhs to Rs.10.15 lakhs. The share of SHG loan outstanding in the total loan outstanding also increased from 0.10 per cent to 8.49 per cent, i.e., from merely Rs.1.03 lakhs to Rs.248.70 lakhs. That is about 1/10th of the total loan outstanding of PACS was due to SHG linkage, for which group cohesion was the only security. However for the remaining 9/10th of the loan outstanding either standing crop or jewel or other tangible assets stands as security.

Though both the sample PACS has been in the middle of the micro finance route to empower the downtrodden (*Ravichandran, K, 2013,14*):

- Their effort has drastically reduced the role of money lenders in informal rural credit market in their service villages,

- Promoted entrepreneurial culture among few the members of SHGs, and
- Both the stakeholders gradually reduced their dependence on NGOs (*who originally served as paid channel between PACS and SHGs*).

This is the first level of success on both sides. A FGD was conducted separately among the employees of sample PACS and members of SHGs on their perception about PACS-SHG linkage. It was found that a sense of stakeholders' feeling appeared in their relationship and both the parties experienced with several benefits. In fact this new line of business diversification increased GLC flow to rural women. The outcome is that there is an increase in the interest income to the sample PACS, while reducing the interest burden for some members of SHGs (*Ravichandran K & M.Revathibala, 2004, 7*) and tapped the entrepreneurial culture among other members of SHGs. This trend has improved the livelihood of the members of SHGs, majority of them belong to small and marginal farming community. The result of FGD conducted among these stakeholders is given in box-1.

<b>Box -1</b>	
<b>Perception on the Advantages of PACS – SHGs linkage</b>	
<b>The advantages Perceived by Members of SHGs</b>	<b>Advantages Perceived by Employees of PACS</b>
1) Availability of loan without any traditional collateral securities	1) Business diversification with low cost
2) PACS are strategically located very nearby the SHGs	2) Attracting more number of customers both for fund based and non fund based business
3) Availability of inputs and other services for agriculture and allied activities	3) Mobilizing low cost deposits for working capital
4) Generally the Board of Directors and employees of PACS are hailing from local villages. Hence, members of SHGs can easily approach them to avail services without any inhibition	4) It is an opportunity to increase the interest income
5) Some of the members of SHGs have become members of Board	5) Generally the members of SHGs are investing the loan on non farm sector@ and hence, the investment risk for the PACS is diversified.
6) There is no time constrains in availing services	6) Regular recovery of loan and in some cases advance recovery
7) A ordinary village women can establish contact with an institution of their own	7) As all the members of SHG are visiting PACS, there always been a busy scene daily in the office, which attracts new customers and motivates the employees to work
8) Reduced the interest burden and in some cases overcome from the problem of debt and promoted entrepreneurial activities.	8) Recovery of old debts in other loans, which have been given to the relatives of the members of SHGs
	9) Trustworthy new customers
	10) It is an Corporate Social Responsibility of the PACS
	11) The reputation available from Government officials and the villagers
	12) Other advantages

*Source:* FGD conducted among the members of SHG and employees of sample PACS.

*Note:* @ Most of the cases loan given for NFS to individuals has been NPAs both at PACS and CCB level.

From the performance of these sample PACS it is found that SHG linkage as a fund based business diversification strategy will have a better chance of success only if the employees of the PACS have the attitude and knowledge in the new lines of business to utilize their core competencies. In both these sample PACS employees have been trained on SHG linkage and hence they showed adequate interest in this field of business diversification.

Nowadays PACS loan operations are skewed infavour of Jewel Mortgage Loans, as it is construed as highly secured and risk free due to successive waiving policies of the Governments. Hence, only those members, who have jewel to pledge alone, can borrow from PACS. For example out of the total loan outstanding the share of jewel loan outstanding was 60.12 per cent (2008-09), which increased to 61.58 per cent (2012-13) in A.N.Pudur PACS. The relative figure for Kadayampatti PACS was 50.36 per cent and 53.17 per cent. In this occasion if the poor rural women were not associated with SHGs, they might have been forced to continue their dependence on non-institutional sources of credit for their financial requirements. So PACS-SHG linkage served as conduits for increasing / creating / ensuring access to institutional sources of credit to marginalized sections of the community.

Also transaction with SHGs has telling impact on the interest income earned by the sample PACS. For example the total interest income earned by A.N.Pudur PACS as on 31.3.2013 was Rs.420.36 lakhs of which the share of interest income earned through SHG linkage was 17.2 per cent. The relative figure for Kadayampatti PACS was Rs.285.93 lakhs and 10.36 per cent.

## **8. Conclusion**

The present study found that among the different diversification strategies that are followed by the sample PACS, SHG linkage has shown considerable performance from the point of view of (i) increasing the customer base (ii) mobilizing the low cost small savings

(iii) finding new ways for increasing interest income and above all (iii) reengineering their functions. Apart from the direct business generated, the good-will being created in the villages gets translated into other indirect benefits (Benedicto S. Bayaua, 2007, 30). Also it is found that both the stake holders enjoyed benefits and in fact this new line of business diversification increased the access to institutional credit to rural women by eliminating the role of the players in rural informal credit market and thereby increased the GLC flow from PACS for farm and non farm sector. ,

However, the present trends in PACS – SHG linkage bring to surface certain issues for further research. They are viz., whether the business alliance between PACS and women SHGs will increase the flow of institutional credit to the poor even after withdrawal of Government support? Whether the business alliance between PACS and women SHGs will remain as mere conduits of rural credit or promote socio-economic development of the women in the small and marginal farming community? What are the policies and governance systems that are required for the sustainability of this linkage programme?



### *Notes*

- 1) The long term cooperative credit structure consists of 714 PCARDBs and 19 SCARDBs as on 31.3.2012 <http://nafcard.org/home.htm> accessed on 19.8.2013.
- 2) The STCCS functions as a three tier structure in 16 States; while in 13 smaller States and Union Territories, PACS are directly affiliated to the SCBs and the STCCS functions as a two tier structure. In 3 States, a mixed structure, i.e., two tier in some districts, and three tier in the other districts operates (RBI: 2013, p-6).
- 3) The Long Term Cooperative Credit Institutions in Tamil Nadu consists of the Tamil Nadu Cooperative State Agriculture and Rural Development

Bank and 180 Primary Cooperative Agriculture and Rural Development Banks at Taluk /Block levels.

- 4) In Tamil Nadu the Primary Agricultural Cooperative Credit Societies were called as Primary Agricultural Cooperative Banks (PACB) with effect from Government Notification – G.O. Ms. No.507, COOPERATION (CCI) DEPARTMENT Dated: 1.9.1987 and Letter No.32651 / CG.2/87-1, dated: 13.5.1989. Later as the part of Revival Process as recommended by Task Force for the Revival of STCCS 2004, the nomenclature of PACBs are again changed to Primary Agricultural Cooperative Credit Societies as per the Tamil Nadu Ordinance No.8 of 2008 – An Ordinance further to amend the Tamil Nadu Cooperative Societies Act, 1983, published in Tamil Nadu Government Gazette, Extraordinary dt.21st October 2008.

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**TAPPING ECONOMIES OF SCOPE THROUGH STCC  
REFORM AND REVIVAL PACKAGE:  
A CASE OF PACS IN TAMILNADU**

**R. Elangovan \***

**T. Paranjothi \*\***

**Settings**

Now environment in the country has considerably changed with the future thrust, squarely towards liberalization and globalization to achieve rapid economic growth. The Cooperatives will have to reorient themselves to acquire a new role in the emerging free market economy against the mixed economy of past. The careful analysis of the emerging situations, particularly in agriculture and allied sectors clearly indicates the weakening market power of farmers against their input suppliers and buyers of output. Therefore, the main role of cooperatives will be of minimizing opportunistic tendencies of other market participants to protect the economic interest of their members. The big question is - Can cooperative perform this role in the emerging free market economy and succeed in a highly competitive environment? If yes, how cooperatives will meet this formidable challenge? Though the past performance of cooperatives has not been promising, but their future success is important because of their potential and promise they offer to make rural economy grow at a faster pace. The stakes in the success of rural economy are very high, if the country has to achieve a growth rate of 8 percent and above.

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The farmer is a risk-taking entrepreneur who faces uncertainties from weather, spurious inputs, pests and diseases, and market shocks among other risks. Inadequate and untimely credit along with procedural hassles from formal institutions add to his/her burden. In recent years, policy interventions have led to doubling of agricultural credit, but the limited access of small and marginal farmers to institutional credit continues to be a matter of concern. What is worrying is that the proportion of such farmers is increasing and they form more than four-fifths of the operational holdings. It is in this context the role of cooperatives in providing credit for both agricultural and allied operation needs no special mention. The cooperative credit system exists even in the remotest corner of the country can meet the credit requirements of the farmers.

The Task Force on credit related issues on farmers (2010) indicated that the agricultural census provides some information on credit from institutional sources for 2001-02 for all class of farmer households. The share of holdings across size-class indicates that three-fifths are marginal and one-fifth small farmers- these also broadly match with other recent estimates. The proportion of farmers accessing institutional credit increases with size-class - it is the least for marginal at 14% and highest for medium at 33%. Across all size class of farmers who have borrowed from institutional sources, nearly two-thirds have taken credit from primary agricultural credit societies (PACS), around one tenth each from land development banks (LDBs - also known as State Cooperative Agriculture and Rural Development Banks) and Commercial Banks and between one-sixth and one-fifth from RRBs. Across all sources, as size-class increases, the number of borrowers having more than one account rises; for marginal holdings (<1 hectare) there were 103 accounts which increased to 119 accounts for large holdings (10 hectares and above) per 100 borrowers

After 2001-02, one of the major policy initiatives for agricultural credit has been the doubling of credit between 2004-05 and 2006-07.

This is particularly evident in credit through commercial banks, which has intensified the structural shift in the source of ground level credit flow to agriculture that has been observed since 1990s. In fact, in 1991-92 the share of cooperatives in agricultural credit was more than 50% which declined to 13% by 2008-09. Concurrently, share of commercial banks increased and their share stood at 78% in 2008-09. The share of RRBs has been hovering around 10% in recent years. Thus, the period of distress in agriculture is also identified with a relatively declining contribution of cooperatives in agricultural credit, and with RRBs not showing substantial increase, indicating the urgent need to ensure increased access to agricultural credit for small and marginal farmers.

### **Scope of the study**

While cooperation has been the foundation of most human progress and advancement, co-operatives as formal legal entities under a statute have been in existence for more than hundred years. It is therefore appropriate to take stock of the emerging issues and challenges, to examine what has been achieved, more importantly, what could have been achieved, the reasons for the failure to take the salient place in the production systems. There is a need to discuss the interface of co-operatives with diversified business activities not only in the production system but also responding to a postmodern production system. Another point that emerges is the role of the co-operative organization in the WTO regime which recognizes only one term: competition, competition and more competition. To compete and win over the competition the cooperatives should necessarily achieve the economies of scale and scope in their operations.

In the case of agricultural credit sector, despite the emphasis and the effort which NABARD is putting to increase the supply of rural credit manifold through the co-operative credit institutions, the fact is that the overall share of agricultural credit in the national economy is

declining which is understandable because the growth in the manufacturing and services sector far outstrips the growth in the agricultural sector. Primary agricultural lending does not include agri processing and value addition. The moot point is that even within the agri-credit sector, the share of co-operatives has stopped growing, and from the peak of the late eighties, its share is now gradually declining with nationalized and private sector banks becoming more aggressive in this sector. As Kisan Credit Cards become popular, and the fungibility of finances in rural areas gives many more options to the farmer, the edifice of the PACS-with its linkages to input supply and output marketing stands eroded.

It is in this context the credit cooperatives diversify their business activities both in related and unrelated area to undertake many business activities like diversified loan portfolio, non-credit business in the form of marketing of agricultural produce, value addition, input supply. In addition they should also involve in the non-fund business activities where the investment is very low or it is nil. Activities included inter-alia, agency business, micro insurance, acting as Business Correspondent and Business Facilitator (BC&BF). By undertaking these activities the Primary Agricultural Cooperative Credit Society (PACS) not only became a viable but also can tap the benefits of economies of scope.

### **Need for the Study**

In Tamil Nadu for a quite long time cooperatives are considered as a central domain of economy of state for accelerated all round development of the rural areas through various sectors of cooperatives. The quite laudable achievement of Public Distribution System through PACS in Tamil Nadu stood as a role model for the entire country. The cooperatives spread its tentacles in all walks of life. Besides, they act as a vehicle for implementing various welfare measures of the government for socio-economic developments in the rural areas.

With a view to sustain the momentum of the progress of the credit cooperatives and its financial stability, the government introduced measures which include the waiver of farm loans, implementation of revival package for short term cooperative credit structure, total interest subvention for prompt repayment of crop loan, provision of soft loan to financially weaker cooperative societies to start new lines of business, restructuring of their borrowings, strengthening of the infrastructure, intensive capacity building, redeploying the surplus staff and refund of unpaid deposits. The positive policy direction of the state culminated in improved performance of PACS in terms of lending which increased by 2.4 times and the outstanding stood at Rs.18232 crores as on 28.2.2010. The PACS were made as one time shop for various needs of the rural people. In Tamil Nadu, there are 4,522 Primary Agricultural Cooperative Credit Societies. Their main objective is to provide agricultural and non-agricultural credit in rural areas besides distribution and sale of agricultural inputs like fertilizers, seeds and small agricultural implements and PDS business done through 15,569 outlets.

On signing the MoU with other stakeholders and after the receipt of the packages of assistance under the STCCS Reforms and Revival Package, it is expected that the PACS should achieve the viability. Given the experiences of PACS in this State and other States in India, in general, a question is frequently raised whether PACS still have any relevance and a chance of survival in the changed credit delivery system and in increasing economic liberalization in favour of private institutions in general and the new generation banks in particular. The first part of the question obviously refers to the intrinsic theoretical advantages and disadvantages of PACS vis-à-vis the investor oriented forms of business (IOF) and their validity

in the changed economic scenario. The second part of the question on the other hand seeks to find out whether and how through an objective and professional approach, the intrinsic theoretical advantages can be converted into real ones.

The present study intends to answer the questions, mainly with reference to PACS. No doubt, over the last ten decades or so the credit cooperatives have assumed mammoth structure covering the length and breadth of the state and covering 100 percent villages and household. However, their achievements in general have fallen far short of expectations, barring few PACS and that too in certain regions. The extent of 'Fat' in PACS in the State can be gauged the moment one seeks to find out

- a. how many of these PACS are sustainable ( which can maintain economic viability in the long run while being competitive not only at the local level but also at state level at the same time)
- b. have high ' member-centrality' ( which means fulfilling the members' needs with the resources available at their disposal)
- c. high 'member-participation' (meaning active participation of members in the business of PACS)

Only a fair proportion of PACS seem to pass the above criteria for success. Most of the existing PACS in the residual category can at best be looked upon as parastatals and only a small fraction of those are commercially viable. Although no precise estimates are available, the situation seems to be hardly improving over time. The stake holders of PACS are facing over-riding strategic question as they are in 21st century: Can the traditional PACS compete in increasingly technological driven financial services and products and also in the increasingly global market place in the face of declining government policy support?

## **PART - I**

### **Theoretical concept of economies of scope and its application to credit cooperatives**

#### **A. The Economies of Scope: Concept**

Traditionally, production theories have been concerned primarily with single product output. For this reason, arguments in industrial organization theory have generally been based on the production function for single-product output. Real business enterprises, however, generally produce multiple products. The emergence of large-scale multiproduct firms called conglomerates is one manifestation of this fact. Accordingly, growing attention is being focused on the phenomena that distinguish the multiproduct case from that of the single product. Multiproduct output cannot be explained solely by the single-product output theory or by the industrial -structure theory based upon it. Economies of scope, the economic efficiency in multiproduct output technology, refer to situations in which one firm can produce multiple products at lower cost than can several single-product firms. This paper is an attempt to empirically analyze multiproduct output theory and its application to PACS, which has now undergone rapid diversification in an environment of deregulated financial markets and aftermath effects implementation of STCCS Reforms and Revival Package.

As deregulation of financial markets has progressed, however, it has become clear that while the economies of scale theory retains validity and explanatory significance, one-sided dependence on quantitative expansion cannot guarantee profit increase. The argument is advanced in many quarters that PACS will diversify as a way to manage the more intensely competitive environment brought about by deregulation. They will need to enter new areas of business that will enable them to make the most of their information and accumulated know-how. The argument is that diversification and entry into new business areas will yield economies of scope and improve profitability.



## **B. Definition of Economies of Scope**

When the total production costs for one company to produce multiple products is lower than those that would be incurred by several single-product companies, the economic effect is called "economies of scope." Similar to economies of scale, economies of scope provide companies with a means to generate operational efficiencies. However, economies of scope are often obtained by producing small batches of many items (as opposed to producing large batches of just a few items). Because they frequently involve marketing and distribution efficiencies, economies of scope are more dependent upon demand than economies of scale. This is often what motivates manufacturers to bundle products or to create a whole line of products under one brand.

Although economies of scope are often an incentive to expand product lines, the creation of new products is often less efficient than expected. The need for additional managerial expertise or personnel, higher raw materials costs, a reduction in competitive focus, and the need for additional facilities can actually increase a company's per-unit costs. When this happens, it is often referred to as diseconomies of scope.

Nevertheless, when done correctly, economies of scope can help companies gain a significant competitive advantage. Not only do they trim expenses on a per-unit basis and improve profitability, but they can also force less cost-efficient competitors out of the industry or discourage would-be rivals from even entering the market.

Economies of scope exist if a firm can produce several product lines at a given output level more cheaply than a combination of separate firms each producing a single product at the same output level. Economies of scope differ from economies of scale in that a firm receives a cost advantage by producing a complementary variety of products with a concentration on a core competency. While economies of scope and scale are often positively correlated and

interdependent, strictly speaking the benefits from scope have little to do with the size of output.

For instance, banks have economies of scope when they offer a variety of related financial services, such as retail banking and investment services, through a single service infrastructure (i.e., their branches, ATMs, and Internet). Clearly, the costs of providing each service separately would be much greater than the costs of using a single infrastructure to provide multiple services.

### **C. Application of Economies of Scope to PACS:**

An organization which is contemplating to achieve the competitive advantage should necessarily be centrality domain in its operation and it could be achieved by acting as a growth centre. The concept of growth centre as applied to a firm means, 'firms' policies, programmes or schemes are implemented, practiced, adopted and directed for the development of agriculture, agricultural allied activities, promotion and establishing agro-based industries, creating infrastructure (both economic and social purposes), utilization of available human resources and fulfilling the needs of people'.

One may wonder the scope of activities PACS can undertake to fulfill the above areas of growth centre. To develop the agriculture, the activities starts from land development to ensuring better price besides establishing the value addition facilities like processing units. Agricultural allied activities including the animal husbandry, fisheries and plantation and horticulture. Promotion of agro allied industries like rice mill, oil mills and other units. Creation and utilisation of infrastructure include the storage, market yard, drying yard etc., All these activities not only required credit but also some services and PACS is the effective institution to provide this. A PACS handling a low volume of business will earn at best, just enough gross profit to cover its managerial and other costs. Increased land productivity through a greater volume of inputs and possibly a greater marketable surplus can increase profits. Additional off-farm activities, especially

processing and manufacturing, also require handling of inputs and outputs. If a cooperative undertakes schemes for increasing land productivity and also for off-farm activities, the greater volume of trade it handles will provide greater profits through:

- Economies of scale and scope,
- Better utilization of managerial and other manpower and
- Better utilization of facilities, such as warehouses and transport.

Thus, each factor- high input, high production, high marketable surplus, more inputs and outputs from off farm activities, value added by processing and manufacturing units, and better utilization of human resources and facilities- will contribute individually and mutually higher profits. Joint cooperative services are closely interwoven with economies of scope. It is only when profits from all possible channels flow through a cooperative to small farmers that the increase in their net income is substantial.

## **Part-II**

### **Implementation of STCCS Reforms and Revival Package in Tamil nadu.**

#### **A. Onset of STCC Reforms and Revival Package**

There are number of commissions and committees appointed by Government of India and the respective state governments to revitalize the PACS. It is suffice to say that no economic institution is subjected to such experiments than that of cooperatives especially the credit cooperatives. All the recommendations were made without substantial budgetary support. With the LPG set in motion where in the government of India extended the financial assistance to CBs and RRBs to cleanse their balance sheet, the same assistance is not immediately extended to cooperatives. But after a prolonged struggle the government of India finally agreed to consider assisting the cooperatives to cleanse the balance sheet of credit cooperatives and appointed the Task Force on STCC. The Task Force studied the whole structure of credit cooperatives both ST and LT and found some important impediments in the functioning of credit cooperatives. The main impediments are:

### **Impairment in terms of Governance**

- Losing the Competitive Advantage
- Loss of Self-Governance
- No residual control with the members
- Higher level control
- Interference and control by the State
- Compliance Report is not encouraging

### **Impairment in terms of Management**

- No accountability
- Ageing Staff
- Poor house-keeping
- No stake of the Members- A REAL STAKEHOLDER
- Low Profitability- No Profitability

### **Impairment in terms of Operations**

- Loans are given to 'lemons'
- Imbalances
- Too much of Procedure
- High Transaction cost of lending

Further, the Task Force also highlighted the contribution of credit cooperatives in agricultural development and the need for revival and reforming the functioning of credit cooperatives. It suggested the following measures to strengthen the credit cooperatives especially the STCC structure.

- Special financial assistance to wipe out accumulated losses and strengthen its capital base
- Institutional restructuring to make for democratic, member driven, autonomous and self-reliant institutions
- Radical changes in the legal framework to empower the RBI to take action directly in matters and to the extent deemed appropriate for prudent financial management of banks, and
- Qualitative improvement in personnel in all tiers and at all levels

through capacity building and other interventions, leading to an increase in overall efficiency.

## **B. Implementation of STCCS Reforms and Revival Package in Tamil nadu**

Based on the recommendations, the government of India agreed and requested all the state to enter into Memorandum of Understanding with the NABARD and State Government to avail the financial assistance. As such the Governemnt of Tamil Nadu entered into MoU with NABARD and Government of India in the month of January, 2008. The total recapitalization assistance assessed by the special audit was Rs.1902.01 crores, of which the GoI share was Rs.1441.59 crores and the state Government share amounted to Rs.230.81 crores. The loss on the part of PACS was assessed at Rs.229.61 crores. The total amount of assistance released so far was Rs.1293.20 crores including the GoI share of Rs.1008.34 crores and the state assistance of Rs.230.81 crores. The PACS contributed Rs.150.39 crores. The total assistance so far realised under the STCC Reforms and Revival package was around 68 percent. The GoI released about 70 percent of the total assistance and the remaining balance will likely to be released after conducting election to credit cooperatives.

The Governemnt of Tamil Nadu as per the MoU inserted a separate chapter on credit cooperatives in the existing Act, in the month of October, 2008, bringing much needed legal reforms to enable the PACS to undertake their activities without any interference from the State. As per the provision of the Act, the Government or the Registrar of Cooperative Societies cannot interfere in the following areas.

- Business affairs
- Management
- Funds- Mobilisation and Investment
- Employees- pay and their service conditions

As a leader of Short Term Cooperative Credit in Tamil Nadu, the Tamil Nadu State Apex Cooperative Bank has been playing a

predominant role in the implementation of the revival package. The TNSC Bank has formed a separate section namely “SCORE CELL (Short-term Co-operatives Revival Cell)” for the purpose of guiding and monitoring the progress of the implementation in Primary Agricultural Cooperative Credit Societies (PACS) and District Central Co-operative Banks (DCCBs) and also for coordinating with the implementing agencies viz., NABARD and office of the Registrar of Cooperative Societies in the State. The following stages are the status of implementation of reform packages.

1. Memorandum of Understanding signed on 3.1.2008.
2. State Level Implementing and Monitoring Committee (SLIC) and District Level Implementing and Monitoring Committee (DLIC) were constituted on 28.2.2008.
3. The Ordinance was promulgated to amend the Tamil Nadu Cooperative Societies Act 1983, on 20.10.2008.
4. The same was published in the Gazette on 21.10.2008 ( Tamil Nadu Ordinance 8 of 2008)
5. Further the Act was passed on 14.11.2008 in the Legislative Assembly and received the assent of the Governor on 30.11.2008 as Act No.62 of 2008.
6. Fourteen SLIC meetings were held so far.
7. Special Audit completed for 4527 PACS.
8. Government of Tamil Nadu had released Rs.261.19 Crores towards their share for PACS.
9. NABARD released Rs.1078.84 crore towards the Govt. of India Share.
10. TNSC Bank had credited the amount of assistance received from GoI of Rs.1078.84 crore and GoTN of Rs.261.19 crore to PACS through DCCBs on 27.4.2009, 1.9.2009, 30.3.2010, 9.12.2010 and 25.1.2012.

11. Special audit of 22 DCCBs completed.
12. Government of Tamil Nadu released Rs.46.73 crores towards its share for DCCBs.
13. Government of Tamil Nadu also released Rs.5.30 crores towards its share for ineligible PACS.
14. Special audit of TNSC Bank completed with 'NIL' claim.
15. Common Accounting System and Management Information System have been installed in all PACS from 1.4.2009. Two training programmes were conducted to all PACS Secretaries on CAS/MIS.
16. Common Software for DCCBs and PACS is under implementation.
17. ACSTI, sponsored by TNSC Bank, Natesan Institute of Co-operative Management, Chennai, Institute of Co-operative Management, Madurai have completed the training programme to all PACS Secretaries on 'Capacity Building' and 'Business Development and Profitability.'

**Table 1**  
**Some facts of STCCS Reforms and Revival Package in**  
**Tamilnadu**

Total No. of PACS as on 31.3.2004	4540
Number of Eligible PACS	4474
Number of ineligible PACS	66
Total loss as per special audit	Rs.2070.89 crores
GOI Share	Rs.1535.82 crores
State Govt. share	Rs.263.21 crores
PACS Share	Rs.271.86 crores
Assistance of CRAR	Rs.38 crores
Total amount released till date	Rs.1340.03 crores
of which amounts adjusted by DCCB against dues	Rs.301.16 crores

**Table 2**  
**Impact Assessment**

Performance of PACS	Pre package period (31.3.08)	As on 31.3.12
Viable PACS	1512	3041
Potentially viable PACS	1673	1212
Unviable PACS	1273	281
Membership	59,19,000	1,04,15,000
Share capital	524.28	762.31
Reserves	362.47	379.07
Deposit	2672.86	4926.14
Borrowings	3917.56	9379.48
Others		
Investment	591.08	1884.28
Loans and advances	4897.56	14158.39
Overdues / NPA		
No. of SHG		
Loan amount		
No. of JLG		40000
Loan issued		Rs.671.86 crores
No. of PACS doing insurance business		4336
Amount of insurance business done - premium collected		Rs.79.80 lakhs
No. of PACS having agri clinic		190
No. of PACS having Agri. Service Centre		883
No. of PACS having Common Service Centre		537
No. of PACS doing Non-controlled Consumer Business		
No. of PACS doing marketing of agri. produce		
No. of PACS having Mini Super Market / Bazaar		
No. of PACS having processing facilities		
No. of PACS computerized		741



### **PART-III**

## **Implementation of STCCS Reforms and Revival Package in Dharmapuri DCCB, Tamil nadu**

### **A. Tapping Economies of Scope through STCCS Reform and Revival Package**

New opportunities are emerging. The world of agriculture has changed dramatically. Dynamic new markets, far-reaching technological and institutional innovations, and new roles for the state, the private sector, and civil society all characterize the new context for agriculture. The emerging new agriculture is led by private entrepreneurs in extensive value chains linking producers to consumers and including many entrepreneurial smallholders supported by their organizations. The agriculture of staple crops and traditional export commodities also finds new markets as it becomes more differentiated to meet changing consumer demands and new uses (for example, bio-fuels) and benefits from regional market integration.

### **Value Chain Activities**

Cooperatives by default of the organisational configuration can undertake the entire value chain activities to achieve economies of scale in agricultural production. The cooperation among the verticals and cooperation between the horizontal cooperatives ensure the strategic advantages to design the new institutional mechanism (which is popularly known as new generation cooperatives). Through strategic initiatives and new institutional mechanism the cooperatives can easily serve emerging market demands and correct the market imperfection. The emerging market needs and demands are met through the value chain activities.

In an organisation, every function creates a value. For attaining competitive advantage, the organisation has to combine and manage the value so generated, as a system. Coordination of activities and

management of linkages form part of the core of competitive advantage generated through the value chain. In the value chain for credit cooperatives in India, the primary services form the length of the chain. The breadth of the chain is formed by the support services contributed by the manpower, managerial process, innovation, investment in technology and the resources at the disposal of the institution for the betterment of client services. Productivity forms the thickness of the chain. Volume of customers attracted is a function of thinness of margin and quality of service. Given the structure of the value chain, cooperatives have to enrich their core competence-knowledge and skills to deal with large rural clientele- with improved quality of services and thin margin, thus making the services competitive in comparison with other players in the market. Though the margin is thin, the volume would arise from the increased business.

Primary services: Deposits, lending, monitoring, recovery, investment, diversified business activities and business growth.

Support services: Planning, management, MIS, HRD, R&D, Resources.

Dharmapuri district is one of the backward districts in Tamil nadu curved out from the erstwhile Salem district. The Dharmapuri District Central Cooperative Bank (DDCCB) is serving two district namely Dharmapuri and Krishnagiri. The implementation of STCCS Reform and Revival package is done as per the guidelines issued by the Registrar of Cooperative Societies, Government of Tamil nadu.

## **B. Performance of DDCCB**

As a District Central Cooperative Bank serving two districts, the main activities of the DDCCB is to provide various farm and non-farm credit to the PACS as well as individuals under different categories of loan. The progress made by the DDCCB from 2007-08 to 2011-12 and it impact of pre and post STCCS Reforms and Revival Package period is positive. In almost all the financial

indicators/parameters the DDCCB is marching high through the periods and also post STCCS Reforms and Revival Package. Notably the loans and advances during 2007-08 was Rs.49996.89 lakhs and it increased to Rs.99764.77 lakhs during 2011-12 recording a growth of 99.54%. When observed the post STCCS Reform and Revival package growth rate was 64.41 percent. The main reason for increase in the loan and advances was most of the PACS became eligible for high cash credit facilities on account of the financial package under the STCCS Reforms and Revival package.

The DDCCB once was under Section 11C of BR ACT, with an accumulated loss of Rs.2313.95 lakhs and their NPA was also on the higher side. For instance, during the year 2007-08 the gross NPA was Rs.12,648 lakhs and it reduced to Rs.8,338.41 lakhs during 2011-12. In the same way the percentage of net NPA to net advances during 2007-08 was 4.64% and it drastically came down to 0.90%. This is mainly due to increased financial help to the member institutions/PACS.

### C. Economies of Scope at the District level

After the implementation of STCCS Reform and Revival package, PACCS are encouraged to take up the diversified business activities to tap the potential of economies of scope. As such the following activities are undertaken by PACCS in Dharmapuri District.

**Table - 3**

Name of the Activities	No. of PACCS	Income	Expenditure	Net Income
Common Service Centre	29	13.13	0.57	12.56
Agro Service Centre	26	19.35	11.05	8.30
Agriclinics	4			1.17

Prior to the implementation of package there was no diversified business activities undertaken by PACS. Post implementation

witnessed some diversified business activities. It enabled PACS to earn more income and achieved viability.

## PART - IV

### *A. Tapping Economies of Scope- A Case of Naripalli PACS*

The Naripalli PACS was established on 10/7/1959, to serve the rural people particularly the farming community. The area of operation of the society was two revenue villages covering 16 small villages. The total population in the area of operation of the society was 10855 of which 5906 were men. The total area available under the area of operation was 8577.45 acres. The area is irrigated by Kalaru Check Dam, Canal and Well irrigation. The main crops cultivated were paddy, sugarcane, turmeric, banana, tapioca, groundnut, sunflower seeds, cotton, bamrose grass and others. The total number of members of the society was 6977 of which 2301 was A class members and 4675 were associate members. There were 7 employees working in the society and society runs six full time and three part-time ration shops, to supply controlled consumer goods to 3280 ration card holders.

**Table 4**  
**Financial Assistance Received under STCCS Reform and Revival Package**

Sl.No	Particulars	Amount
1	Government of India Share	61.22
2	State Government Share	2.36
3	PACS Share	0.48
	<b>Total</b>	<b>64.06</b>

Prior to the implementation of STCCS Reforms and Revival package the society activities were very limited and Society had an accumulated loss of Rs.29.75 lakhs during 2007-08. The society

received a financial assistance of Rs.63.59 lakhs, of which Rs.61.22 lakhs contributed by Govt. of India and State Government contribution was Rs.2.31 lakhs. The Society utilized the entire assistance to provide jewel loan to its members and received a cumulative interest of Rs.29.27 lakhs and wiped out the entire accumulated losses and at the end of 2011-12 the net profit of the society was Rs.10.45 lakhs. In addition to the above increased credit activities, the society also diversified its business in other areas like common service centre, agricultural service centre, sale of non-controlled items through mini super market, collection of DDs etc.

The society maintained a cordial relationship with all stake holders i.e. cooperative department, DCCB, Panchayat and other Institutions. The employees of the society are committed in safeguarding the interest of the society.

***B. Impact of STCCS Reforms and Revival Package on certain select parameters***

**Membership**

The total number of members prior to STCCS Reforms and Revival package was 5455 and it increased to 7226 recording a growth of 32.47 percent. The increase in membership is due to providing more credit to the members especially the associate members.

**Table 5**  
**Membership position**

Sl. No	Type of Member	No.of Members		% of Growth
		31.3.2009	31.7.2012	
1	A Class members	2300	2547	10.74
2	Associate members	3155	4679	48.30
3	Total	5455	7226	32.47

## Financial Performance

The Financial Performance of the organization is presented in table 6 below

**Table 6**  
**Financial Performance**

Sl.No	Particulars	As on 31.3.2009	As on 31.7.2012	% of Growth
1	Share Capital (excluding waiver amount)	17.05	31.36	83.93
2	Reserves and surplus	30.31	11.55	-61.89
3	Deposits	121.54	265.68	118.59
4	Borrowings	187.68	443.76	136.45
5	Loans and advances			
	(i) Crop Loan(KCC, JI Agri )	87.78	127.27	44.99
	(ii) J.L. (Non-agri )	201.34	571.62	183.91
	(iii) Others	14.35	75.52	426.27
	(iv) Total	303.47	774.41	155.19
6	Investments	7.08	32.11	353.53
7	Accumulated loss if any	0	0	
8	Profit/Loss	2.62	11.46	337.40
9	Recovery percentage	89%	94%	5.62

## Profitability Analysis

The profitability analysis of PACS is done based on the amount PACS invested in the business ie the average working funds and it is a denominator to measure the profitability of PACS. It indicates that the profitability of the PACS has improved many fold after the implementation STCCS reformed under revival package prior to the implementation of STCCS reform and revival package the average working fund was Rs.405.55 lakhs, whereas during the year 2010-11 the average working fund increased to 717.89 lakhs. The yield on asset was only 4.08 percentage to the average working funds recorded two fold increase (9.38percentage) at the end of 2010-11. In other words within 3 years of implementation the yield has increased due to the recapitalization assistance. The net margin earned by PACS prior to implementation of STCCS reform and

revival package was near 0.02% to the average working funds and is increased to 0.71% at the end of 2010-11. During the year 2009-10 the net margin shows an abnormal increase i.e. 5.59% as the Miscellaneous income recorded at 4.99%. The higher Miscellaneous income is the result of release of non- statutory reserves.

**Table 7**  
**Profitability Analysis of NPACCS**

Profitability Measures	2007-08	2008-09	2009-10	2010-11
Avg, Working Funds	405.55	532.13	533.16	717.89
Yeild on Assets	4.08	4.46	8.87	9.38
Cost of Funds	2.75	3.35	5.54	5.75
Gross Financial Margin	1.33	1.12	3.34	3.63
Misc Income	1.50	1.42	4.99	1.19
Risk Cost	0.04	0.09	0.36	0.34
Net Financial Margin	2.80	2.44	7.97	4.48
Transaction Cost	2.77	2.01	2.37	3.77
Net Margin	0.02	0.44	5.59	0.71

As stated earlier the STCCS Reforms and Revival Package enabled the Society to diversify its business activities in number of fields. The society started mini super market during the year 2010. During this period the total sales was Rs.28.96 lakhs and it increased to 38.96 lakhs in 2011-12 and earned a net profit of Rs.1.16 lakhs. The society also established Common Service Centre to provide chitta, Xerox facilities, scanning and other utility services. The net income earned by the society per month was Rs. 89,075/-.

Year	Total Sales	Income	expenses	Net income
2010-11	28.96	2.02	0.99	1.03
2011-12	38.96	2	1.04	1.16

**Table 9**  
**Self Help Group**

Particulars	2008-09	2009-10	2010-11	2011-12	2012-13
No. of group	5	7	8	10	10
No. of Members	50	70	80	100	100
Loans issued	2.58	9.5	6.42	3	

**Table 10**  
**Joint Liability Groups**

Particulars	2008-09	2009-10	2010-11	2011-12	2012-13
No. of Groups	5	10	10	16	17
No. of Members	50	100	100	160	170
Loans issued					
i) Short-term	1.76	1.96	2.36	4.96	2.56
ii) Medium-term				40.38	
iii) Total	1.76	1.96	2.36	45.34	2.56



In order to ensure the financial inclusion in the year of operation of the society, it undertook the marketing of insurance product and the society also earned good amount as a commission. During the year 2012-13 the total commission earned by the society was Rs.1.34 lakhs. In order to serve the farming community in a better way, the society established agro service centre. The total investment made to establish this Centre was Rs.8.77 lakhs. The society earned Rs.7,967/- per month as service charges.

Under the initiative of NABARD, the Govt. of Tamil Nadu encourages all the PACS to organize both self help groups and joint liability groups. The society formed only 10 self-help groups and no loan is issued to those groups. At the same time, the society formed 5 JLGs in 2008-09 with 50 members and provided a loan of Rs.1.76 lakhs. In the year 2011-12 the number of groups increased to 16 covering 160 people as its members and provided a loan of Rs.45.34 lakhs.

The analysis enumerated above, pictures the ability of PACS in tapping the economies of scope through the STCCS Reforms and Revival Package.

## **Conclusion**

It is neither a surprise nor a secrete, an organisation grow at a rapid pace during the period of economic prosperity. The organisations are tested only during the hard times when the economy slow down, the economic crisis put its hurdles on the rapid growth and expansion. The only organisation exception to this phenomenon is cooperatives. It is only during hard times cooperative prove its mettle and recorded rapid economic progress. The recent economic crisis proved detrimental to many of the Multi National Companies (MNCs). Even big corporate banks collapsed but at the same time witnessed the growth of Cooperative Banks and Credit Unions all over the world. The ICA survey revealed that the Cooperative Banks and Unions put together achieved 36% in deposit mobilisation. McKinsey Report on Cooperatives again highlighted the spectacular performance of Cooperative Banks.

The Cooperative especially the Credit Cooperatives have enormous where withal to act as a domin centrality in the area where they serve. There are many successful examples (though they have not been documented properly) residing in residuals. PACS being a local organisation is influenced by many factors and notably among them is the leadership and professional approach in delivering credit and non-credit services.

Though, success exists everywhere the failure of the policy frame makers to create enabling environment to tab the economies of scope is quite evident everywhere. The restrictive legal frame work, prohibits efficient and dynamic PACS to enter into business areas of another PACS which is suffering from its inherent weaknesses thus, depriving the members of PACS in availing services from the successful PACS. Besides, there are several areas of concern raised in the ability of PACS in undertaking various diversified business activities put break on the performance of PACS.

The need of the hour is to create enabling environment conducive to PACS in their investment portfolio, agency of investment, undertaking a diversified new and innovative business ensure the professional approach in doing the business. Once if above prescriptions are taken, PACS will certainly act as a centrality domain - A Growth Centre in its area of operations through tapping of economies of scope.

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# EFFICIENCY AND PRODUCTIVITY OF COOPERATIVE BANKS IN KARNATAKA – DATA ENVELOPMENT ANALYSIS

**Mahesha. M \***

## **1. Introduction**

The gains of the productive sector depend upon the performance of financial sector and it contributes to economic growth by providing financial resources **appropriately and timely to the development of the economy**. An enduring and efficient banking sector provides a base for effective stabilisation policies and investment prospects to achieve genuine earnings for developing economy (Rangarajan, 1997). Therefore, efficiency of banking sector received a high priority from policy makers. Development of the real sector depends on this sector.

Co-operative banks have been playing a distinct and import role in the banking system of in terms of their reach, volume of operation and purpose they serve. Co-operative banks aim at fulfilling the banking requirements of rural populace. They were established with the prime objective of meeting the credit needs of the rural sector.

Greater degrees of efficiency among co-operative banks would result in greater accessibility to finance, higher profitability and increased financial services to rural people. Efficiency of co-operative banks often lies in the efficiency of each co-operative

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bank which contributes to the total efficiency of the co-operative banking system.

This study is particularly important because, despite their relatively small market share in comparison to commercial banks, cooperative banks play an important role in the development of the local economy. They mainly focus on farmers, small and medium enterprises (SMEs) and provide support and encourage the development of local enterprises. By offering competitive banking products adjusted to local conditions and with operational features, they attempt to be established as reliable, friendly, and flexible. Hence, the level of their efficiency and the productivity analysis can be of special interest to several stakeholders such as customers-members, bank managers, local community, and of course bank regulators.

Over the past years, several studies have examined the efficiency of banks using either parametric (e.g. stochastic frontier analysis) or non-parametric (e.g. data envelopment analysis-DEA) techniques. However, most of these studies focus on commercial banks. Very few have examined the efficiency of cooperative banks exclusively. (e.g. Molyneux and Williams, 2005; Bos and Kool, 2006) or studied them in comparison with other types of banks (e.g. Girardone et al., 2006). Some of the studies that examine cooperative banks focus on individual countries such as U.S. (Rezvanian et al., 1996), Netherlands (Bos and Kool, 2006), Italy (Altunbas et al., 1994), Finland (Kolari and Zardkoohi, 1990), and Germany (Lang and Welzel, 1996), while others focused EU countries (e.g. Molyneux and Williams, 2005; Cavallo and Rossi, 2002; Weill, 2004; Girardone et al., 2006). The scenario in India and Karnataka level is not much different; most of the studies have examined efficiency and productivity of commercial banks and compared them across different ownership (Milind Sathye 2003, Bhattacharya, A. et.al.1997, Shanmugam and Das 2004, Kumbhakar and Sarkar 2004). The studies focussing on the efficiency of cooperative banks are very

scanty. Hence this study made a moderate attempt to measure efficiency and productivity of District Cooperative Banks in Karnataka employing Data Envelopment Analysis (DEA).

## 2. Methodology

The present study is mainly based on secondary data collected from National Federation of State Co-operative Banks Limited (NAFSCOB). The study used Data Envelopment Analysis (DEA) methodology to measure the efficiency and total factor productivity of District Cooperative Banks in Karnataka. The study adopted intermediation approach in selection of inputs and outputs. Inputs are considered in both physical and financial terms. Input variables include number of employees, deposits, and working capital, while the output variables include the value of loans and investments. Inputs and outputs are specified considering the availability of data.

DEA is a linear programming model initially developed by Charnes et.al (1978). Sherman and Gold (1985) were the first to employ DEA to estimate efficiency of banks. DEA is a special application of linear programming which measures the relative efficiency of individual Decision Making Units (DMUs). A DMU could be any financial service provider, bank or co-operative bank which uses multiple inputs to produce multiple outputs. It makes use of mathematical programming technique to identify best practice DMUs from the observed data on inputs and outputs. The constructed relative efficiency frontiers are non-statistical or non-parametric in the sense that they are constructed through envelopment of the DMUs, with the best practice DMUs forming efficient frontier.

DEA employs linear programming technique to obtain best possible solution for each DMU. It measures the distance necessary to move an inefficient DMU to the efficiency frontier and then translates that distance into the amount of resource (inputs) that may be reduced to make the DMU efficient relative to DMUs

on the frontier. As an efficient frontier technique, DEA identifies the inefficiency in a particular DMU by comparing it to similar DMUs regarded as efficient, rather than trying to associate a DMU's performance with statistical averages that may not be applicable to that DMU (Sathye, 2003).

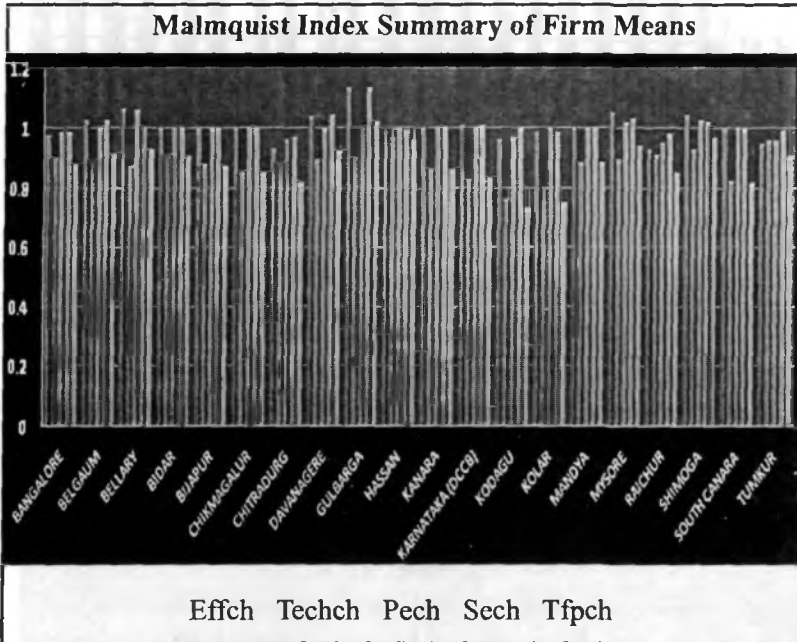
DEA generates a simple, easily interpretable relative measure of efficiency (called DEAscore) for each DMU included in the particular sample. The DEA score is a value ranging from 0 to 1.00. A DEA score of 0 means that a DMU is maximally inefficient compared to all other DMUs in that sample. A DEA score of 1.00 means that DMU is 100 per cent efficient.

### **3. Results and Discussion**

This section discusses the efficiency and productivity scores derived from Malmquist DEA analysis. The summary statistics of selected input and out variables are given in Table 1. The panel means of deposits, employees, working capital, loan advances and investment are Rs. 31900 lakhs, 215.10 persons, Rs. 52000 lakhs, Rs.28900 lakhs and Rs.14500 lakhs respectively. The highest value of standard deviation is recorded for working capital followed by loan advances.

Malmquist index summary of annual means and its decompositions of twenty DCCs of Karnataka are reported in Table-2 and Fig 1. The annual mean of the efficiency change (effch) and Scale Efficiency change have shown an improvement by only an amount of 0.2 % and 0.7 %, but not significant. Whereas technological change (techch), 0.874 pure technical efficiency change (pech) 0.995 and total factor productivity change 0.876 (tfpch) were regressed during the study period. These results reveal that the DCCs banks in Karnataka are technologically backward and inefficient in using inputs. Further the analysis shows that among twenty DCCs banks only Gulbarga DCC bank has shown a marginal

improvement in tfpch and all other banks tfpch has decreased. Out of twenty banks nine have used the available technology efficiently but the remaining banks are inefficient. None of the banks have shown technological change. It implies that DCCs are lagging behind in technological advancement. In case of pech and sech also mixed results are obtained.

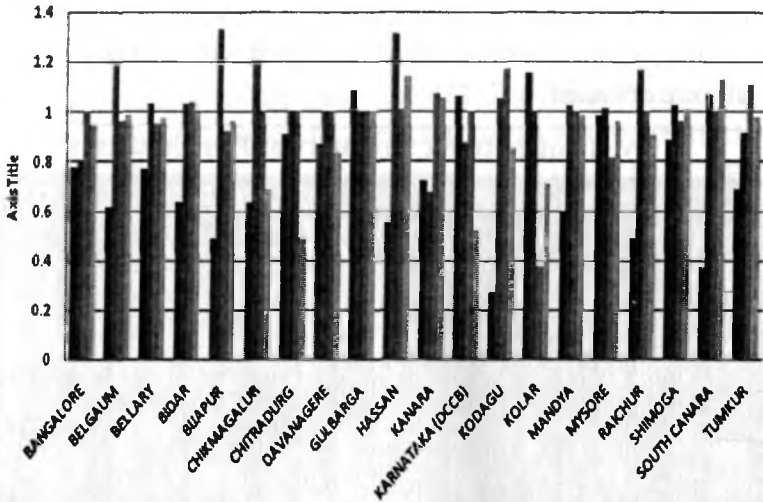


The results of year-wise effch for the study period are given in Table-3. In 2009 effch scores of four banks is one. It indicates that there is no gain or loss in efficiency. While five banks have experienced growth of effch remaining eleven banks effch has declined. But in 2010 eleven banks have shown improvement in effch, five have no change and four banks effch has decreased. Four banks improved effch, six have no change and other ten banks declined. The results of 2012 also is not much differ. Overall these results show that there no consistency in using existence technology. Hence the



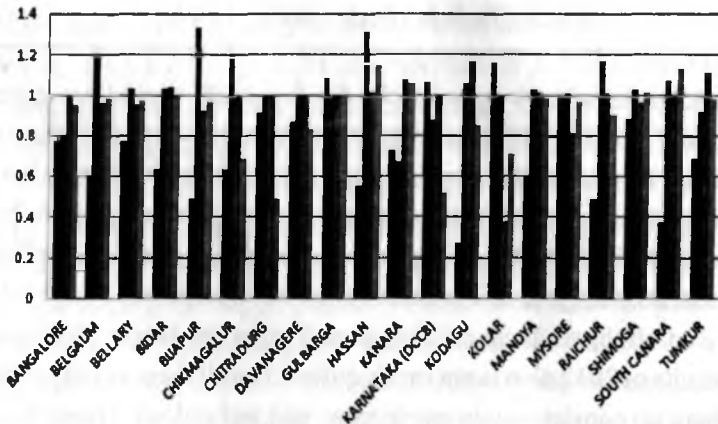
banks should improve their technical skill for optimal use of available technology.

Year-wise effch



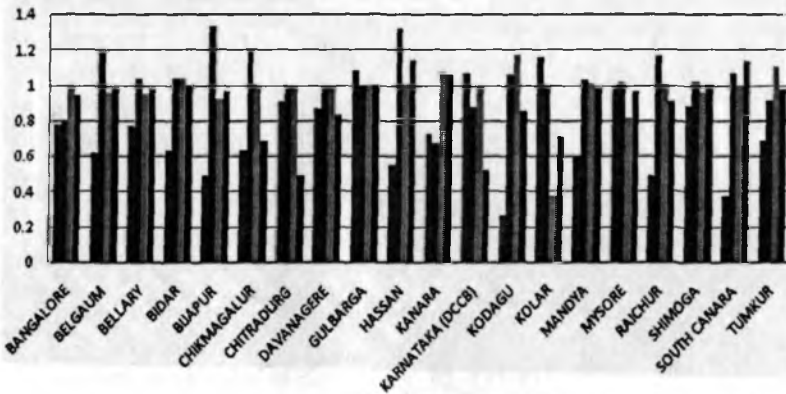
Technical change scores are given in Table: 4. The results of change of technology has shown that the application new technology is very poor. Techch scores for almost all bank in the study period have less than one indicating decline of technological change except few banks in 2011.

Year-wise techch

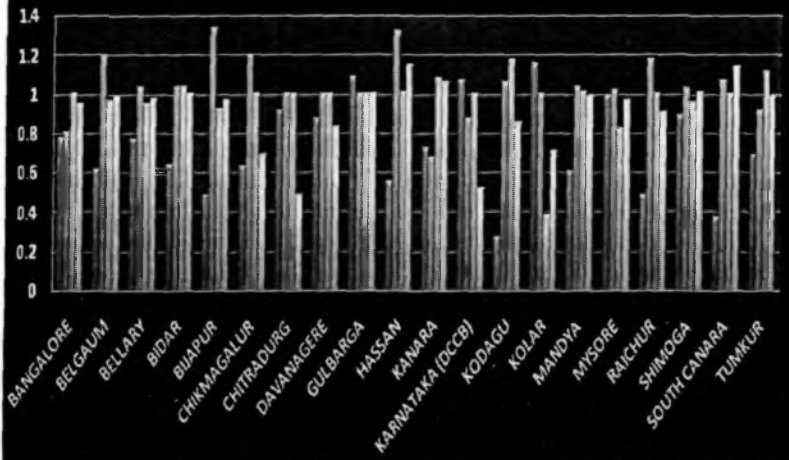


Efficiency change scores are decomposed into pure technological score and scale efficiency change. The results of these two are reported in Tables 5 and 6 respectively. The result of these scores reveals that if there any improvement in technical efficiency change it is mostly due to scale efficiency change. Further, the scores of these measures are mixed over the study period indicating fluctuation in use of available technology.

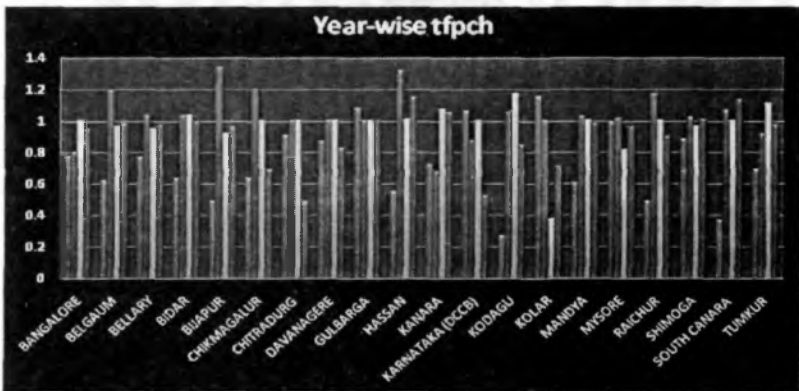
Year-wise pech



Year-wise sech



Total factor productivity change score is the product of efficiency change and technical change. Only three banks have shown improvement of tfpch in 2009 remaining seventeen DCC banks tfpch has declined. Whereas in 2010, tfpch has improved in twelve banks and it decreased in four banks. Tfpch scores for the years 2011 and 2012 have decreased for majority banks. From this result it can be observed that the DCC banks could increase their performance with existing inputs.



### Conclusion and Policy Implication

The objective of this paper is to measure efficiency and productivity of DCC banks in Karnataka during 2008 and 2012. To measure performance approach has been used. The empirical results of the study reveal that DCC banks are inefficient in using existing technology and also the technological advancement is poor. Because of this inefficiency DCC banks have less competitive edge over commercial banks. Hence, DCC banks should improve technological skill and upgrade their technology. This will make them competitive in this globalised world.

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## Appendix

**Table : 1 Summary Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
deposits	100	3707	131749	3.19E4	27846.760
employees	100	40	561	215.10	130.495
workingcapital	100	6755	198965	5.20E4	40416.677
loanadvances	100	433	122418	2.89E4	29714.832
invt	100	1486	70789	1.45E4	13795.970

**Table : 2 Malmquist Index Summary of Annual Means of DCC Banks in Karnataka**

DCC Bank/District	effch	techch	pech	sech	tfpch
Bangalore	0.971	0.901	0.986	0.986	0.875
Belgaum	1.026	0.889	1	1.026	0.911
Bellary	1.061	0.873	1.058	1.002	0.925
Bidar	1.001	0.904	1	1.001	0.905
Bijapur	0.993	0.877	0.993	1	0.871
Chikmagalur	1.002	0.848	1	1.002	0.849
Chitradurg	0.93	0.875	0.96	0.969	0.814
Davanagere	1.034	0.891	0.993	1.041	0.921
Gulbarga	1.132	0.902	1	1.132	1.02
Hassan	0.987	0.967	1	0.987	0.955
Kanara	1	0.862	1	1	0.862
Karnataka (Dccb)	1.009	0.827	1	1.009	0.834
Kodagu	0.963	0.757	0.966	0.997	0.728
Kolar	0.986	0.755	1	0.986	0.745
Mandya	1	0.882	1	1	0.882
Mysore	1.049	0.896	1.02	1.029	0.941
Raichur	0.93	0.91	0.948	0.981	0.846
Shimoga	1.039	0.93	1.023	1.016	0.966
South Canara	0.994	0.822	1	0.994	0.817
Tumkur	0.946	0.958	0.956	0.99	0.906
mean	1.002	0.874	0.995	1.007	0.876

**Table: 3 Year-Wise  
Changes in efficiency (Effch) of DCC Banks in Karnataka**

DCC Bank/District	2009	2010	2011	2012
Bangalore	1	1	1	0.89
Belgaum	0.94	1.226	0.948	1.014
Bellary	1.219	0.981	0.946	1.119
Bidar	0.871	1.242	0.977	0.95
Bijapur	0.805	1.342	0.91	0.989
Chikmagalur	0.847	1.189	1	1
Chitradurg	1	1	1	0.748
Davanagere	1.135	1.075	1.001	0.935
Gulbarga	1.09	1.263	0.991	1.202
Hassan	0.594	1.484	0.956	1.128
Kanara	1	1	1	1
Karnataka (Dccb)	1.036	1	1	1
Kodagu	0.817	1.05	1.157	0.865
Kolar	1	1	0.738	1.281
Mandya	0.942	1.062	1	1
Mysore	1.102	1.066	0.819	1.261
Raichur	0.726	1.255	0.97	0.845
Shimoga	1.026	1.086	0.951	1.098
South Canara	0.88	1.071	0.988	1.049
Tumkur	0.711	1.042	1.061	1.02

**Table:4 Year-Wise  
Technological Changes (Techch) of  
DCC Banks in Karnataka**

DCC Bank/District	2009	2010	2011	2012
Bangalore	0.775	0.799	1	1.063
Belgaum	0.654	0.968	1.015	0.971
Bellary	0.631	1.053	1.005	0.869
Bidar	0.726	0.83	1.058	1.046
Bijapur	0.603	0.992	1.012	0.974
Chikmagalur	0.746	1.008	1	0.686
Chitradurg	0.908	1	1	0.647
Davanagere	0.763	0.93	0.999	0.888
Gulbarga	0.994	0.792	1.009	0.832
Hassan	0.926	0.885	1.053	1.015
Kanara	0.723	0.672	1.074	1.056
Karnataka (Dccb)	1.026	0.873	1	0.521
Kodagu	0.328	1.007	1.011	0.983
Kolar	1.155	1	0.509	0.553
Mandya	0.636	0.968	1.002	0.984
Mysore	0.896	0.948	0.994	0.764
Raichur	0.669	0.929	1.032	1.069
Shimoga	0.859	0.943	1.007	0.918
South Canara	0.42	0.996	1.012	1.077
Tumkur	0.963	0.876	1.042	0.958

**Table:5**  
**Year-Wise Pech (Pene Technological Changes)**

DCC Bank/District	2009	2010	2011	2012
Bangalore	1	1	1	0.943
Belgaum	1	1	1	1
Bellay	1.215	1.032	0.961	1.04
Bidar	0.867	1.412	0.946	0.864
Bijapur	0.809	1.398	0.89	0.967
Chikmagalur	0.88	1.136	1	1
Chitradurg	1	1	1	0.849
Davanagere	0.814	1.128	1.007	1.053
Gulbarga	0.9	1.081	1.028	1
Hassan	0.594	1.507	0.969	1.154
Kanara	1	1	1	1
Karnataka (Dccb)	1	1	1	1
Kodagu	0.825	1.054	1.146	0.873
Kolar	1	1	0.975	1.025
Mandya	0.947	1.057	1	1
Mysore	0.985	1.071	0.859	1.194
Raichur	0.735	1.258	0.987	0.884
Shimoga	0.971	1.077	0.955	1.094
South Canara	1	1	1	1
Tumkur	0.741	1.009	1.099	1.017



**Table: 6**  
**Year –Wise Total Factor productivity (Trpch)**

DCC Bank/District	2009	2010	2011	2012
Bangalore	0.775	0.799	1	0.946
Belgaum	0.614	1.186	0.962	0.984
Bellary	0.769	1.032	0.95	0.972
Bidar	0.633	1.031	1.034	0.994
Bijapur	0.486	1.332	0.921	0.963
Chikmagalur	0.632	1.199	1	0.686
Chitradurg	0.908	1	1	0.484
Davanagere	0.865	1	1	0.83
Gulbarga	1.083	1	1	1
Hassan	0.55	1.313	1.007	1.145
Kanara	0.723	0.672	1.074	1.056
Karnataka (Dccb)	1.063	0.873	1	0.521
Kodagu	0.268	1.057	1.17	0.85
Kolar	1.155	1	0.376	0.709
Mandya	0.599	1.028	1.002	0.984
Mysore	0.987	1.011	0.814	0.963
Raichur	0.486	1.167	1.001	0.903
Shimoga	0.882	1.023	0.958	1.008
South Canara	0.37	1.066	1	1.131
Tumkur	0.685	0.912	1.105	0.977

# RECOGNITION OF FISHY ECO-LABEL IN JAPAN AND ROLE OF CONSUMER CO-OPERATIVE

Miyazaki, Tatsuro \*

## Introduction

The first purpose of this paper is to clarify about the recognition of Fishy Eco-label. The second purpose is to discuss about the role of Co-operatives in achieving sustainable society. Fishy Eco-Label is a labeling system for conservation of marine resources. This system certifies fishery product produced in a sustainable way. In this paper, we deal with “Marine Stewardship Council Eco-label” and “Marine Eco-Label Japan” as Fishy Eco-Label.

At present, fish stocks are decreasing all over the world. According to The State of World Fisheries and Aquaculture 2014, 28.8% of fish stocks of whole world were estimated as fished at a biologically unsustainable level in 2011 (FAO, 2011). In Japan, Fishery Agency evaluated fish stocks in the sea near Japan by dividing 84 groups. This grouping is based on fish species and regional population. According to the evaluation of Fishery Agency in 2014, 17.6% of the groups have wealth of fish stocks, but 49.4% of the groups have poor of fish stocks. The reasons that fish stocks are decreasing are many, for example, development of coastal areas, marine pollution, alien species, global warming. But main reason is bad fishing in the form of overfishing, bycatch, and ghost fishing.

Fishy eco-label was made to reduce bad fishing. Fishery products certificated by specific certification organizations are packaged with

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eco-labels. And, if consumers choose products with eco-label, producer will make an effort to get eco-labels. Such action is important for Japan in particular, because Japan is one of the major consumer of fishery products. But, these eco-labels are not famous, and most of the consumers don't recognize these labels in Japan.

For improving recognition of fishy eco-label, the role of retailer is important. There is a need to introduce fishy eco-label to consumer in daily life and purchasing scene. This paper focus on consumers' co-operatives, Retail Co-ops in particular, to discuss how these corporatives can contribute to improving the recognition of eco-labels.

### **Consumer Co-operatives in Japan**

The nature of consumers' co-operatives in Japan is discussed here. Consumers' co-operatives are organization based on the Consumers' Co-operative Livelihood Law. At present, there are several types of consumers' co-operatives, viz Retail Co-ops, Health & Welfare Co-ops, Insurance Co-ops, and Housing Co-ops. According to coop Facts & Figers 2013 the total turnover of consumers' co-operative is 3,352 billion yen, and turnover of Retail Co-op is 3,028 billion yen (Table.1).

Retail Co-op is most famous type of consumers' co-operatives in Japan. Most of members are consumers who purchase the goods from Retail Co-op. So, most of the members think that consumers' co-operative is Retail Co-op. The operations of Retail Co-op are roughly divided into two types. One is a store operation, and the other is home delivery service. In 2013, store sales was 880 billion yen, home delivery sales was 1,671 billion yen. In the retail sales, fresh foods occupy 54.8% of retail sales, groceries occupy 25.4%, other foods 0.1%, non-foods 15.8%, and others 3.8% (Japanese Consumers' Co-operative Union, 2013).

According two Japanese Consumer's Co-operative Union (JCCU), 343 consumers' co-operatives are its members. The main

activities of these co-operatives are 1) Development, improvement and supplying of Co-op brand products to member Co-ops, 2) Co-op insurance business, mail-order business, welfare business, and travel business, 3) Planning and promotion of food safety, environmental and consumer's affairs, 4) Instruction, communication and adjustment for businesses and member activities performed in the member Co-op's, 5) Inspection of the products, quality control, 6) Exchanges between overseas Co-ops, including support and attendance of international conferences, 7) Secretariat of the Health Co-op.

**Table.1**  
**Status of Consumer Cooperatives (2013)**

Number of Consumers' Co-operative	577
Retail Co-op	449
Medical Co-op	108
Insurance/Housing Co-op	8
Membership (thousand)	27,339
Total business turnover (billion yen)	3,352
Retail sales amount (billion yen)	3,028

*Sources:* Japanese Consumer's Co-operative Union, "Co-op Facts & Figures 2013"

### **Certification Organizations of Fishy Eco-labels**

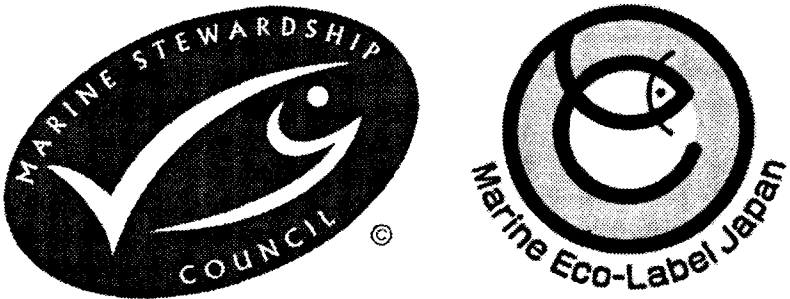
In Japanese fishery products, the main certification organizations for fishy eco-label are Marine Stewardship Council (MSC) and Marine Eco-Label Japan (MELJ). MSC is a non-profit organization which sets standard for sustainable fishing. This organization was established in 1997, and has head office in London. MELJ is established in 2007 as the first certification organization in Japan for fishy eco-label. The secretariat is positioned in Japan Fisheries Association.

The purposes of fishy eco-label are

- 1) Sustainability of fishery resources; without overfishing, to maintain Fishery resources.
- 2) Conservation of ecosystem; maintain biodiversity and ecosystem of the sea which is the fishing grounds.
- 3) Effective management system; to carry out fishing in conformity with international or domestic or regional rules. In addition, it is possible to create a system for carrying out sustainable resource use.

These certification programs check both of fishing and distribution processing on the basis of the set-up standards. In the case of fisheries, certificate organization examines whether the fisher has implemented the appropriate fishing so as to preserve fishery resources. In the case of distributor and processor, certificate organization examines whether distributor mixes certificated fish and non-certificated fish. For selling fishery products with eco-label, all involved in the production of the products must be certified.

**Figure - 1**  
**The Marine Eco-labels**



### **Research Studies on eco-labelling**

In this section, two previous studies about fishy eco-label and marine resources are presented.

The first paper on “Suisan eco-labeling Ninsho no Genjō to Kadai” (2010) (in English: Current trend and issues of fishy eco-label) analyses

various issues. This paper identifies reasons for low spread of the fishy eco-label in Japan. The main reason is less opportunity for Japanese consumers to use labelled products in daily life. Most of the major distributors are certificated by Marine Stewardship Council and Marine Eco-Label Japan. There are few fish products with eco-label in market. From the consumers point, there are very few economic merits for consumer to purchase fishery product with eco-label. In case of many, these products are expensive compared with usual products.

2) The second paper is from the Research Institute of Economy, Trade and Industry titled “Suisan eco-labeling no Hattenkanousei” (2010) (in English: Potential for expansion of fishy eco-label). This paper discussed about economic value of fishy eco-label. This paper adopted choice experiment (conjoint analysis) as the way of analysis. The analysis shows that most of the consumers donot have information about fishy eco-label and the crisis of marine resources. It is observed that willing to pay (WTP) for a fishery product with eco-label has not increased even though related information is provided on eco-label.

In another study by The Research Institute of Economy, Trade and Industry about distributor’s consciousness to fishy eco-label, 88.3% of distributor respondents answered “transaction volume of fish is decreasing” and 85.9% of respondents answered “natural marine resources are decreasing”. Distributors recognized the crisis of marine resources. But, they suspect the economic effect of fishy eco-label. Only 6.3% of respondents answered “by fishy eco-label, sales will increase”.

From this its is clear that retailers have to create oppartunity for the eco-label fish products to reach consumers. Consumers Co-operatives are expected to play the role which rices of recognition of eco-label.

### **Fishy Eco-label in Retail Co-ops**

Co-op products are the original products of co-ops with a brand name of 'CO-OP'. These products are developed by members who are strongly conscious of food safety, environment and growing area. There are 635 Stock Keeping Units (SKU) in Co-op fishery products. Out of this 3 SKU (3 items) are certificated with Marine Eco-Label Japan and 10 SKU (6 items) by Marine Stewardship Council. The number of product with eco-label in all fishery products is yet very small.

Co-op products with eco-label of Marine Stewardship Council are made from fish spawn and flatfish in the state of Alaska, America. Due to expensive cost, there are only two products certificated by Marine Stewardship Council in Japan. Co-op products with eco-label of Marine Eco-Label Japan are made from raw Albacore tuna and Skipjack in Northwest Pacific Ocean, Japan. All are through Yamafuku Suisan Co. Ltd. Yamafuku Suisan are fished through pole-and-line fishing. This fishing method is traditionally existing science 400 years and it prevents damaged to fish. There are 19 cases certificated by Marine Eco-Label Japan.

### **Evaluation by General Consumers and Members**

Fishery foods with eco-label do not have a market share. The opinions of the consumers collected by Retail co-ops was only about taste for fishery foods with eco-label. The members didn't recognize or evaluate fishy eco-label.

According to the survey by Ministry of Agriculture, Forestry and Fisheries, 55.4% of Japanese general consumers think that fisheries resources are being depleted. Regarding resource management, 43.5% of consumers think that there is a need to increase the opportunity to select and purchase seafood caught under firm resource management in the shop. About recognition of fishy eco-label, 74.2% of consumers answer that they don't know these eco-label. About purchasing of

fishy product with eco-label, 69.9% of consumers answer “If price and freshness are the same, I will choose fishy product with eco-label”, but the consumer who answer “Even if somewhat high, we buy fishy product with eco-label.” occupy only 16.0%. It is difficult to sell fishy product with eco-label at high price (Ministry of Agriculture, Forestry and Fisheries, 2011).

According to “Zenkoku Seikyo Kumiaiin Ishiki Chousa 2012” (In English: National Co-op members Survey in 2012) about the expectation of Co-op members. 68.3% of respondent members answered that improvement of food security, 62.6% of respondent members answered improvement in freshness and quality, 42.6% of respondent members answered provision of information about food security, 30.6% of respondent members answered rich assortment of goods, 28.9% of respondent members answered price cut. The respondent member who identified environment friendly are 25.3%, lower than those listed above (Japanese Consumers' Co-operative Union, 2012). So, members are not necessarily altruistic, and choose goods which contribute towards environmen. Fish products with eco-label are environment friendly but don't have effect on the purchaser. This is the major weakness in the Japanese market.

### **Future Issues**

It is difficult to attain both economic efficiency and protection of the environment. This is true not only in aquatic eco-label, but also in other environmentally friendly products. If products with fishy eco-label are not accepted in the market, this means consumers and members don't recognize fishy eco-label or crisis of marine resources. About fishery products, Japanese consumers are accustomed to foreign goods. It is hard to feel the crisis of marine resources. Retail Co-ops should provide information about marine resources and consume of fishery products in Japan. This is very important as Japan is one of the major consuming nations of marine products. But only information



is not enough. There is a need to emphasise the other characteristic such as fishy products with eco-label are environmental friendly. Not only Retail Co-ops but also other consumer co-operatives should approach the fishers, the distributors and processors in order to develop high value-added products. Currently, Japanese consumers' co-operative is focusing on sales of eco-labeled fishery products. The effect of this effort is expected to be seen in the future.



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# **GENDER MAINSTREAMING IN FISHERIES: A STUDY OF FISHERIES COOPERATIVES IN COASTAL KARNATAKA**

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## **Introduction**

Gender mainstreaming is a globally accepted strategy for integrating gender concerns in the analysis, formulation and monitoring of policies, programmes and projects. This is important because there are differences in the roles of men and women that demand different approaches. Gender mainstreaming aims at strengthening the legitimacy of gender equality values by addressing known gender disparities and gaps in such areas as the division of labour between men and women, access to and control over resources, access to services, information and opportunities etc. Gender and Development (GAD) framework which emerged in the eighties as an alternative to Women in Development (WID) and Women and Development (WAD) and recognizes the differential impacts of development policies and practices. It calls for questioning both gender relations and the development process.

Fisheries is one of the sectors in which women play an important role and the roles of men and women are well defined. Several development programmes are introduced for the development of fisheries sector. Since different activities in this sector are gender

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specific, it is important to mainstream gender in the planning and implementation of development programmes aimed at improving the welfare of people dependent on fisheries sector. With this premise, the present study makes an attempt to understand the role of women in the fisheries, gender analysis of development programmes in the sector and the participation of women in fisheries cooperatives with an objective of understanding the extent of gender mainstreaming in fisheries.

### **Background of the study and Review of Literature**

During the process of development, fisheries sector is also exposed to technological development and the main objective of these changes is enhancing the productivity so that the incomes of the people dependent on fishing increase. Based on the recommendations of the expert committee on fisheries development during 1951-66 capital intensive technologies were introduced in fishing with the objective of increasing productivity. There are several studies focusing on the impact of huge investments in fisheries both in India and other countries (Srivastava and Reddy, 1983; Rebecca et al, 1985; Merlijn, 1989). These studies have reported mixed responses. Some of the studies have observed that the investments have helped only those who have access to resources and women were left behind. Among the studies in Karnataka Varamballi (1983) observed that there was an increase in the tangible assets of the fishermen household due to mechanization of fishing. A study by Joshi (1996) in Gujarat observed a positive relationship between mechanization of fishing and employment opportunity. Based on the study Thingalaya (1976) concluded that mechanization might not be a panacea. It could reduce the uncertainties in income. Ibrahim's (1992) study focused on the net impact of the introduction of mechanization on the fishing sector of India in general and Kerala in particular. The study found that the absentee fishermen or fishermen from other communities were a major threat to fishing

community. Bhatta (1994) examined that in Karnataka the developmental programmes promoted by the Government created heterogeneity in the socio economic characteristics of the once homogeneous community. Bhatt's later study (1996) was on the success of a community based fishery co-operatives as against Government sponsored co-operatives in Dakshina Kannada district. The study also observed that to avail the subsidies, many unions of boat operators were converted into primary co-operative societies and ridiculed the Government schemes. Bhatt and Gadgakar's study (1998) contested the above position. Their study showed that Government promoted fisher's co-operatives performed better and developed into major institution in port fish markets. But none of these studies have addressed gender issues. Analyses of studies on policy interventions in fisheries show that experience gained in developed countries was taken as basis for fisheries development in developing nations. Some of the studies, which focused on gender dimension of fishing and on consequence of private capital are reviewed below.

Samantary and Vaidehi (2005) study highlights how the women's organization known as 'Samudram' in coastal Orissa has been active in the protest against the invasion of trawlers, violation of the Coastal Regulation Zone Act and collection of shrimp and seeds. In another study by Madanda (2003) on 'Commercialization and Gender Roles among Lake Victoria Shore Fishing Countries of Uganda' concluded that commercialization of fishing has not made a significant change in the roles of women, because they were trading in low quality species of fish. Nayak's (1992) study on 'Fisheries a Feminist Perspective' attempted to examine the impact of technology transfer on women and observed how flow of capital sidelined fisherwomen from the local fish vending market. Shet (1994) contested Nayak's study. This study found that even though proportion of females involved in major decision was higher in the non-mechanized households, mechanized households take better decision in the area of purchase of assets and

accounts keeping. Another study in the same region on the same problem by Bhatt and Rao (2003) do not fully support the position of Shet. The study observed that the main source of credit was from the informal sector. Fisher women's co-operative societies have not lent much to the women. In the context of Taiwan Chao and Chang (2001) observed that while responding to transition to globalization in fisheries, special prominence was given by the Taiwanese women to prepare against globalization. Taiwanese women in fisheries have organized various schemes in response to globalizing trends. Report of National Commission on Self-Employed Women and Women in the Informal Sector observed that women are involved in all post harvesting and pre-harvesting activities. The basic problems faced by women are perishability of fish, high cost, poor transport facility and the competition in the fisheries sector. Lambeth et al. (2001) explored the existing policies and supports from the Government and examined women's role in fisheries management. They observed that cultural taboos have become a major impediment for women to ask for assistance from the Government.

Ninawe and Diwan (2005) study on 'Women Empowerment in Fisheries,' found that fisher women could not utilize the science and technology developed by the Research and Development institutions due to lack of awareness, gender relations and poverty. Vijayan (1992) in her study on 'Women Fish Vendors of South Kerala and their Efforts to Organize,' brought out the success of special transportation procured for women fish vendors with their organized efforts. From the above literature review it can be observed that technology in fisheries has sidelined women. The other alternative to main stream gender concerns in fisheries is through cooperatives. None of the studies have attempted to analyse the participation of women in fisheries cooperatives. Therefore the present study makes an attempt to understand participation of women in fisheries cooperatives.

### **Objectives of the study**

Fishing activity is highly concentrated in the coastal districts of Karnataka. The main objective of this study is to understand the gender mainstreaming in development programmes introduced for the development of fisheries in Karnataka and the participation of women in Fisheries Cooperatives in the coastal districts of Karnataka.

### **Methodology**

The study is based on both primary and secondary data. Secondary data was collected from the Census Reports, Marine Fisheries Census Reports, Human Development Reports, Statistical Bulletin of Fisheries, Economic Survey Reports etc. Primary data was collected from the sample respondents.

The study is confined to maritime districts of Coastal Karnataka namely Dakshina Kannada, Udupi and Uttara Kannada. A sample of 152 women was selected randomly from three villages of Dakshina Kannada District, 114 from five villages of Udupi district and 102 from four villages of Uttara Kannada district. The study concentrates on fisher women who are engaged in post harvest fisheries activities such as fresh fish vending, drying fish and working for fish processing industry and fish workers at fish landing centers. The study employed both quantitative and qualitative research methods.

Structured questionnaires were used to collect data from the 368 female respondents and 12 primary fishermen co-operative societies (that have both male and female members) in 12 fishing villages. A key informant's interview was used to elicit response from key individual and officers in the fishing villages. Opinions were sought from leaders, members of Stree Shakthi and Self Help Groups, Leaders of the Communities, District Level Government Officials, Chairpersons and Directors of Fish Marketing Federation, Secretaries and Presidents of fishermen co-operative societies. The observation method was used to supplement the data collected through other

methods. Besides, personal visits were made to the concerned fishing villages and attended the Directors meetings of primary fishermen co-operative, Annual General Meetings of Federations, Monthly meetings of communities associations and meetings of SHG and Stree Shakthi Groups.

Apart from percentages, the study used chi-square (2-test) for arriving at the association between different variables.

### **Demographic Profile of Fishermen Community**

According to the Marine Fisheries Census 2010 there are 144 marine fishing villages in Karnataka where fishermen reside. The maximum number was in Uttara Kannada district (86) and minimum was in Dakshina Kannada district (17). There are 41 number of fishing villages in Udupi District. There were 30,713 fishermen families in Karnataka with a total population of 1,67,429. The maximum number of families was in Uttara Kannada (16,236). The next highest is in Udupi (9,907) followed by Dakshina Kannada (4,570). Out of the total fisher folk population, Uttara Kannada accounted for 47%, followed by Udupi (37%) and Dakshina Kannada (16%). Among 30,713 fishermen families, 93% were traditional fishermen. Women formed 48% of the population. Poverty levels are high among the fishermen community. There were 23,624 (77%) families below poverty line. Highest poverty levels are observed in Uttara Kannada (89%) and Udupi (77%).

There were 40,756 active fishermen, of whom 32,037 were fulltime fishermen, 6,657 were part-time and the rest are engaged in fish seed collection. A total of 34,277 fisher folk are engaged in fishing allied activities, such as marketing (43%), labourers (41%), making/repairing net (5%), curing/processing (4%) and peeling (3%).

Women outweighed men in fishing allied activities accounting for about 67%. Among the major fishing allied activities, women dominated in curing/processing (90%), peeling (88%) and marketing (83%).

### **Cooperatives in Fisheries**

During 1946, the Co-operative Planning Committee suggested that the State aid for the development of fishing industry should be provided largely through Co-operative Societies. The first Fishermen Co-operative Society in Karnataka was registered in 1951 in Karwar. Later 39 Marine and nine Inland Fisheries Co-operative Societies and also one district level Fish Marketing Federation in Mangalore were established in 1956 to encourage fish production. At present, there is one State level Co-operative Fisheries Federation at Mysore and two District level Co-operative Fish Marketing Federations in Mangalore and Karwar.

At the end of 31-3-2009, the number of fishermen co-operative societies in the state was 469, in which 48 were defunct. The active fishermen co-operative societies are engaged in fish production, harvesting, marketing and allied activities. The coastal districts of Karnataka have 108 fishermen co-operative societies and out of this two are defunct. A number of schemes aimed at the development of fisheries and the welfare of fisher folk sponsored by Central, State and Panchayat sectors are channelized through fisheries co-operative societies. National Cooperatives Development Corporation assisted for investment in fishermen cooperative societies. Loans were provided to fishermen cooperative societies for the implementation of National Cooperatives Development Corporation assisted projects. The National Cooperatives Development Corporation started assisting fishery cooperatives after its Act was amended in 1974 to cover fisheries within its purview. The focus of National Cooperatives Development Corporation is to provide assistance to fishermen cooperatives on liberal terms. Since 1980, facilities for fishermen were initiated through National Federation of Fishermen Cooperatives Limited (FISHCOPPED). It is the only national level cooperative federation in India. This body has been carrying on promotional activities and providing business support to its constituent units in the form of



financing for cold storage, insulated box and two wheelers, transport vans for retail marketing of fish to member organizations including health care and insurance to fisher community. Through FISHCOPPED centrally sponsored schemes for the welfare of fishermen have been initiated. The name of one of the programmes is Development of Model Fisher Villages. Under this program basic civic amenities and Group Accident Insurance Scheme for active Fishermen in the age bracket of 18-65 years are given. The scheme also assisted to develop Saving Cum Relief for fishermen with the intention of providing financial assistance to the fishermen during the lean period. National Bank for Agriculture and Rural Development (NABARD) is an apex institution in the field of credit for agriculture and other economic activities in rural areas. It supports fishery through refinancing and introduction of new technologies, research and development.

Out of 469 fisheries co-operative societies in Karnataka, 40 percent are exclusively in the three coastal districts. According to Marine Fisheries Census 2010, 36% of the adult fisher folk were having membership in co-operative societies out of which 69% were in fisheries co-operative societies. This proportion was highest in Udupi (34%). There are 23 fishermen co-operative societies with a membership of 25,778 in Dakshina Kannada district. Out of this four are fisherwomen co-operative societies. As per the Statistical Bulletin of Fisheries 2008-09, there are 44 fishermen co-operative societies in Udupi district and out of this 12 are fisherwomen co-operative societies.

### **Gender Division of Fisheries Activities**

Women outweigh men in fishing allied activities. According to the Marine Fisheries Census 2010 women constitute 67% of the total workforce engaged in allied activities. Among the major fishing allied activities women dominate in curing/processing (90%), peeling (88%)

and marketing (83%). The following table gives details of men and women engaged in fish seed collection activities.

**Table -1. Participation of women in fish seed collection**

Gender	Fish seed collection	
	Full Time	Part Time
Male	948	128
Female	560	426

*Source: Marine Fisheries Census 2010*

The data shows that women are engaged in equal numbers in fish collection. But compared to men, more women are engaged in part time fish seed collection. While 128 men are engaged in part time collection, 426 women are engaged in this activity. Therefore it can be inferred that collection of fish seed is a full time work for men and part time work for women.

In other activities like curing/processing, polishing, labour work like cleaning the area etc., marketing and net repair also there appear to be gender division. Table 2 provides gender division of work related to fisheries.

The data shows that net repair is completely done by men only. On the other hand large numbers of women are engaged in curing, marketing, peeling, labour and other activities.

**Table -2. Gender division of fisheries activities**

Gender	Marketing	Net repair	Curing/ Processing	Peeling	Labour	Others*
Male	2485 (16.71)	1790 (100.00)	144 (10.17)	127 (12.00)	6234 (44.72)	486 (40.23)
Female	12382 (83.28)	...	1272 (89.83)	931 (87.99)	7704 (55.27)	722 (59.77)
Total	100.00	100.00	100.00	100.00	100.00	100.00

\*Others include collection of sea weeds, ornamental fish, ice breaking etc.

55 percent of women are participating in labour activities, 89.83 percent of women are engaged in curing and processing and an equal percentage are engaged in peeling. This clearly shows the gender segregation of fisheries related activities. This calls for specific programmes in these areas in order to reach the benefits to women.

### Educational status of Sample Fisher women

The level of literacy is one of the indicators of the level of Human Development. The following table gives the literacy status of sample fisher women.

**Table -3. Educational Statuses of Fisher Women**

Educational Status	Districts			Total
	Uttara Kannada	Dakshina Kannada	Udupi	
Illiterate	31(30.4%)	42(27.73%)	33(28.72%)	106 (28.8%)
Primary	20(19.60%)	85(55.92%)	43(37.72%)	148(40.14)
High School	44(43.2%)	2(1.3%)	23(20.4%)	69(18.8%)
PUC	3(2.9%)	11(7.2%)	5(4.4%)	19(5.2%)
Not Reported	4(3.9%)	12(7.85%)	10(8.76%)	26(7.06%)
Total	102 (100.0%)	152(100.0%)	114(100.0%)	368(100.0%)

Christian missionaries, Hindu upper caste and elites of lower caste social associations established many English Medium Schools and colleges in Coastal Karnataka. These institutions provided modern education to lower caste students. These institutions have brought a lot of change in the educational status and attitude of fisher folk children in Coastal Karnataka. The data presented in the table reflects this. Out of the total sample women only 28 percent are illiterates. Forty percent studied up to primary. The percentage of women who studied up to high school is high in Uttara Kannada compared to the other two districts.

### Linkages Between Literacy and Income

Level of literacy has a lot of bearing on various issues such as income, absorption of development schemes, membership in cooperatives and finding alternative employment etc. The relationship between literacy and income is explored in the present study. The data is presented in the table below.

**Table -4. Income and Education**

Education status	Income ( in Rs per day)				Total
	< 100	100 - 200	200 - 300	>300	
Illiterates	60(56.60%)	29(27.36%)	6(5.66%)	11(10.38%)	106(100%)
Primary	89(60.14%)	28(18.92%)	18(12.16%)	13(8.78%)	148(100%)
High School	49(71.02%)	9(13.04%)	0 (0%)	11(15.94%)	69(100%)
PUC	8(42.10%)	3(15.80%)	0(0%)	8(42.10%)	19(100%)
Not Reported	16(61.54%)	2(7.69%)	1(3.85%)	7(26.92%)	26(100%)
Total	222(60.33%)	71(19.29%)	25(6.79%)	50(13.59%)	368(100%)

In the present study, around 12.16 percent of the fisherwomen who have the primary level of education could earn an income between Rs.200 to Rs.300 in a day. However, 15.94 percent of the fisherwomen who have High school level of education could earn more than Rs.300 in a day. But it is also important to note that some illiterate fisherwomen could also earn Rs.300 in a day. However, the relation between level of literacy and income is clear from the fact that fisherwomen who have pre-university education (42.10 percent) could earn Rs.300 in a day. Moreover, majority of the fisherwomen's earnings is in the bracket of less than Rs.100. The relation between education and income could be read in both ways. On the surface, it appears that education level does not influence the income of the fisherwomen. This conclusion may be true to some extent because the post harvest fisheries activities in which women are engaged are highly informal and at subsistence level. At the same time, percentage of fisherwomen who earn more than three hundred rupees per day is more among those with higher

education. Therefore, it can be inferred that there is some relation between the level of literacy and income.

### **Educational Status and the Utilization of Development Assistance**

Several programmes are introduced for the welfare of fisher folk through budgets. As per the gender budget document of 2014-15 there is only one scheme under 'A' category which is 100 percent women specific programme. Whereas, there are 51 programmes under which 30 percent of the budget is allocated for women. Supply of Insulated (Ice) boxes to fisher women is the programme in Category A, while programmes like assistance for the development of inland fisheries, assistance for the construction of market, assistance for the purchase of fish seed, supply of fibre glass coracle, development and maintenance of harbours etc. are some of the programmes under category B.

The objective of supply of ice boxes scheme is objective is to retain the freshness of fish and thus strengthen the marketing system. Insulated boxes are being given free of cost to fisher women involved in fish marketing. During the year 2012-13 an allocation of Rs.240.00 lakh has been made and out of this Rs.230.92 was actually spent. A total of 8958 women have availed the benefit. But during 2013-14, the allocation is reduced to Rs.160.32 lakhs and out of this Rs.118.03 lakhs was spent.

Assistance to the construction of fish markets is also another programme which has greater benefit because women are involved more in the marketing of fish. However the allocations for this scheme have reduced from a revised estimate of Rs 91.38 lakhs in 2012-13 to Rs. 30.00 lakhs in 2014-15 budget. While the actual expenditure in 2013-14 was Rs. 19.12 lakhs, it is Rs. 29.08 lakhs in 2014-15 budget.

Matsya Mahilaswalambana yojana is another programme implemented by the Government of Karnataka for the empowerment

of fisher women. Under this scheme, fisherwomen are given financial assistance in the form of Revolving Fund.

Data relating to the utilization of assistance under this scheme by the sample respondents is presented in table 5.

The study found that more than hundred fisherwomen have obtained financial assistance under the 'Matsya Mahilaswalambana yojana'. Majority (89.47percent) of those who availed assistance are educated up to high school or above. Among those women who said that they have not availed, majority (67.9 percent) are illiterates. Fisherwomen with lower literacy level have lower access to this scheme. The data reveals the direct relationship between the education and the utilization of the assistance. In fact, fisherwomen with lower level of education become an easy prey to informal assistance. There are similar studies which observed that fisherwomen with little or lower literacy level have little or no access to institutional credit.

**Table -5. Education and Utilization of Assistance under Matsya Mahilaswalambana Yojana**

Number of women who availed assistance				
Educational status	Yes	No	NA	Total
Illiterates	10(9.43%)	72(67.92%)	24(22.65%)	106(100%)
Primary	48(32.43%)	88(59.46%)	12(8.11%)	148(100%)
High school	62(89.86%)	5(7.25%)	2(2.89%)	69(100%)
PUC	17(89.47%)	0(0%)	2(10.53%)	19(100%)
Not Reported	2(7.69%)	6(23.08%)	18(69.23%)	26(100%)
Total	139(37.78%)	171(46.46%)	58(15.76%)	368(100%)

### Co-operatives and Fisherwomen

Fishermen Cooperatives have become an important component in fisherwomen empowerment in some of the maritime states like Kerala

and 'Samudram' in Orissa. Participation of fisher women in fishermen cooperatives is presented in table 6. The data shows that nearly 59.24 percent of the respondents are members of fishermen co-operative societies in coastal Karnataka. However, the Fisherwomen membership in fishermen co-operative society is more in Dakshina Kannada (67.76 percent) than in Udupi (66.67 percent) and Uttara Kannada district (38.34 percent). One of the objectives of primary fishermen co-operative society is to provide short-term credit to fisherwomen to eliminate the exploitation by intermediaries and moneylenders. There are 12 fisherwomen cooperatives in Udupi district and six in Uttara Kannada.

**Table -6. Membership in Primary Fishermen Co-operative Societies**

Membership	Districts			Total
	Uttara Kannada	Dakshina Kannada	Udupi	
Yes	39(38.24%)	103(67.76%)	76(66.67%)	218(59.24%)
No	55(53.92%)	36(23.68%)	31(27.19%)	122(33.15%)
Not Reported	8(7.84%)	13(8.56%)	7(6.14%)	28(7.61%)
Total	102(100.0%)	152(100.0%)	114(100.0%)	368(100.0%)

It is observed that these societies only transfer the Government schemes and assistance to the beneficiaries. The societies themselves have not introduced any programmes. Hence, around 35.68 percent of the respondents are not satisfied with the performance of these societies. Of those who are dissatisfied, 30.39 percent are from Dakshina Kannada and 23.16 percent are from Udupi district.

### **Influence of Education of Membership in Cooperatives**

In the present study, an attempt is made to understand if the educational status of the respondent has an influence on membership in cooperatives. The data is presented in table 7.

Since majority of the welfare programmes for fishermen are routed through cooperatives in Karnataka, having membership in a cooperative is very important for the women to avail the benefits of

these schemes. The study found that only 18.87 percent of illiterate fisherwomen have become the members of the fishermen cooperative societies. Compared to this majority of the literate women have become members. Nearly 85.51 percent of the fisherwomen who have educational status of High School and 100 percent of the fisherwomen with PUC level of education have become members of fishermen cooperative societies

**Table 7**  
**Educational Status vs Membership in Co-operative Societies**

Membership in Co-operative Societies				
Education of status females	Yes	No	Not Reported	Total
Illiterates	20(18.87%)	74(69.81%)	12(11.32%)	106(100%)
Primary	108(72.97%)	30(20.27%)	10(6.76%)	148(100%)
High school	59(85.51%)	10(14.49%)	0(0%)	69(100%)
PUC	19(100%)	0(0%)	0(0%)	19(100%)
Not Reported	12(45.15%)	8(30.77%)	6(23.08%)	26(100%)
Total	218(59.24%)	122(33.15%)	28(7.61%)	368(100%)

### **Participation of women in Decision making in Cooperatives**

The study has examined the involvement and participation of fisherwomen in decision-making in fishermen co-operative society. Here both the fishermen as well as fisherwomen are the members. In Dakshina Kannada district, there is a Marketing Federation known as Dakshina Kannada and Udupi District Fishermen Marketing Co-operative Federation. This is the Apex body for all Fisheries Primary Co-operative Societies of Dakshina Kannada and Udupi. Out of 21 directors, only 9.52 percent are women directors. One is elected and the other one is nominated by the Government. In a particular meeting, hardly 30 women were present. Among the women present, only six



were actually involved in post harvest activities. In the meeting, no women members raised any questions or doubts on the functioning of the Federation. In Trivandrum, a co-operative society was established in 1961 for the economic and social welfare of the members. Unfortunately, that co-operative did not include women fish vendors. In Dakshina Kannada district, out of nine directors of cooperatives only one is the woman director. That means women representation is insignificant in the management of the co-operative societies. In Bloor Fishermen Co-operative Society, there is no female director but there is a nominated female vice president. However, the secretaries of this Primary Fishermen Co-operative are all women.

In Udipi district, in five sample primary fishermen co-operative societies there are nine directors. Of them, one fishermen co-operative society has two women directors. Another cooperative has only one female Director. In all the co-operative societies, all the secretaries are female. However, they are not involved in fisheries related activities. In Uttara Kannada, Hari Kanthra Kravi Fishermen Co-operative Society was established in 1915. It is the oldest and the First Fishermen Co-operative Society of Karnataka. In addition to this, there are two more cooperatives in Uttara Kannada. In the entire three fishermen co-operative societies only one woman director could be found. Hence, the women representation in the fishermen co-operative societies is marginal. In Chithakula Fishermen Co-operative Society there is no female director found in the managing body due to the docile nature of fisherwomen (as told by the secretary). Moreover, in all the five fishermen co-operative societies examined, they have male secretaries. It was observed that during a meeting of a Fishermen Co-operative Marketing Federation in Karwar, to discuss about the distribution of Rs.3 crores among fisherwomen groups consisting of 10 members no female directors were found in the meeting. Some of the female secretaries arrived late and in the meantime, chairperson observed that their presence or absence did not make much difference

to the decision of the meeting. The major agenda of the meeting was birthday celebration of the minister of Fisheries and Harbour and the distribution of cheques to the members of fisherwomen groups. For, that purpose, the Federation wanted the presence of all the fisherwomen member beneficiaries in large scale. The discussion was on the arrangement of the transportation facilities to make it convenient to attend the function by those poor fisherwomen without fail. The bye-laws of all fishermen co-operative societies insist that there should be minimum one female director in the managing body of the society. The same norms are being followed right from the inception. As the years passed, in most of the fishermen co-operative societies, there are equal numbers of fisherwomen as members to secure the economic benefit because many of the Central, State and Zilla Panchayat Schemes are sponsored through fishermen co-operative society. However, the societies have not made any attempt in increasing the number of women directors. The bye-law says only about minimum but the maximum could reach to eight or nine. In reality all the societies tried to stick to the minimum, never attempted to raise the number of women directors beyond the minimum. When patriarchy gets incorporated into modern market mechanisms, it creates more apprehensions to the weaker sections including women. Gender biased social system leads to this kind of under representation in these bodies. Lack of representation leads to lack of economic power and opportunity to develop leadership. One can easily understand the gender bias existing in decision-making bodies. Women directors and members have become voiceless and their underrepresentation in the managing committee has made them powerless in the patriarchic economic domination.

### **Opinions about Cooperatives**

Opinions about the working and the benefits derived from the cooperatives were collected from the respondents. The data shows that nearly 45.7 percent of the respondents felt that primary fishermen

co-operative societies are good sources of finance, and 36.4 percent of the respondents expressed that SHG is a good source of finance. Nearly 32.6 percent of the respondents still feel that approaching relatives and friends is a good source of securing finance, whereas 31.5 percent of the respondents felt Nationalized Banks are better. In Uttara Kannada district nearly 53.9 percent of respondents stated that the relatives and friends are good sources of finance whereas in Udupi district 38.6 percent of the respondent observed that SHG is a good source of credit and saving.

### Utilization of Government Schemes by Fisherwomen

In order to avail some of the Government schemes fisherwomen should become members of primary fishermen co-operative society. In the present study, only 59.24 percent have become the member of fishesmen co-operative society. Hence, most of the fisherwomen could not avail some of development schemes. Details of availed schemes are given in Table 8.

**Table 8.**

### Utilization of benefits from Government Schemes by Sample Respondents

Schemes	Number of women			Total
	Yes	No	Not Reported	
MatsyaMahila Swalambana	139 (37.77)	171 (46.47)	58 (15.76)	368 (100.00)
Insulating Box	88 (23.9)	270 (73.4)	10 (2.7)	368 (100.00)
Yashaswini Insurance	167 (45.38)	142 (38.59)	59 (16.03)	368 (100.00)
Matsyashraya	28 (7.61)	259 (70.38)	81 (22.01)	368 (100.00)
Moped	7 (1.9)	340 (92.4)	21 (5.7)	368 (100.00)
Savings cum Relief Scheme	157 (42.66)	172 (46.74)	39 (10.60)	368 (100.00)

The data clearly reveals the lower levels of utilization. While 37.77 percent fisher women have availed assistance under Matsya Mahila Swalambana scheme, only 24 percent availed the assistance under insulating box. Matsyashraya is availed by only 7.16 percent.

Based on the focus group discussions and interaction with the key informants some reasons are identified for the lower rate of utilization of schemes. The secretaries of primary co-operative societies have expressed their inability to meet the greater demand for insulated icebox. Insulated iceboxes are heavy and it is difficult to carry from one place to another. Hence, fish vendors have to keep the unsold fish in the Insulated icebox in market place with lot of safety. However, during the field survey, it was observed that in the sample fish markets of Uttara Kannada and Dakshina Kannada district, except one fish market in Udupi district, there is no safe place to keep the insulated box in the fish market. In Uttara Kannada district, the male household, are in traditional crafts and their female households are in charge of fish vending. Hence, there is more demand for insulated icebox.

The beneficiaries under 'Yashaswini scheme' can approach a pre-identified network hospital for treatment. However, the respondents have apprehension that they have to hospitalize only in the listed hospitals identified by the 'Yashaswini Trust'. Apart from this, since the respondents are poor and busy in their activities, they sometime forget to make a renewal of the scheme, and they feel that Yashaswini Insurance Premium should be 'one shot' premium instead of paying as premium every year. It is to be noted that all the Government-sponsored schemes in Uttara Kannada district were less absorbed. During the fieldwork, it was observed that secretaries in the primary fishermen co-operative societies are all men. Secondly, no proper and necessary timely information was given for accessing the schemes. Third reason is ineffective operation of the fishermen co-operatives. Moreover inactive and lack of participation of female director in the decision making process of the primary fishermen co-operative

societies; and in one of sample primary fishermen co-operative society there is no female director in the Management and Administration of the society. Besides the sample, primary fishermen co-operative societies in Uttara Kannada, have not displayed the programs and schemes available to fisherwomen on the notice board.

'Matsyashraya' is a housing scheme to fishermen to the extent of Rs 40,000 financial support for the construction of the house. In the present study, nearly 7.61 percent of the respondents have availed financial support in this scheme. In Dakshina Kannada district nearly 11.84 percent and in Udupi district 8.78 percent of the respondents have benefitted from this scheme. In order to avail the benefits of this scheme, the land title should be in the name of the concerned person. Since the fishermen communities in Dakshina Kannada and Udupi district follow the matrilineal system of inheritance some fisherwomen have titles in their name whereas in Uttara Kannada district the fishermen follow the patrilineal system, no fisherwomen have title deeds in their names. It was observed that globalization and liberalization has hardly addressed the property relations. Vehicles are provided to fish vendors through 'Matsyavahini Scheme' for quick and easy disposal to various market areas. However, the men fish vendors, in the form of mopeds, bicycles, tempo rickshaw, etc predominantly use subsidized 'Matsyavahini Scheme' with insulated ice containers. Beneficiaries under this scheme should have the necessary documents showing the ownership of the vehicle, insurance and a driving license. Fisherwomen do not know driving and so they have no driving licenses. Many of women fish vendors are not ready to accept changes in their age-old practices of vending. In Dakshina Kannada district, in 2009, some fisherwomen were distributed bicycles for fish vending under the Government-sponsored scheme of 'Matsyavahini'. There was 'hue and cry' by the fish vending women. They were reluctant to accept the bicycles. They do not have the required skill to make use of the modern facilities. At the same time

gender, stereotyped society looks at this program with mockery. All these rather than helping, them creates an embarrassing situation for them.

During the fish leaning period normally for four months in a year, fisher folk can avail the facility of financial assistance under 'Savings Cum Relief Scheme'. Nearly 42.66 percent of the respondents have benefitted from this scheme. However, the beneficiaries need to pay Rs 75 per month for 8 months. Their savings of Rs 600 along with equal contribution of state and central government to the extent of Rs 1200 will be disbursed to fisherwomen during the fish lean period. One of the secretaries of fishermen co-operative society said that in practice first year's savings will not be distributed in the same year. It will be given to them in the second year. The second year accumulated amount will be given in the third year and so on. Hence, the fisherwomen have expressed their problems that they have to wait for one year to collect their savings, unlike recurring deposit of banks and financial institutions. Majority of the respondents find it difficult to save their income after meeting all the household expenses and repay the loan with interest.

It is clear from the above data that schemes introduced to support the fisherwomen involved in post harvest activities are capital intensive in nature and are gender biased. In the case of 'Matsya Mahila Swalambana Yojana' fisherwomen who are not involved in fisheries, activities can also make use of the scheme. Even primary fishermen co-operative societies also support them to reach the target. Because of its interest free nature of credit followed with relaxed mode of repayment 'non-fisherwomen' take the advantage of the scheme. Apart from this if fisherwomen need higher amount for expansion of her business, they have to depend on sources such as moneylenders who charge higher rate of interest. The 'Matsyavahini' scheme meant to support the fish vending women such as financial assistance to buy two, three, or four wheelers are gender biased. Driving license is a

necessary to avail the benefit these schemes. Most of the fisherwomen do not have driving licenses. In fact, under these schemes vehicles are purchased in the name of fisherwomen and used by the fishermen. So most of the schemes meant for women either not reached to them or being used by the male members.

Most of the fisherwomen could understand that the fisheries development policies have not been designed taking into the interest of fisherwomen. The study found that nearly 79.9 percent of the respondent expressed that the modernizing policies of fisheries are not gender sensitive. But 14.1 percent of the respondents stated that there should be a separate policy for fisherwomen because fish processing industries and fish landing centers have absorbed the fisherwomen in modern sector of fisheries. Only 2.4 percents of the respondents have attended the skill development programs needed for handling the post harvest fisheries technologies. In Uttara Kannada District, no respondents have participated and they were not aware of such programs. Those who attended the training program felt that the programs imparted in the training centers require more capital investment and to market the products of such programs they require further investment.

### **Conclusions and policy suggestions**

Fisherwomen play an important role in the fisheries sector as processors and marketers. Majority of the women are involved in these two activities. While there is a clear gender division of work in the sector, there are very few 100 percent women oriented programmes. According to the gender budget document there is only one programme under category A. The study also observed that allocations are decreasing under successive budgets.

Regarding the programmes introduced, there appear to be no gender sensitivity in the programmes and local conditions and the environment under which fisherwomen work are not taken into

consideration in the designing of the programmes. Greater gender sensitivity is important for the benefit to reach women.

The study also observed lack of gender segregated data in the sector. This is very important to design gender sensitive programmes and to main stream gender in the planning, implementation and monitoring of the programmes.

- Only fisherwomen who are engaged in fisheries activities should be provided with loans at subsidized rate of interest. For prompt and timely repayment of loan, fisherwomen should be provided with rebate on their loan amount.
- At present, fisherwomen are marginally represented in the fishermen's cooperative societies. In order to correct this low representation, fifty percent directorship of the cooperatives should be reserved for active fisherwomen.
- Fisher women cooperatives should form into a federation to fight against the market forces that weakens their bargaining power.
- The Federation should evolve a mechanism to disseminate information on issues relating to production and marketing of fisheries to all fisherwomen.
- To meet the competition from the hi-tech sector in fish vending, fish vending women should form their own co-operative societies and market fish through these societies.
- More schemes are to be introduced under Category A because there are large number of women engaged in the fisheries sector.

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