

A person wearing a traditional conical hat and a face mask, working in a greenhouse with cucumbers. The person is wearing a light-colored long-sleeved shirt and gloves, reaching up to harvest cucumbers from a vine. The greenhouse structure is visible in the background.

# COOP Dialogue

Issue 2: Future Proofing Cooperatives through Innovation

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# Editorial

Dear Readers,

We are delighted to present the second issue of COOP Dialogue on **'Future Proofing Cooperatives in Asia and Pacific through Innovations'**. We believe that innovation is a lynchpin of any cooperative business enterprise and is driven by evolving member needs, increasing competition in the market, changing business goals, and debilitating external shocks such as the COVID-19 pandemic. Future proofing is crucial to sustain cooperative businesses, build cooperatives' resilience, and ensure competency and relevance among members, the community and the market.

In this issue, we have covered interesting and diverse examples from the Asia and Pacific region that cooperatives are doing to innovate; perspectives from cooperators on the importance of innovation; issues and challenges in driving innovations; how culture, policy and legal environment hinder innovations in cooperatives; and key areas where innovation is long due.

Prof. Tim Mazzarol, Winthrop Professor, University of Western Australia, in his piece on 'Cooperative and Mutual Enterprises as a Business Model Innovation', examines the nature of cooperatives and mutual enterprises as an example of business model innovation. Ms. Roz Henry, CEO, Cooperative Business New Zealand, New Zealand; Dr. Sudhir Mahajan, IAS (Retired), Chief Executive, National Cooperative Union of India, India; Mr. Edwin A. Bustillos, CEO, Philippines Cooperative Center, the Philippines and Ms. Samah Al Hajeri, Director of Cooperatives and Strategic Reserve, Ministry of Economy, United Arab Emirates, throw light on innovations by their organisations to build resilience and meet evolving member needs post the COVID-19 pandemic. The pandemic has brought to the fore the significance of digitalisation in the finance sector. Mr. Balasubramanian Iyer, Regional Director and Ms. Simren Singh, Lead Gender and Education at ICA Asia and Pacific, cover perspectives from Indonesia, Nepal, the Philippines, Thailand and Sri Lanka on how credit and banking cooperatives are learning, adapting, and evolving to meet competition from new fintech players and traditional commercial banks. Dr. U.S. Awasthi, Managing Director of Indian Farmers Fertilisers Cooperative Ltd., India discusses the recently launched Nano Urea Liquid, an agri-tech innovation to reduce the excessive application of urea that exacerbates soil, water and air pollution with climate change problems.

We cover much more on cooperatives and innovation and hope you enjoy reading the diverse perspectives from across the Asia and Pacific region. We encourage you to continue dialogue on the topics covered in this issue within your organisation and country. We will be pleased to hear your views and suggestions which you can email us at [coopdialogue@icaap.coop](mailto:coopdialogue@icaap.coop).



# Editorial

We would like to convey our thanks to the Advisory Committee members of Coop Dialogue – Prof. Akira Kurimoto, Chairperson, ICA Committee on Cooperative Research and former Professor at the Institute for Solidarity-based Society, Hosei University, Japan; Dr. Sidsel Grimstad, Vice-Chairperson, ICA Asia and Pacific Committee on Cooperative Research and Senior Lecturer and Researcher, Newcastle Business School, University of Newcastle, Australia; Dr. Hema Yadav, Director, Vaikunth Mehta National Institute of Cooperative Management, India; and Ms. Anahita Eslapazhir, CEO, Rah-e-roshd Cooperative Educational Complex, Iran – for their rich advice, inputs and guidance in making the vision for Coop Dialogue come true!

The first issue of Coop Dialogue launched in November 2021 focused on 'Cooperative Identity in Asia and Pacific'. You can read the first issue in three languages – [English](#), [Hindi](#), and [Arabic](#).

BEST WISHES,  
COOP DIALOGUE TEAM

# Cooperative and Mutual Enterprises as a Business Model Innovation



Tim Mazzarol, Winthrop Professor,  
University of Western Australia

This article examines the nature of cooperative and mutual enterprises (CMEs) as an example of business model innovation. It overviews the historical evolution of the CME business model and its adoption of both economic and social innovation practices to achieve its strategic purpose. Historically, the resilience and sustainability of the CME business model have been shaped by its ability to respond to member needs through the application of economic and social innovation.


## What are CMEs?

CMEs comprise a group of related organisations (e.g., cooperatives, mutuals, friendly societies, credit unions, and building societies) that while having numerous distinctive characteristics, share sufficient common attributes to justify being considered as representing a unique business model (Mazzarol et al., 2018). Although there is no universal definition of a CME, it is an acronym and concept that traces its origins to the 1990s when the term was first used publicly (Cooperative Futures, 2000).

The principal characteristics of CMEs are member-ownership, a strategic focus on members' economic and social purposes, democratic governance based on sharing, democracy, and delegation for the benefit of all its members (Mazzarol et al., 2018). CMEs also possess a commitment to enhancing trade through the application of innovative organisational systems that are democratic and inclusive in nature (Ridley-Duff, 2015).

## What is business model innovation?

Business model innovation (BMI) remains a work in progress within academic circles (Wirtz et al., 2016). Definitions for BMI are many and varied, with little consensus (Foss & Saebi, 2017). However, it can be broadly viewed as a process of re-engineering the business model through reconfiguring at least three key areas. The first is a focus on “content” through investment in forward or backward integration across the supply chain. In investor-owned firms (IOFs) this typically takes the form of vertical integration designed to capture the full value available within the industry or market. In CMEs, the value chain is often comprised of member suppliers and/or buyers, which creates enhanced control over the supply chain through mutual ownership and collaboration (Mazzarol, et al., 2013).



*BMI can be broadly viewed as a process of re-engineering the business model through reconfiguring at least three key areas – content, structure, and governance.*

The second is a focus on “structure”, whereby the organisation reconfigures its existing resources, assets, and capabilities to generate new value. IOFs have traditionally undertaken BMI through the creation of strategic business units, subsidiaries, and joint ventures (Miller, 1986). However, CMEs (particularly those whose members are small firms) are by nature strategic networks, coalitions (Staatz, 1983; 1987), or a “nexus of contracts” (Sexton, 1983; 1986). CMEs are hybrid structures that are not hierarchical (vertical), but a network of interdependent actors, which implies strengths and weaknesses (Menard, 2007).

They have a better potential to create n-form business models, based on heterarchy rather than hierarchy in their organisational design, and which can deliver enhanced knowledge management, innovation, and resilience (Hedlund, 1994). CMEs comprise a variety of organisational forms and the extent of their hybrid versus hierarchical configuration varies from one type to another, with implications on governance (Chaddad, 2012).

The third is a focus on “governance”, which involves changing the role and responsibilities of one or more actors within the firm’s business activity system to generate new value. This can involve organisational restructuring as well as changes to strategic alliances (Amit & Zott, 2012). Here the difference between IOF and CME governance is important, with the former based on shareholders with a ‘one-share-one-vote’ allocation of power, while the CME follows a democratic membership model of ‘one-member-one-vote’.

BMI is therefore a process of business re-engineering to enhance value creation (Wirtz & Daiser, 2018). In the design and redesign of a business model, it is important to recognise that success “depends as much on art and intuition as it does on science and analysis” (Teece, 2018).



Further, it needs to be linked to strategy, guided by a deep understanding of the needs of customers, or members (in the case of CMEs), and the resources and organisational structures that can best sustainably satisfy those needs. In addition, the success of a good business model design is contingent on an understanding of the strengths and weaknesses of existing business models (Teece, 2018).

### **What are the main characteristics of the CME business model?**

A business model is a strategic blueprint of how an organisation will create and distribute value (Morris et al., 2005). The business model concept emerged slowly within academic literature from the 1950s, but gained momentum during the 2010s, as its application shifted from an operational to a strategic focus (Teece, 2010).

The principal attributes that distinguish CME business models from those found within IOFs are the purpose, value proposition, approach to market segmentation and value chain configuration, pricing and competitive positioning strategies, and performance metrics (Mazzarol et al., 2018). Where the IOF business model is primarily designed around a purpose (mission), and a value proposition to maximise shareholder returns, the CME business model is focused on addressing the economic and social needs of members by creating value through the maximisation of member benefits.

While an IOF business model typically focuses on targeting customer and market segments that can generate the most profit and returns to shareholders, the CME business model is usually targeting areas of greatest need for members. Further, in general, CMEs are focused more on creating both economic and social value for their members than are IOFs.



In relation to pricing and competitive positioning strategies, IOF business models usually seek to reduce supplier costs while securing price premiums from customers. Further, to maximise profits and shareholder returns, IOF business models focus their competitive positioning on securing control over strategic assets that can be leveraged to enhance their bargaining power in relation to buyers and suppliers. This contrasts with CMEs, which have supplier-buyer value chains comprising their members. As a result, they usually focus on delivering better prices for those suppliers and buyers within the supply chain who are active members. Here the strategic focus is on value creation for the CME membership.

### **The historical evolution of CME business model innovation**

The origins of CMEs can be traced back to the medieval guilds that served as a foundation business model for the Friendly Societies, one of the oldest CME types, which emerged in Scotland and Wales in the 12th and 13th Centuries. Two of the earliest recorded Friendly Societies were established in Scotland in 1598 and 1634 (Electric Scotland, 2022; Patmore & Balnave, 2018). These societies represented a BMI in the form of a mutually owned and governed financial benefits fund for seafarers and their families in the event of sickness or death (Fraser, 1934).

Within an economic and social system that offered little or no government assistance, and only charity from the Church, the business model offered by the Friendly Societies quickly gained public support. The BMI addressed content by using collective action and ownership to create the funds needed to address the economic and social problems it was responding to. In turn, the creation of a mutually owned pool of funds created a new structure, and the democratic ownership that the members of the society enjoyed represented a new governance model.

With their business models building on the foundations laid by the guilds, these societies involved members swearing oaths of fealty, committing to the observance of laws and codes of conduct, and paying fees. However, in return, they secured access to financial benefits to assist with unemployment, sickness and funerals thereby alleviating economic and social pressures on their families (Weinbren & James, 2005).

By 1800 these societies were the dominant form of mutual assistance for working people within England and Wales and had largely replaced the older guilds (Cordery, 2003). Government legislation (e.g., Rose Act, 1793 and Friendly Societies Act, 1875) granted these firms legal recognition, protection, and regulation, plus exemption from taxes and charges (Cowherd, 1960). The success of this business model saw its growth in the UK, with England and Wales having 32,000 societies serving more than 4.7 million members by the 1870s (Davis, 1876). They were a key element in Britain's social welfare system (Cordery, 2003). The business model developed by the Friendly Societies provided the foundations for the creation in 1844 of the Rochdale Society of Equitable Pioneers, which is recognised as the start of the contemporary cooperative (Drury, 1937). The cooperatives operated under the Friendly Societies legislation as no cooperatives' law existed in the UK at the time (Patmore & Balnave, 2018).

Rochdale contributed to CME BMI via the creation of the cooperative principles that have endured to the present with only modest changes. These enshrined the need for voluntary and open membership that was not exclusive to a member's gender, age, religion, race, or political affiliation. Also, active democracy via one-member-one-vote governance. In addition, it laid down rules for how members could trade with the cooperative, receive benefits, including share capital and profit distributions, in a manner that preserved mutuality (Fairbairn, 1994). The founding constitution of Rochdale contained clear statements of strategic purpose that focused on both economic and social goals (Rochdale Society, 1877).

### **CME expansion in the Asia-Pacific**

During the 19th and 20th centuries, Friendly Societies and Rochdale cooperatives were established throughout the Asia-Pacific. These included producer and consumer cooperatives, plus credit societies and unions, and insurance mutuals (Gide, 1922). The BMI they brought with them helped to transform the economic and social well-being of their members in agriculture, fishing, forestry, health care, housing, retailing and financial services.

They enabled farmers in Quebec to transition from subsistence to commercial farming during the 19th Century (Doyon, 2002). Similar patterns were found in the United States which saw CMEs increase in numbers from 1810 to the 1850s (Patmore & Balnave, 2018). The Rochdale model was the dominant form within consumer cooperatives found across North America and Australasia from the 1850s (Patmore & Balnave, 2018).

The first Friendly Society in Australia was established in 1828 (Exley, 1936) and their numbers grew throughout the 1830s (Wetternhall, 2018), supported from the 1850s with legislation derived from Britain (Marshall, 1950). They provided affordable health, medical and pharmacy services to their members (Green & Cromwell, 1984). From 1859, Rochdale model consumer cooperatives began to spread across Australia, offering better prices and protecting their members from the trap of store credit offered by IOF retailers (Balnave & Patmore, 2012).



*Historical picture showcasing loading of fruit at Yenda producers siding.  
Source: BCCM Facebook Page*



During the 20th Century, agricultural producer cooperatives helped transform the social and political economy of rural America (Mooney, 2004). During the 1930s Great Depression, electricity cooperatives provided power supplies to rural America, which continues today for 48 of 50 states in the USA (Heriot & Campbell, 2006). Faced with competitive market challenges in the 1970s and 1980s, the emergence of New Generation Cooperatives (NGC), as a BMI response to the need for greater clarity surrounding ownership rights demonstrated the adaptiveness of the CME business model (Nilsson, 2001).

Although NGCs were pioneered in the United States, they have spread throughout the Asia-Pacific with examples in Australia (Plunkett & Kingwell, 2001) and China (Ma, Hu & Guo, 2011). These adaptations of the original Rochdale model have provided farmers, particularly smallholder producers the ability to add value and strengthen their bargaining power within the supply chain through network alliances, enhanced information flow from the market, and collective pursuit of opportunities and threats (Manalili et al., 2008).

CME business models were introduced to many Asia-Pacific nations during the colonial era. For example, in 1904 the British administration in India established cooperative banks, modelled on the German Raiffeisen banking system, to provide affordable credit to smallholder farmers and shopkeepers. This model was replicated in Sri Lanka, Malaya, and Singapore (Birchall, 2013).

Following independence, these former colonies saw their CME sectors expand and become a significant focal point for their governments' economic and social development policies (Mitchie & Rowley, 2014). This has included communist states such as China (Bernardi & Miani, 2014), Vietnam (Nghiem, 2008), and non-communist states such as Malaysia (Othman et al., 2014). The CME business model offers an alternative to government ownership, or IOF investor control, which often sees ownership concentrated in the hands of a minority, or to foreign ownership (Cox & Le, 2014).

### **CME BMI in the Asia-Pacific**

By 2021 the Asia-Pacific was home to 20% of the world's top 300 largest cooperatives, which included Japan's agricultural cooperative federation Zen-Noh and Japanese Consumers' Cooperative Union (JCCU), as well as the Indian Farmers Fertiliser Cooperative Ltd., (IFFCO) Australia's bulk grain wholesaler and exporter, Cooperative Bulk Handling (CBH) Group Ltd., and New Zealand's Fonterra Cooperative Group Ltd. dairy cooperative (ICA-Euricse, 2021).

The CME business model continues to provide social and economic innovation for the benefit of its members throughout the Asia-Pacific region (Rowley & Michie, 2014). For example, China's agricultural cooperatives have shown high levels of innovation through the adoption of new technologies, as well as developing social innovations such as hybrid business models (e.g., capitalistic but mutually owned), guided by modified versions of the cooperative principles (Lou et al, 2017). Longitudinal analysis of the role of cooperative members on the productivity of rice production in China found that while there are some differences across regions,

cooperatives help improve rice productivity where farms are small or medium-sized and less mechanised, due in part to the support and training the cooperatives provide to members (Lin, et al., 2022).

In India, dairy cooperatives have enabled small and marginal dairy farmers to turn their country into the world's largest milk producer. This has included innovations in the conversion of animal manure into biogas and fertiliser on a large scale, with concurrent benefits to the environment and the economic and social well being of the rural community (Rath & Joshi, 2020). Cooperatives in India's dairy industry have played an important role in the diffusion of innovations such as artificial insemination for dairy herds, due to the social connectivity and knowledge exchange that exist amongst the members (Gosh et al., 2005).

The cooperative business model has been demonstrated to be important to assist small-holder farmers as the national economies of South Asia transition from state ownership dominance to free-market private ownership. For example, in Sri Lanka agricultural cooperatives have played a vitally important role in helping economic reconstruction following the Civil War in that country (Kadirgamar, Rashid & Shah, 2021). In addition, female membership and participation in India's cooperatives have significantly enhanced the economic and social empowerment of women (Dohmworth & Liu, 2020).

Also in India, the existence of workers' cooperatives has enhanced the overall rate of employment growth within the coir industry in Kerala State. However, poor management and a lack of innovation within the coir producer firms have impacted profitability, suggesting the need for local firms and cooperatives to collaborate in BMI to turn the industry around (Naseef & Jyothi, 2019).



Malaysia's rubber industry is important to the national economy, but it is dependent on smallholder farmers, many of whom are now leaving the industry. To address this, the formation of producer cooperatives and greater investment in government incentives and R&D have been proposed (Ali et al., 2021). Malaysia has also used housing cooperatives to help address housing shortages for low to middle-income households. Such cooperatives have a long and successful track record in Malaysia (Abu Bakar et al., 2017). The creation of an Islamic public-private housing cooperative model (IPHCM) has created an innovative business model to provide affordable public housing (Abdul et al., 2021).

Agricultural cooperatives in Vietnam provide a valuable mechanism for the dissemination of information about crop and crop management innovations as well as market pricing, particularly to smallholder farmers. Where large scale producers have more ability to source information via their own channels, their smaller counterparts were more reliant on cooperatives (Hoang, et al., 2022).

In Thailand, cooperatives have strong compliance with the cooperative principles, which helps to support their sustainability and ability to support their members through education, knowledge dissemination and personal development (Singsee & Suttawet, 2021). Thai agricultural cooperatives have enhanced the market share of local durian producers through innovative approaches to the integration of value-addition within the supply chain, with a BMI involving product development, marketing strategies, network building and management efficiencies (Grodgungunt et al., 2021).

South Korea has a strong CME sector including both producer and consumer cooperatives that distribute share capital (equity) to members (Seo & Choi, 2021). Financial services CMEs such as credit societies and unions have demonstrated their ability to enhance the economic and social well-being of low-income communities (Birkenmaier & Tyuse, 2005). Korean credit unions played a key role during the 1960s in protecting the financial welfare of industrial workers who were victims of excessive usury by private sector credit providers (Yoo, 2017). A similar pattern took place in Japan where that nation's cooperative banks and consumer cooperatives championed the interests of their members (Birchall, 2013).



*Agriculture cooperative in Vietnam.*



In Australia, the credit unions and building societies provided a strong alternative to the major IOF banks. However, competitive market pressure and the deregulation of the banking and finance sector during the 1980s and 1990s led to the demutualisation of many mutual institutions. In response, the sector engaged in a process of BMI comprising marketing, external capital raising, and mergers (Davis, 2016).

This process was facilitated by changes to Australian company law, which recognised the mutual enterprises within the legislation and provided eligible firms to raise external capital via mutual capital instruments (MCI). These are not issued as ordinary shares and provide the holder with no membership rights, or the power to influence the demutualisation of the entity that issues them. In 2020, Australian Unity, a large Friendly Society, used MCIs to raise \$120 million from its members (ASX, 2021a), and a further \$230 million from the public the following year (ASX, 2021b). This innovation of the Australian mutual enterprises in raising capital builds on the earlier introduction of cooperative capital units (CCU), which emerged in 2012 through the development of the Cooperative National Law framework that modernised Australia's cooperative legislation (Apps, 2016; Mamouni Limnios et al., 2016).

## Conclusions

The history and current practice of the CME sector within the Asia-Pacific suggests that the unique nature of the business model offered by this type of enterprise has provided and continues to provide economic and social innovation to the benefit of its members. The unique characteristics of its content, structure and governance enable the CMEs to address social and economic problems that IOFs and government businesses are unwilling or unable to.

*The unique characteristics of its content, structure and governance enable the CMEs to address social and economic problems that IOFs and government businesses are unwilling or unable to.*



CMEs are not a perfect business model and their success and sustainability depend on the quality, commitment, and adaptability of their boards, managers, and members. However, the CME business model in its myriad different permutations has been recognised by governments throughout the world as an important mechanism for enhancing the economic and social well-being of communities (Roelants et al., 2020). It does this through the application of a unique business model that offers a content solution that embraces collaboration and cooperation throughout the supply chain, a structure that leverages the collective resources and capabilities of the combined membership, and a governance model that is founded on the principles of democracy, equity, mutual benefits, and collaboration.

# Why do Cooperative & Mutual Enterprises Need a Customised Approach to Measure their Impact?

Learnings from the Mutual Value Measurement Framework in Australia



**Melina Morrison, CEO, Business Council of Cooperatives and Mutuals (BCCM), Australia**

In conversation with Ms. Melina Morrison, we discussed the recently launched [Mutual Value Measurement \(MVM\) Framework](#). The MVM Framework developed by BCCM in partnership with Monash University's Monash Business School is a first-of-its-kind and customised tool for cooperatives and mutual enterprises (CMEs) in Australia, helping them measure and report their mutual value (total value creation).

The MVM Framework is a response to the existing and conventional frameworks to assess the business value of companies do not holistically measure and report the value that CMEs generate for members and the wider community.

CMEs across industries face a consistent and shared challenge because of limitations in conventional business impact frameworks. More than how a common framework can suit CMEs across industries, the solution focuses on how CMEs can communicate their impact comprehensively.

A customised solution for CMEs, the MVM framework is need-based and innovative developed by and for CMEs. The framework focuses on six dimensions – Commerciality, Shaping Markets, Member Relationships, Community Relationships, Ecosystem and Reciprocity and Mutual Mindset. Inspired by and embedded within the Cooperative Principles and Values, these dimensions allow CMEs to move beyond traditional accounting and reporting tools to communicate their success and impact to members and communities better.

Currently, 30 BCCM members are in the process of adopting the framework and those who complete the process can apply for a special MVM accreditation. Open for CMEs in other countries, the MVM framework is an innovative step towards future-proofing cooperatives through innovative data collection and reporting.

Watch the conversation below to learn more about the application of the MVM Framework and BCCM's partnership with Monash University.





# Future-Proofing Cooperatives in Asia and Pacific through Innovation: A Dialogue with Coop Leaders

Innovation is key for any enterprise to grow and can be driven by a lot of factors. For cooperative businesses, innovation can be driven by evolving member needs, increasing competition in the market, changing business goals, and debilitating external shocks such as the COVID-19 pandemic. These innovations can differ across countries and sectors and can be in the form of new products and services, expansion to new geographies, social and technological, improvisation in business practices, etc. Though driven by necessity, innovations in cooperatives are accompanied by their challenges as well. Future-proofing cooperative businesses is crucial to sustain them, build their resilience, and ensure competency and relevance among members, the community and the market.

Through this dialogue with coop leaders – Ms. Roz Henry, CEO, Cooperative Business New Zealand (CBNZ), New Zealand; Dr. Sudhir Mahajan, IAS (Retired), Chief Executive, National Cooperative Union of India (NCUI), India; Mr. Edwin A. Bustillos, CEO, Philippines Cooperative Center (PCC), the Philippines and Ms. Samah Al-Hajeri, Director of Cooperatives and Strategic Reserve, Ministry of Economy, United Arab Emirates (UAE), we tried to understand their perspective on innovations to future proof cooperatives and innovations to build resilience and meet evolving member needs in their respective countries.

## **Innovation in cooperatives to meet the business and member needs**

In New Zealand, 18 % of the country's GDP is generated from cooperative businesses and a significant proportion of that comes from the primary sector. However, the New Zealand Productivity Commission Report findings state that these organizations have low productivity levels. Ms. Henry said that CBNZ had submitted a report on behalf of cooperatives in the primary sector that showed to present how they incorporate greater levels of productivity and contribute to research and development and innovation.

*In New Zealand, 18 % of the country's GDP is generated from cooperative businesses and a significant proportion of that comes from the primary sector.*



Funding is a big driver as only a small percentage of cooperatives uses external funding; most of them are funded by their members. New Zealand has some of the major packing cooperatives that have invested in high-tech automated equipment to reduce manual labour while packaging Kiwi fruit. A lot of retail cooperatives are focusing on reducing the use of packaging or reutilizing/repurposing packaging from other sources. There is a livestock improvement – R&D facility for improving herd productivity, that focuses on meeting SDGs by monitoring carbon emission levels and maximizing milk production using gene assessments. Fonterra, the biggest dairy cooperative has moved most of its fleet to electric. According to Roz, “A lot of things are moving and changing in New Zealand, said Ms. Henry and CBNZ lobbies with the government on their members' behalf to ensure that their challenges are heard and understood.



*I call the ecosystem a golden triangle, wherein, academia is connected to the government as well as the industry.*  
– Samah Al-Hajeri

Ms. Al-Hajeri presented the UAE government's point of view on the importance of innovation for cooperatives. The Ministry of Economy, which overlooks the cooperatives sector, has a program to support an innovative environment and engage youth and individuals with creative ideas to devise practical solutions to develop government services and enhance the ease of doing business. In 2015, the government launched a national strategy to enhance the innovation ecosystem from two lenses – input (what kind of initiatives are launched for the ecosystem) and output (what impact these initiatives create).

She called the ecosystem a golden triangle, wherein, academia is connected to the government as well as the industry. The Ministry realises the potential of cooperatives and had set an agenda to make them entrepreneurial and contribute 5% to the GDP by 2030. The challenges are a lack of awareness about cooperatives among youth and the perception that cooperatives are mainly in trading or consumer sectors. The Ministry is working to change this mindset by enabling the ecosystem for the cooperatives by digitising services, easing the process of establishing a cooperative, and integrating government entities for hassle-free service delivery. As one of the innovative financial tools, the Ministry is looking at cryptocurrencies and digital assets to finance cooperatives.

The Philippines cooperative development plan developed by the Cooperative Development Authority (CDA) in the Philippines has a strategic goal to make cooperative products and services globally competitive through technology and innovation. Quoting Heraclitus, “the only constant in life is change”, Mr. Bustillos says that PCC was originally formed as an agora of cooperatives to meet and network with other stakeholders to advance the interest of the cooperative sector.

*The Philippines cooperative development plan has a strategic goal to make cooperative products and services globally competitive through technology and innovation.*



PCC is now looked upon as a coordinating body for cooperatives and a unifying center that focuses on advocacy and education. During the pandemic, the importance of digitalization was realised and the integration of coops from different sectors to form an ecosystem is of utmost importance. For example, the NATCCO Network has created Kaya platform, a cooperative financial transaction platform. Cooperatives are supporting their members to provide training and use the platform. PCC facilitate consultations with its members to inter-operate these e-platforms and connects them with other cooperatives involved in agriculture, manufacturing, marketing, utilities, etc. Upon the onset of the pandemic, the micro, small and medium cooperatives were not prepared, they had to be trained on having virtual meetings through zoom, google and online transactions.

Moving online was useful in pursuing the cooperative development agenda with governments leading to the creation of policies benefitting the cooperative sector.

Mr. Bustillos said that, "while cooperatives are extensively using technology there is a need to introduce innovations around data gathering, developing a coop data registry, marketing programs and linkages for agriculture cooperatives. Considering the pandemic is still here, we need to embrace and practice this kind of technology."



*Innovation is no more a privilege, it has become a necessity.*  
- Sudhir Mahajan

Dr. Mahajan said that Innovation is no more a privilege, it has become a necessity. He said the world is going through a time where everything is changing at a fast pace, and this can be seen in all types of business models be it private or cooperative businesses. The lifespan of organisations has reduced due to technological revolutions, rapid industrialization, ageing populations and most recently the Covid-19 pandemic. Now everything has become online, so usage of online media for business promotions and marketing has become important.

Business organizations which will not evolve, innovate or diversify to address customers evolving needs will be out of the race. Therefore, the main challenge before cooperatives is to build and retain their competitive advantages without giving up their ideological routes. For cooperatives, members are their strengths and that is why they need to establish strong bonds with the members to remain updated and future proof themselves. Last year, the Indian Government had established a separate Ministry of Cooperation which earlier used to be a department. The Prime Minister of India, Mr. Narendra Modi, called upon cooperatives to play a major role in making India a USD 5 trillion economy by 2025. Aligning itself with the government's vision, NCUI has taken several initiatives in the education and training domain by collaborating with national and international organizations to set up a cooperative entrepreneurship development cell. Through NCUI Haat, a marketing platform for women cooperators, they provided women-led cooperatives with the much-needed design interventions and market linkages, through tie-ups with the Fashion Design Council of India and the National Institute of Fashion Technology.

Recently, NCUI has set up an incubation center to impart skill-based training to underprivileged women and youth to generate new livelihood opportunities. It has tied up with the Indian Institute of Technology (IIT) to link NCUI clusters with IIT's rural technology action groups. It has entered into MoUs with organisations working with the transgender community and street vendors to address their concerns by forming cooperatives and enabling them to create better livelihood opportunities for them.

### **Technology and service areas for growth of cooperatives**

Ms. Henry said that due to the pandemic, most businesses have shifted online including the services sector. However, post-pandemic, New Zealand is anticipating a mass exodus due to the opening of borders and people going out for work. Due to supply chain constraints, there is congestion, leading to elevated consumer demand, high prices, and a high cost of living, because of which youth are leaving New Zealand. On the other hand, there have been a lot of legislative changes which is supporting growth in the services industry. CBNZ is trying to make these businesses competitive and helping them re-build post-Covid-19.

*Due to the pandemic, most businesses have shifted online including the services sector.*  
– Roz Henry



Ms. Al-Hajeri noted the need for cooperatives to transform and innovate especially after the pandemic. The government is supporting cooperatives that adopt innovative approaches to create awareness among the community. For example, one of the cooperatives is using virtual reality to give a real-time store buying experience to its customers. The government has launched the Circular Economy Policy and is working on projects with cooperatives that are moving towards paperless technology by digitalizing their processes and using the Internet of Things (IoT) to track fleet locations and fuel requirements. The government is using artificial intelligence and machine learning to develop systems for consumer cooperatives to analyse consumer behaviour and segment customers according to their needs. Citing examples of social cooperatives, that introduce innovation through their processes and the model itself, she explained how these coops focus on members' happiness which is exactly their objective. The government provides capacity building services to these cooperatives and transfers knowledge and best practices to new cooperatives. The government has adopted a multi-pronged approach to create awareness through workshops, developing a new identity for cooperatives, and behavioural science experiments with all sections of the community, especially youth, women, and the elderly. The government is innovating its own processes to reach out to people and encourage them to be cooperative members by using design thinking processes to analyse their behaviours and reach out through social media influencers. She noted that with all these innovations, it is equally important to understand why some of these fail and how these can be improved. It is a continuous process of R&D, testing, improving, and changing.



Mr. Bustillos mentioned the technological and ideological areas for further growth of cooperatives. In the technology aspect, there has been a boom in financial and digital services cooperatives in the Philippines. These cooperatives focus on core banking systems, e-platforms for governance, financial management, and generic business management. PCC is now focusing on ensuring service delivery at par with commercial banks to its members through digiCoop and NATCCO Network. Led by Mr. Gary Leonardo, PCC Chairperson and its Board of Directors, PCC is collaborating with institutions to create a cooperative data registry that can help in analysing the data and formulate policy recommendations for the Government. It is undertaking research to enumerate the social impact of cooperatives on the Philippine economy.



*The promotion of cooperative ideology is crucial to differentiate them from other forms of businesses.*  
– Edwin Bustillos


Mr. Bustillos said that the promotion of cooperative ideology is crucial to differentiate them from other forms of businesses. Integrating the cooperative values and principles in processes, training, and education is necessary. PCC is actively advocating for the due recognition of cooperatives in the upcoming elections' agenda and has identified 16 common priority agendas for the consideration of legislators in policy formulation.

Dr. Mahajan referred to Nano Urea liquid by Indian Farmers Fertilizer Cooperative (IFFCO), a revolutionary product which is far less polluting than normal urea. The Ministry of Information & Technology, India is developing district-level village entrepreneurs' societies as common service centers to access various e-governance and business services between the villagers and the district headquarters. AMUL, jointly owned by 3.6 million producers in Gujarat, has innovated immunity-boosting product range for milk, chocolates, and ice creams. NAFED has created 65 farmers' producer organizations with the requisite infrastructure for beekeeping and honey production.

### **Evolving and pressing needs of cooperative members post COVID-19 pandemic and cooperatives' resiliency to face external shocks in the future**

The majority of cooperatives in New Zealand have been classified as critical services cooperatives and have experienced huge growth over the last two years. Even in such a challenging time, they have maximised their opportunities by expanding markets and diversifying their products. CBNZ considers it important to future proof their businesses. Cooperatives have digitised, shifted to remote working and changed the way of service delivery. CBNZ facilitates virtual collaborations among its members so that they can deliver at scale. The primary sector cooperatives are engaging closely with CBNZ right from the farm to international markets. CBNZ works closely with the government to devise data sharing solutions through technology and develop upskilling programmes to be incorporated into tertiary education.

Ms. Al-Hajeri said that the Covid-19 pandemic was a wake-up call for not only the cooperatives but also the government and all other players in the cooperative ecosystem. The Ministry of Economy in UAE realizes the potential of cooperatives and is working on three major pillars – Reforming the cooperative regulations and policy, enabling the ecosystem through skill up and scale-up programmes including capacity building of government representatives who are overseeing cooperatives, and raising awareness by creating a new identity of cooperatives. Cooperatives have risen to meet the needs of their members, digitized their processes and are collaborating online. Newer cooperatives are being set up including small and medium manufacturers, agri-tech cooperatives working on food security issues, etc.



*The Covid-19 pandemic was a wake-up call for not only the cooperatives but also the government and all other players in the cooperative ecosystem.*  
– Samah Al-Hajeri

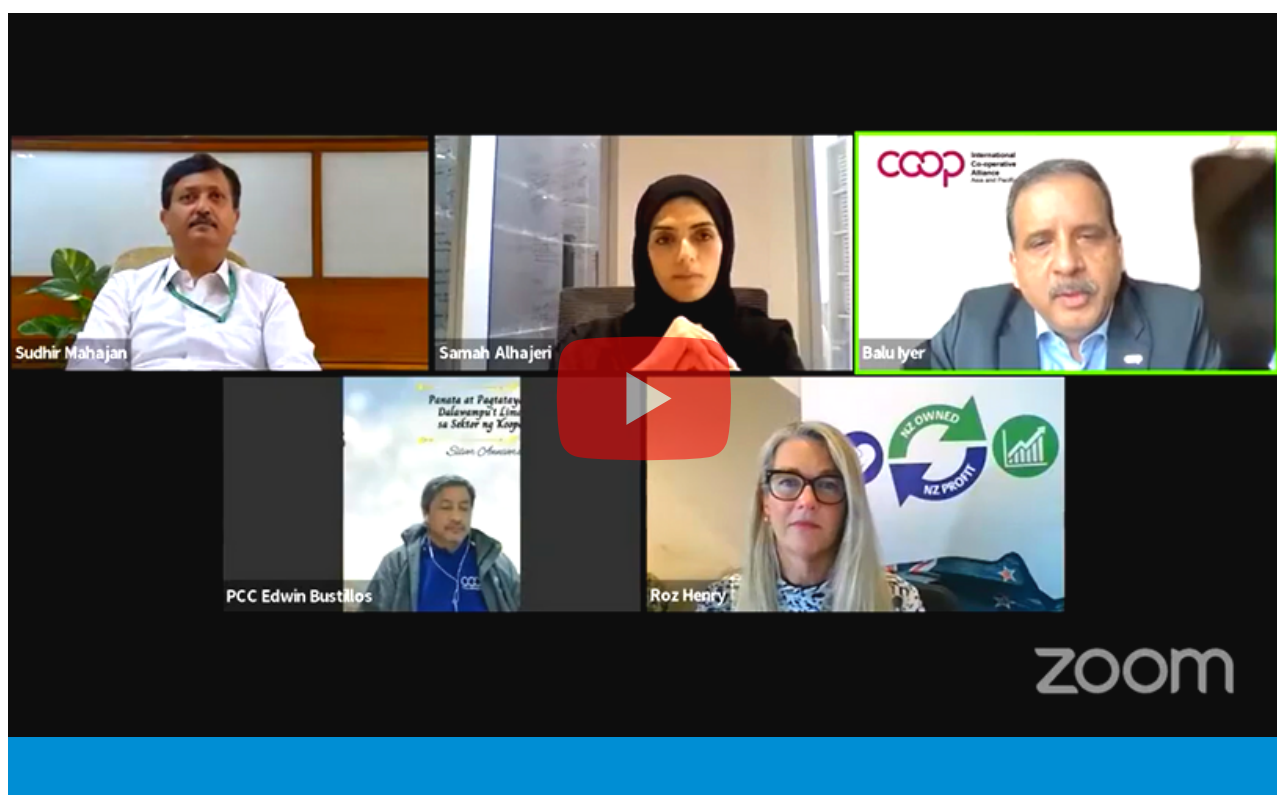
In the Philippines, PCC together with the federations and unions of cooperatives lobbied for the inclusion of cooperatives in the stimulus package that was drafted during the pandemic. Another area to build resilience is mental health management both at the workplace and at home. Covid-19 and the subsequent lockdowns drastically affected the lives and occupations of people who have managed to survive but live with the constant fear of the unknown. Hence the promotion of the cooperative health management federations, cooperative hospitals and related cooperative health services is important.

### **Climate change and its impact on cooperatives**

The whole world is being affected by climate change and its impact is visible across sectors and industries. Cooperatives are at the forefront because the majority of ICA members in Asia-Pacific are involved in agriculture and allied activities and are now trying to innovate in this area. In New Zealand, cooperatives are taking a lead in achieving SDG targets and zero carbon emissions. Fonterra is using e-trucks to reduce their emissions. In the Philippines, the utility sector is transitioning from old jeepneys (mass transportation vehicles) that run on fuel to cleaner jeepneys powered by electricity. The project is under implementation and the cooperative sector is pushing for the institutionalization of the public utility vehicle modernization program. In India, NCUI's cooperative entrepreneurship development cell is spreading awareness among stakeholders about forming renewable energy cooperatives and tapping into geothermal energy space. For UAE, climate change is one of the priority areas in alignment with their Circular Economy policy.

Cooperatives' contribution to the nation's economy, climate change, and innovation cannot be overlooked. We see from this discussion, with specific examples from the four countries – New Zealand, India, Philippines and UAE, that cooperatives are contributing substantially to nations' development. In New Zealand, CBNZ is adopting a three-pronged approach along with the government and academia to drive the change. "Innovation now is no more a luxury", says Ms. Al-Hajeri who shared the government's vision and plan to work with cooperatives for national development. In the Philippines, PCC actively advocates to make cooperatives a preferred business model among its communities and be recognized by the government. Dr. Mahajan feels in India, cooperatives need to transform from being old school to being more technological institutions to have more cooperative icons in the country.

Listen to the dialogue below.



# Fintech in Asia and Pacific Cooperatives



**Balasubramanian Iyer**  
Regional Director, ICA-AP



**Simren Singh**  
Lead-Gender and Education, ICA-AP

## Background

The Covid-19 pandemic has brought to fore the significance of digitalisation and altered the behavioural needs of customers and institutions alike. From ordering groceries to booking tickets to transferring money, technology has conveniently enabled financial services. Fintech helps provide access to financial services in a convenient and timely manner, lower transaction costs, and extend financial products and services to the unbanked. Credit and banking (C&B) cooperatives have traditionally catered to the unbanked and relied on personal contacts, proximity to members, and tailored services (in some cases, going beyond savings and credit). The advent of fintech with its rapid penetration, fast moving market, and extreme competition is posing a threat to C&B cooperatives' traditional approach and way of working.

We spoke with leaders of C&B cooperatives from Indonesia, Nepal, Philippines, Thailand and Sri Lanka to know how they are learning, adapting, and evolving to meet competition from new fintech players and traditional banks. C&B cooperatives still have the advantage over the competition given their proximity to the community, goodwill, and the cooperative identity but they need to move fast in adopting fintech. They need to move away from working in silos and developing their own proprietary systems to working on common platforms or developing partnerships with service providers who are quicker and cost effective, while retaining their identity.



The need is for training and capacity building to bring behavioral change among older members and increasing the value proposition of cooperatives to younger users. As C&B cooperatives deal with vulnerable communities, they need to be aware of data security and privacy, schemes which promote buy now pay later, and loss of data to big third-party vendors/service providers. The role of national federations in advocacy with government and regulators was seen as being important.

*While the cost of fintech is high, the cost of not making members use is higher.*



## Fintech

Fintech – a portmanteau for financial and technology has revolutionised the banking, trading, insurance, and risk management industries. Fintech companies, which include startups, technology companies and established financial institutions (FIs), use internet, mobile application, software technology, and cloud services to perform or connect with financial services.

Fintech's objectives are to change the way consumers and businesses access their finances, make them more accessible and more efficient and in the process compete with traditional financial services. Fintech is transforming the financial landscape where consumers are able to choose from broader set of alternatives at competitive prices, and financial institutions improve efficiency through lower costs.

## Fintech trends in Asia-Pacific

According to the Pulse of Fintech H2'21 – a bi-annual report published by KPMG highlighting global fintech investment trends, fintech investment in the Asia-Pacific region almost doubled – from US\$14.7 billion in 2020 to US\$27.5 billion in 2021.

Governments and regulators in the Asia-Pacific region are defining roadmaps for digital transformation and encouraging citizens to go 'less cash'. The Reserve Bank of India looks at fintech and digital players as the fourth segment of the Indian financial system, alongside large banks, mid-sized banks including niche banks, small finance banks, regional rural banks and cooperative banks.



**Government of India's Unified Payment Interface**  
Source: <https://www.bhimupi.org.in/>

The Central Bank of the Philippines (Bangko Sentral ng Pilipinas) under its Digital Payments Transformation Roadmap (DPTR) 2020–2023, is pursuing the twin goals of converting at least 50 per cent of all retail transactions into digital, and onboarding at least 70 per cent of the population to the formal financial system by 2023. In Nepal, the Central Bank (Nepal Rastra Bank) has opened the door for telecoms to enter into the digital wallets business by obtaining a payment service operator/payment service provider license. In Sri Lanka, the Central Bank of Sri Lanka has in place National QR code standards (LANKAQR), where payments would be charge-free for consumers and a market-determined merchant discount rate (MDR) would be applicable for merchants to encourage the usage of new and convenient payment channels, boost digital transactions in offline kirana (a small, usually family-owned shop selling groceries and other sundries) and enhance the user experience.

### **Fintech– the downside**

Despite the time and cost benefits of fintech, it could widen the digital divide and impact the labor sector. Access to fintech services and products are widely used by the youth but less so by the older generation, thereby widening the gap between different demographics. Also, the technologies are leveraged by those who are more tech-savvy or the ones with smartphones and alienate the already marginalised groups—the poorest who may not have access to smartphones and the internet. Knowledge about the fintech products and services and ways to use is not widely known. The developments in fintech could make certain banking tasks obsolete leaving many employees jobless, and the possibility of the workforce being replaced by AI-enabled machines is high.

### **Impact on cooperatives**

C&B cooperatives have historically offered their financial services through traditional channels and brick-and-mortar locations. Their members have been the unbanked and the underbanked who tend to be older and less technologically savvy. C&B cooperatives have relied on their physical links with members and customers who live in close proximity and leveraged local knowledge and relationships. Their mode of working, growth and penetration of fintech services is posing a serious threat in terms of losing business, retaining clients, attracting younger generations, hiring skilled human capital, and retaining brand identity in the market.

*The developments in fintech could make certain banking tasks obsolete leaving many employees jobless, and the possibility of the workforce being replaced by AI-enabled machines is high.*



## Views from C&B cooperatives in Asia-Pacific

We spoke with Mr. Raul M. Calayan Jr., President and CEO, Network Consolidated Cooperative Bank (NCCB), the Philippines; Mr. Deo Widiyastoko, Chairperson and Mr. Suruto, CEO, National Federation of People-based Coop Enterprises-INKUR, Indonesia; Mr. Badri Kumar Guragain, CEO, National Cooperative Bank Limited (NCBL), Nepal; Mr. Nimal Mamaduwa, CEO, SANASA Federation Limited, Sri Lanka; Ms. Elenita San Roque, CEO, Association of Asian Confederation of Credit Unions (ACCU); and Mr. Ranjith, Hettiarachchi, Myanmar Project Manager and Chief of Technical Officer in Management.

To understand the ecosystem in India, we referred to secondary materials that highlighted views of individuals from the banking and financial sector.

### ***What is the status of fintech in your country? Can you talk about trends and prominent applications?***

In the Philippines, the fintech industry has been improving since 2019. According to the Department of Trade and Industry in 2020, the number of start-ups entering the fintech sector is growing at an average rate of 16% annually. 22% of fintech start-ups are involved in payments; 30% in remittances/investment/and crowdsourcing; 29% in the alternative finance segment; and 19% in the blockchain. Popular payment apps are managed by Telcos such as Gcash which is widely used in the Philippines.



*Popular payment apps in Thailand and the Philippines are PayPal, RapiPay, PayMaya and GCash. These apps have substituted banks in one sense. Banks have become old fashioned. Youth today use one or more than one of these apps for daily transactions.*

*– Elenita San Roque, CEO, ACCU*

The banking sector in Nepal uses software by private companies such as Finacle and Globus for Core Banking System (CBS). Some development banks and micro-finance institutions use locally created software called Pumori because it is affordable. PhonePay is one of the leading apps in Nepal which offers digital and mobile banking facilities to banks. NCBL is trying to use PhonePay to integrate mobile banking into its network. In Sri Lanka, a lot of banks and FIs are widely using fintech solutions. They have various features like e-wallet, internet banking and biometrics, etc. During COVID-19 lockdown, most of the clients got used to using internet banking apps. Banks and FIs are actively adopting such solutions. There are a few companies like Epic Lanka which are famous for IT solutions and have tie-ups with private banks and FIs.

But cooperatives in Sri Lanka are not using fintech solutions that much. Under SANASA, societies are primary and rural in nature and use stand-alone systems. What is needed is connectivity between these societies and co-banking solutions. Cooperative credit societies face regulatory challenges and there is hardly any encouragement from the government to revamp the sector.

Cooperative banks in India are allowed to use Unified Payments Interface (UPI) such as Google Pay, Paytm, BHIM; and mobile banking services. Infosys Finacle has developed a digital technology software for urban cooperative banks to modernise core business and operations. Urban cooperative banks like Vidya Sahakari Bank, Urban Co-operative Bank, Bareilly and Zoroastrian Cooperative Bank are using this software. However, not all cooperative banks have adopted fintech in India.

***One of the motivations of fintech is to reach the unbanked and the underbanked. Credit and Banking (C&B) cooperatives are an important part of the cooperative ecosystem and one of the key points is the reach in urban and rural areas. Are you seeing fintech companies moving into this area where there has been presence of more cooperatives? What are the threats that you see to C&B cooperatives?***

According to Mr. Raul M. Calayan Jr. President and CEO of NCCB, C&B cooperatives can reach the unbanked with digital technology in the long run but in short run, it is difficult due to limited technical know-how. Around 70% of people in rural areas still prefer cash-based transactions. The Central Bank is promoting financial inclusion of the unbanked by encouraging commercial banks to keep a low cap of 100 Pesos as minimum deposit requirement which is affordable to many.



*People like to join a cooperative bank or credit union because they are locally available, they are easy to work with, and their interest rate is better than that of commercial banks or financial institutions. However, commercial banks have their own financial inclusion programs, and they are reaching everywhere. They have huge capital and other resources and are engaged in stiff competition among each other.*

*– Badri Kumar Guragain, CEO, NCBL, Nepal*

In Sri Lanka, Mr. Nimal Mamaduwa, CEO of SANASA noted that poor people working at the primary society level or village level cannot afford smartphones or even a regular mobile phone even today. At the village level, old people do not use technology and this is a challenge. Right now, the younger generation is more conversant in using technology than older generation. Going forward, SANASA will have to get everyone within their network to use technology.



The threat that SANASA sees is that micro-finance companies approach people at the village level, most of whom are members of SANASA societies. Microfinance companies are encouraging them to take micro-credit loans using technology and lure younger people to join their network. Cost is another factor. Due to the economic crisis in Sri Lanka, remittances have gone down. There are a large number of workers in the Middle East and other countries who due to high cost of remittance transfers, use informal channels to send money home. This is an untapped opportunity. SANASA has been in touch with remittance transfer companies particularly Western Union to see how primary societies under SANASA can be given sub-agency at local level to channelise remittances. About 50 primary societies are expected to be part of the partnership between SANASA and Western Union by end of 2022.

In Indonesia, Mr. Deo Widiyastoko, Chairperson of inKUR noted that many fintech companies are engaged in illegal savings and loans online. They usually attract marginalised and women who get lured and exploited by their scams.



*All cooperative banks should aim to adopt digital banking and lending mechanisms, especially with the target of more small advances. If we don't keep up and match digital banking and lending, cooperative banks will be wiped out in terms of lending.*

*– Milind Kale, Chairman, Cosmos Bank, Pune, India  
(as featured in the March 2022 Times of India article on 'Cooperative Banks Need to Adopt Next-Gen Banking'.)*

**What are the advantages that C&B cooperatives have that when added with fintech can help address the competition?**

The advantage that C&B cooperatives have is that they are already in the field where most unbanked people are, noted Mr. Raul M. Calayan Jr. They know people directly in the community, professionally and personally. The fintech companies can partner with cooperatives which will benefit both.



*Cooperatives provide other services such as insurance, stores, social welfare, etc. along with banking and credit services. Cooperatives provide a range of services and advantages to members which helps the model stand out as compared to other private players.*

*– Raul M. Calayan Jr., President and CEO, NCCB, the Philippines*

According to Mr. Badri Kumar Guragain, CEO of NCBL, the Cooperative Development Fund and principles like Concern for the Community can be an advantage for cooperatives to stand out in the competition. But it is not put to maximum advantage. NCBL supported people during the worst phase of the COVID-19 pandemic by keeping its branches open and having affordable interest rates. This has helped strengthen our goodwill among people.

SANASA believes that young people can be attracted through fintech and given better financial inclusion. The technical know-how of people (middle aged) can be built with education and training which is in the cooperative DNA.

*When people have bad experiences with illegal or fraud companies, they realise the value of cooperatives and the services that cooperatives offer. At the end of the day, they value the experiences they have working with a cooperative.*

*– Deo Widiyastoko, Chairperson, inKUR, Indonesia*

**The goal of fintech is to make financial services less expensive and more flexible per transaction. How are C&B cooperatives adopting new technologies to improve their efficiency? Examples of applications; of cooperatives which are at the forefront.**

Ms. Elenita San Roque noted that in the Philippines, ACCU, NATCCO and Philippines Federation of Credit Cooperatives have partnered to set up the Kaya payment platform which is a coop-owned, coop-led, and coop-governed payment platform. It is exclusively developed for cooperatives, enabling their members to undertake cashless transactions through four channels – ATM, Mobile, Over-the-Counter, and POS.

The origins of Kaya platform lie in the need that savings and credit cooperatives need to have inter-connectivity. For this, it was first thought that they need to use the same Core Banking Solution (CBS). But because no regulation mandates them to follow a common CBS, it was not possible to make them use a common system.



**Kaya platform users in Philippines**  
Source: The Manilla Times

It was then decided that a common payment platform could help bring together all savings and credit cooperatives so that they can engage with each other through digital technology. This model was envisaged in 2014 and was launched in 2020 as a pilot model in the Philippines.

NATCCO has developed Kaya Payment Platform for member organisations. But some big cooperatives have their own IT teams or can hire IT services from third party. Those who cannot afford on their own, can make use of the Kaya payment platform. The other platform in the Philippines is digiCoop Technology Services developed by a cooperative to provide technological services to cooperative organisations. ICISP, an ICA member is one of the promoters of digiCoop.

In Nepal, out of 30,000 cooperatives, around 50% of them use CBS by private or local companies. They maintain their financial records using computers. Out of 15,000 cooperatives, around 3,000 cooperatives are competent enough to offer mobile banking services to their members and around 1,000 of them offer mobile wallets, and payment gateway facilities at present using third-party services. ATM services are offered by only 50 to 60 cooperatives as the Payment and Settlement Act of Nepal does not authorise cooperative banks and credit unions to directly provide ATM services. A commercial bank is required for cooperative banks to settle payments with third parties to reduce settlement risks. In Indonesia, there is a digital platform called SAKTI for cooperative credit unions. It is formed by primary and secondary credit unions and is managed like a cooperative.



According to the Banking & Finance Post 2016 article on 'IT Revolution in Cooperative Banks of India', "large parts of the cooperative sector in India have CBS developed by the National Informatics Centre (NIC). NIC is a government-based web services organisation, which has brought them into the technology mainstream. In Cooperative Core Banking Solution (CCBS), NIC takes care of all aspects, except hardware and manpower. As the access is role-based, there are many security layers to make sure data is kept safe. CCBS has been rolled out in state cooperative banks, district cooperative banks, primary agriculture cooperative societies, land development banks and primary agriculture development banks."

## What are the challenges that C&B cooperatives face in adopting new technologies? Internal and external.

In most countries such as India, Thailand, Nepal, Bangladesh, Indonesia, Taiwan, Hongkong Sri Lanka, and Malaysia, savings and credit cooperatives are regulated by cooperative legislations and are administered by registrars. These legislations don't allow cooperatives to have their fintech platforms. They are not given same status as commercial banks and financial institutions in the market to grow and develop.



*IT investment is very much needed in the sector. "We are very uncooperative even though we call ourselves cooperatives. Unlike the private sector, we don't invest in each other. Cooperatives are given too much democracy without proper guidelines. We don't have much entrepreneurial spirit and don't think about the future. By 2030-35, cash transactions will cease to exist and how will cooperatives face this situation? Nobody is thinking about it.*

*– Ranjith Hettiarachchi, Myanmar Project Manager and Chief of Technical Officer in Management, ACCU, the Philippines*



*One of the challenges in adopting new technology is duality in what we say, want and do. Cooperatives talk about cooperative principles but they are not followed. For example, on one hand, cooperatives talk about equality but are worried about profitability. We talk about members' growth and are worried about dividend rates. If ethics are difficult to abide, there should be strong regulations in place to monitor the performance of cooperatives.*

*– Badri Kumar Guragain, CEO, NCBL, Nepal*

Most of the SANASA societies are computerised but there is no central system for data keeping and collection. Moving forward, ATMs and connectivity within the network is required.

In Indonesia, some of the challenges include regulatory systems which do not encourage cooperatives to adopt technology, no angel investor in cooperative sector, and high costs of developing, testing and running technology. Most of the digital technology is owned by corporate giants and they are expensive to adopt or there is a fear of losing data to them.





*The other challenge is that in most credit unions, the board of directors or members are old people who do not understand or are interested in adopting digitalisation in their core business. On the other hand, there are youngsters in the community who want to use digital technology and are left out of our network because we are not advanced enough to provide them with technological services. This is a huge challenge.*

*– Suroto, CEO, inKUR, Indonesia*

In a Mint 2022 article on 'Bank in a Box the Indian Scenario', Mr. Harshavardhan Pusala, Founder & Managing Director at Techurate Systems Private Limited observes that in India, demonetization in 2016, and the COVID-19 pandemic accelerated the adoption of digital financial services, mainly core banking. The newly formed small banks, fintech's and the large banks had little or no problems in adapting to the new age digital platforms. The traditional small and cooperative banks fell behind them in the race to progress. The three major impediments to change are, the prevailing cultural mindset, the lack of understanding the digital framework and the capital investment needed to digitize."

**How are C&B cooperatives ensuring that members (especially the poor, women, elders, and people with disability) adopt or start using technology in their day-to-day banking/credit transactions?**

There is a regular marketing program run by NATCCO for their societies about the Kaya platform. Once societies subscribe the Kaya platform, they are given trainings on how to use the platform. For the elderly, cooperatives provide customised services to members like going to their homes to provide services. To ensure that the elderly adopt digital technology, cooperatives can provide personalised services. NATCCO is promoting the Kaya Payment Platform among the youth so that they can understand its advantages and start using it.

The best way forward in Sri Lanka will be to select a few primary societies and pilot a program where they are handheld on using payment gateways or using a digital system that connects them, according to SANASA.

**Are C&B cooperatives in your country cooperating to have fintech platforms to pool resources, scale operations and address competition?**

Cooperatives in the Philippines want to collaborate hence two large initiatives such as the Kaya Payment Platform and digiCoop Technology Services have been undertaken. This will help establish one common Cooperative Identity which will be a strength in the long run.

NCBL has partnered with a commercial bank and PSO to provide ATM services to cooperative members. This will reduce costs and ensure that we are efficient. But in the long run, it is not advisable to rely on them but build our own system. NCBL have requested National Cooperative Federation (NCF) to build a comprehensive policy to enhance digital capacities of cooperative banks and credit unions.

SANASA has partnered with Développement international Desjardins (DID) Canada to develop the MIS system in about 500 primary societies (but only 50 of them currently use Management Information System (MIS) to provide information to SANASA). Discussions have also been held with LankaPay on how to implement a common network for primary societies. But the main obstacle is high cost.

## Reflections

- 1.C&B cooperatives still have the advantage over competition from commercial banks and FIs with fintech services given their proximity to the community, goodwill, and the cooperative identity but they need to move fast in adopting fintech. However, they need to think of creative ways to ensure that members remain loyal to them.
2. There is a need for interconnectivity between cooperative banks, credit unions, and between cooperative and other private banks (long term).
3. C&B cooperatives need to move away from working in silos and developing their own proprietary systems to working on common platforms or developing partnerships with service providers who are quicker and cost effective, while retaining their identity.
4. While the cost of adopting fintech is high, the cost of making members use fintech is also high. It requires not only training and capacity building but also advocacy for behavioural change. Older members are not keen on trying new technology but to move forward and compete better, technology is much needed. Members need to be taken into confidence as to why fintech is relevant and important for business and growth.
5. Youth today are used to using technology and adopting digital technology in their services. Cooperatives stand to lose a huge number of young people as membership/customer base, who generally look to associate with socially-responsible businesses. By not adopting digital technology, C&B cooperatives lose out on a big opportunity to attract youth which in the long run is not sustainable.
6. There is concern about the loss of members' data to big third-party vendors/service providers but it's a risk that has to be calculated and well taken. Steps need to be taken to prevent data and market share loss to private banks and financial institutions.
7. National cooperative federations need to step in and support C&B cooperatives to come up with comprehensive solutions and strategies.

# Case Study: digiCOOP as the Platform Ecosystem for Cooperatives in the Philippines

According to the 2018 report of the Cooperative Development Authority (CDA), the government agency in charge of promoting cooperatives, of the 11,138 cooperatives, 5708 or 51.2% are micro cooperatives[1]. Micro cooperatives consist of farmers, fisherfolk, and other individuals from the most vulnerable communities.

While the pandemic has hastened the country's digital transformation, as an unexpected consequence, the picture among cooperatives is mixed. Large cooperatives with the bandwidth to shift gears and to invest in innovative ways of helping their individual members transact amid the lockdowns have attempted, and a few succeeded, to create platforms for business continuity. However micro cooperatives continue to lag as they lack the funding muscle to adapt to the changing needs of the times.

Like many others, digiCOOP is a portal offering both financial and non-financial services. However, what differentiates digiCOOP from the rest is its bid to unify the country's cooperatives—regardless of their asset size—by offering an interoperable and interconnected “platform ecosystem.” At the helm of the system is DigiCOOP Technology Services Cooperative (DTSC), a secondary cooperative composed of 20 founding cooperatives. Barely one month after the CDA released Memorandum Circular 2021-14 (or the guidelines on how to register a Technology Service Cooperative (TSC) as a Special Type of Cooperative), the DTSC completed its registration under such classification---the first in the Philippines to do so. In the next two months, DTSC onboarded 86 newly invested cooperatives and their 700,000 individual members and partnered with 10 federations and 12 unions. The vision to unite cooperatives through technology is now taking shape. This is a vision that started with an idea three years ago.

Long before assuming the role of DTSC President and CEO, Ann Cuisia had been the force behind GAVA, the start-up that owned the crowdfunding platform of the same name for NGOs, charities, and foundations in the Philippines. GAVA was developed as the practical go-to option for NGOs and charitable institutions that could not afford to build their own platforms to collect donations. As GAVA CEO, Cuisia was often invited as a speaker for her niche in the tech industry. In one such networking event, she met the leaders of 1 Cooperative Insurance System of the Philippines Life and General Insurance (ICISP) who initiated her into the world of local cooperatives.

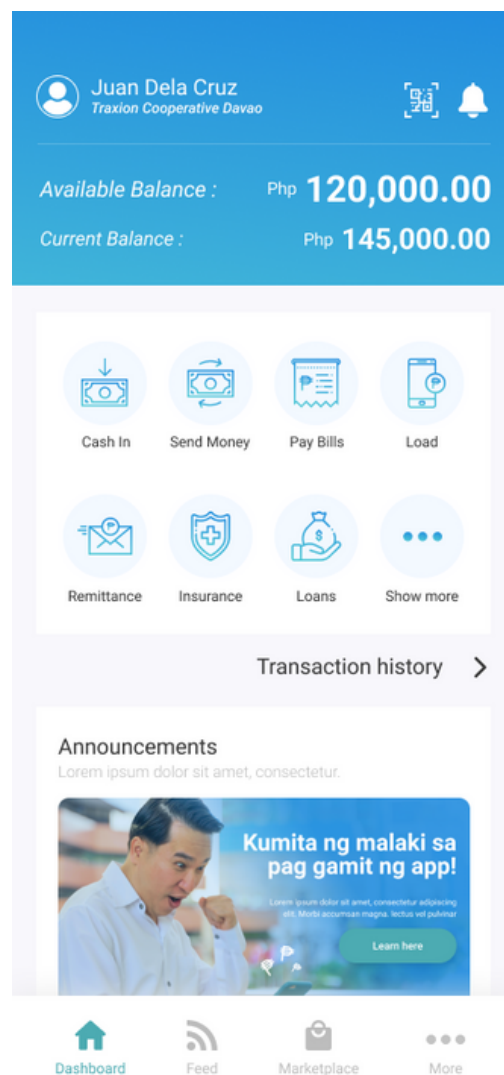
In 2018, Cuisia was in London for an event on blockchain technology. While touring the city, she noticed the ubiquity of cooperatives for what seemed to be almost all products and services—from fashion to banking, to even beer. But what set her thinking was the way these cooperatives had automated and tech-ed their processes. These scenes were in contrast to that of the cooperatives back home. A year later, ICISP invited Cuisia to an assembly attended by almost a thousand cooperative leaders. Despite the size of the crowd, she had one observation: There was a lack of technology for and by cooperatives. A “tech-driven cooperative movement” was absent. She thus began envisioning a platform that addresses local cooperatives’ needs.

In 2020, the idea became a reality with the launch of digiCOOP. Already immersed in the cooperative movement and its principles, Cuisia formed a cooperative for her own fintech company, which later joined other cooperatives as founding members of the DTSC.

### DTSC’s Platform Ecosystem

Many Philippine cooperatives had tried to build a platform but the data on the percentage of Philippine cooperatives going digital is scant. The sentiment is that even the larger ones were unable to reach the point where they have built an online platform that creates and promotes a unified ecosystem. Most platforms were built with close loop technologies, thus limiting their reach to only their members. Herein lies the gap.

As a solution, DTSC’s “platform ecosystem” is envisioned to be a tech-driven ecosystem where members have mutual dependence on a multi-system platform. This aims to promote interoperability and interconnectivity on one hand and independence on the other. Today, as a licensed Electronic Money Institution (EMI) platform, digiCOOP can facilitate e-money disbursements, payment intermediation, and allied online payment services. Users can also turn to the platform as a marketplace, thus providing them additional sources of income. Services can be accessed through one of the three ways: the digiCOOP app, the cooperatives’ physical branches, or the digiCOOP business centers.



*As a licensed Electronic Money Institution platform, digiCOOP can facilitate e-money disbursements, payment intermediation, and allied online payment services.*



## DTSC's Place in FinTech

As the first and only technology service cooperative in the Philippines, DTSC can claim to be a pioneer in the cooperative fintech space. While it is true that the Philippines already had major for-profit mobile payment service providers way before DTSC was created, what the latter brings to the table are the same offerings as those of these key players but with the “cooperative flavor” such as:

- digiCOOP follows the B2B business model and is equipped with features that are universally needed by all cooperatives in the ecosystem. While digiCOOP allows interoperability, it can be personalized per cooperative, thus providing a different user experience per individual. An individual member from cooperative A can view or access features, products, or services on his/her digiCOOP app differently from what a user from cooperative B can view.
- Functionalities for e-learning, e-voting, loan payments, credit scoring, share capital deposit, etc. facilitate a cooperative's administrative governance.
- Principle 6 (“Cooperation Among Cooperatives”) implies that cooperatives are expected to help each other succeed. digiCOOP facilitates such a mandate by helping cooperatives move away from the tendency to operate in silos.
- Transaction rates are competitive, and because all members are part of the platform ecosystem, both their cooperatives and cooperators earn rebates for all transactions made.

## Lessons Learned

Early movers such as DTSC have a learning advantage over others. What DTSC had learned is that the work of transitioning cooperatives to the digital space is not a cakewalk, for at least two reasons:

- Cooperatives are spread across a 300,000-square km country of 7,641 islands. Of the nation's 17 regions, around 50% of the cooperatives are in the regions of Pampanga, NCR, CALABARZON, Cebu, Iloilo, and Cagayan de Oro. One challenge in the delivery of online payment services is the stability of internet connections, particularly in hard-to-reach areas. According to the Department of Information and Communications Technology (DICT), there were less than 20,000 towers in the country as of 2019—far less than Vietnam's 70,000 and Indonesia's 90,000 towers. By Q3 2020, the number rose by 2,000 although still far from the 50,000 additional towers needed to adequately connect the country.
- Other than the onboarding training, there are the cyber security trainings for administrative users manning either the cooperatives' branches or their designated digiCOOP centers. Users who are new to the technology, or even the use of computers and laptops, had to be briefed on topics as simple as why passwords should not be shared.

Today, training takes up a significant portion of the digiCOOP onboarding teams' efforts. For cooperatives' front desk personnel: Free webinars, face to face trainings, fora are given twice a month. At least two face-to-face sessions are scheduled with personnel to teach them how to activate their cooperatives' membership on the app.

Individual members: The Marketing team has prepared instructional kits to guide cooperatives on how and what to educate their members on. These are supplemented by video tutorials available on the official website and social media sites.

These constraints, fortunately, are not without their workarounds. For instance, there are offline solutions for individual members encountering connectivity issues. For those without internet access in their homes, 256 new digiCOOP business centers have been set up nationwide to supplement the existing number of cooperative offices attending to individual members' needs. Cooperators can visit these locations to process their loans, renew their membership, pay their utility bills, etc. using their digiCOOP Circle Cards. Alternatively, they can use their digiCOOP Prepaid Debit Cards in places where a BANKNET Automated Teller Machine is available.

In addition, there is the concept of agency banking that can be tapped for other transactions. Cooperators who do have an internet connection can use their digiCOOP mobile app to process transactions on behalf of a fellow cooperator. This is a win-win solution since those who facilitate the transaction, the agents, can earn extra income out of every successful transaction.

### **Future-Proofing Cooperatives**

DTSC has just started, and a lot still needs to be done. To future-proof cooperatives, the platform should be scalable for businesses in the cooperative ecosystem that want to move toward the future. To do this, DTSC went for a cloud-first, mobile-first strategy. That is, it designs and builds products and services on the cloud for portability and ease of update and then taps mobile devices as the primary channel for improved member experience and convenience.

Once sustainable, can the platform ecosystem eventually see more micro cooperatives join the ecosystem? Based on Cooperatives' Principle 6, such a goal to see all cooperatives succeed should apply to micro cooperatives, too!



# C&S Coop Supermart: An Introduction to New Generation Stores in the Philippines

VICTO National, an ICA member from the Philippines has started C&S Coop Supermart, a new generation of supermarkets, that serve local communities by keeping people at the centre of operations.

C&S is the first and only cooperative grocery store brand and supermarket chain in the Philippines. It started its flagship store in La Castellana Negros Occidental province on April 1, 2018. Currently, the chain has established 3 stores and 4 more are poised to open this year.

With a vision to redefine consumer cooperatives in the country, C&S is creating a more rewarding way of grocery shopping by allowing shoppers to enjoy the special benefits that are exclusive to members of a cooperative while providing them with modern-day convenience. It is committed to empowering its members and communities by providing them with an avenue to showcase their products, broaden their reach, and promote locally made merchandise.

C&S has streamlined its store processes and is currently powered by top-of-the-line cloud-based systems – namely Storehub as the store-front POS and Oracle Netsuite for inventory management and accounting processes – a fully integrated system that makes daily transactions and reporting easy and efficient.

A subsidiary of La Castellana 1 PMPC, a primary Cooperative in the Negros Occidental province, C&S aims to unify and strengthen Cooperatives in the Philippines while offering economic advantages to more Filipino consumers FINALLY under ONE COOPERATIVE BRAND – C&S.

“Our dream is not just to sell products. Our dream is to promote and sell members’ products”, says Mr. Dudz Samson, Brand consultant, C&S Coop Supermart. This special emphasis on members made them stand out in the market in comparison to private supermarkets.

## C&S Coop Supermart: Future Proofing Essential Businesses

01

### KEY HIGHLIGHTS

- Number of operational stores – 3
- Number of stores to open in 2022 – 4
- Average Daily Sales in 2021 – P611k
- Flagship Store Size – 550 sqm (Selling Area: 330sqm and Warehouse Area: 220 sqm)
- Services Offered – Grocery Shopping, Delivery and Bulk Distribution to Members' Stores

02

### KEY DIFFERENTIATORS

- Stores owned and managed by primary cooperatives
- Selling cooperative members' products locally and abroad
- Great services to consumers at low prices  
Higher returns and better services to members
- Local employment generation
- Community service during the pandemic



03

### CUSTOMER & MEMBER BENEFITS

- Members' yearly patronage refund
- Loyalty points
- Senior citizens and person with disability (PWD) discounts
- Exclusive promotions for members
- Yearly top 15 member incentives
- Other services – partnering with local government agencies and empowering SMEs through financial assistance





# Innovation in Agri-tech: Nano Urea Liquid



**U.S. Awasthi**  
Managing Director, IFFCO

In this interview, Dr. U.S. Awasthi, Managing Director, IFFCO discusses the culture of innovation at IFFCO and the innovative nano fertiliser, Nano Urea Liquid.

Dr. Awasthi believes that technology is the solution to all problems. Being a farmers' cooperative, they have to be up-to-date with all relevant technologies to promote a culture of innovation. IFFCO has been proactive in adopting the changes, upgrading to newer technologies and practices, and educating farmers in using innovative methods of farming. Dr. Awasthi states that "with the help of technology, IFFCO has reduced energy consumption by 60% and water by half. Now we are trying to reduce the coal consumption in our coal-based power plants". IFFCO has a suggestion scheme to bring in innovative ideas from its employees which are implemented, and the employees are incentivised.

Dr. Awasthi notes that the rapid changes in the climate and global warming motivated them to bring a change in the way agriculture is practised in India and the world. Urea is the biggest pollutant in the environment; only 30-40% is absorbed and the rest either goes to groundwater or in the air as poisonous gases. IFFCO, a mainstream fertilizer company came up with an alternative, 'nano urea liquid' which uses nanotechnology and increases efficiency up to 85-86 % and is far less polluting.

The first plant was started in 2017-18 in Kalol, Gujarat. After trials across 11,000 locations in India, it showed encouraging results in terms of better quality, better micronutrients, protein and fibre content and less pollution. Nano urea liquid has tested safe for all human and flora and fauna species. A 500 ml bottle of nano urea liquid replaces one 50kg bag of traditional urea reducing the transportation and storage costs for farmers and improving the quality of their produce. It is now commercially available, and 15 million bottles have already been sold to farmers.

Dr. Awasthi believes that nano urea is going to revolutionise agriculture in the world as it can be used anywhere and in any climate. He says, “we have dedicated this product to the farmers of not only India but of the world!” IFFCO held various demonstrations and seminars to sensitise and educate farmers on the benefits of nano urea. “It is a matter of continuous dialogue with farmers”, says Dr. Awasthi and once they understand the advantages, they are happy to upgrade. It is 10% cheaper than the cost of the bag, leads to a 7% higher yield and a better-quality product fetches a better price as well. Internationally, nano urea liquid is being exported at a mere USD 5, so the cost difference is huge as compared to traditional urea.

IFFCO is building an ecosystem around nano urea. It is in process of launching a range of nano fertilizers like Nano DAP, Zinc, Copper, Sulphur, and Boron. It plans to educate consumers too as they are an important part of the ecosystem and their habits will shape the market dynamics.

Highlighting the expansion plans, Dr. Awasthi said, “50% of urea will be replaced by nano urea in India by 2025.” Sri Lanka has already purchased nano urea while Nepal, Bhutan, and Malaysia are showing interest. IFFCO has also discussed with Brazil, Argentina and the Philippines. IFFCO is open to anyone willing to adopt nano urea, be it cooperatives or private industries. It has plans to enter into joint ventures or transfer technology to help set up the plants worldwide. “Given the bandwidth and the desire that we have, it can be done”, said, Dr. Awasthi.

Watch the interview below.



# Cooperation between Vietnam and the Netherlands: Developing Horticultural Value Chain



Mirjam Boekestijn, NVHBP,  
Coordinator for the Netherlands

Vietnamese and Dutch members of the cooperative Netherlands Vietnam Horti Business Platform (NVHBP), established in April 2019 have merged their knowledge and expertise to develop the horticultural supply chain in Vietnam. The support provided includes seed breeding, crop cultivation, greenhouse and technology supply, post-harvest management, trading, logistics, design and engineering.

## **Why cooperation between Vietnam and The Netherlands?**

Reasons for setting up the Netherlands Vietnam Horti Business Platform were the strong bilateral trade relations between Vietnam and the Netherlands. The Netherlands is Vietnam's biggest (cumulative) EU investor and Vietnam's second-largest trading partner among EU countries.

Vietnam and the Netherlands have strong ties in the fields of agriculture and water. The Strategic Partnership Arrangement on Agriculture and Food Security signed in 2014 works as an overarching umbrella structure for all existing and new areas of cooperation in agriculture and food security.

Vietnam's development over the past 30 years has been outstanding. Economic and political reforms under Đổi Mới launched in 1986, have led to rapid economic growth. It has helped transform Vietnam from being one of the world's poorest nations to a low middle-income country and one of Asia's fastest-growing emerging markets with the fastest GDP per capita growth in the world. The agriculture sector accounts for almost 20% of the national GDP and Vietnam has a growing middle class with an increasingly westernized eating pattern. The importance of improving Vietnam's agricultural system along the value chain is growing and becoming more visible. This is increasingly opening up a market for innovative solutions to combat the effects of climate change and address structural challenges in the agricultural sector.



The Netherlands is a hub for international production and trade of horticultural products and plant source materials. It is the number two exporter of agricultural produce in the world as measured by value although it is a small densely populated country. Dutch knowledge and techniques are used in agricultural and horticultural companies all over the world. The Dutch know that one can achieve more by working together and this creates greater value. Collaborations with other countries in terms of sharing knowledge and techniques have enabled the Netherlands to become a world leader in the horticultural sector.

### **Cooperation model**

One of the proven success factors of the Dutch horticultural sector is strong cooperation between the private and public sectors with knowledge institutions: the “golden triangle” or “triple helix”. This form of cooperation took further shape in the formation of cooperatives, thus forming strong private enterprises (e.g. FrieslandCampina, Rabobank, Royal Cosun), branch organizations (LTO) and in the past product boards like Productschap Tuinbouw. The regional variant of this cooperation in the Netherlands is the Greenport model, widely known and implemented in various agricultural sectors. For example, the Westland-Oostland cluster, Venlo Cluster with at its heart Fresh Park Venlo, Greenport Noord-Holland Noord with Agriport A7. Horticulture in the Netherlands is concentrated in a number of core disciplines- bulbs, flowers, fruit, greenhouse vegetables, and open field crops. Greenports associated in some satellite areas are associated with some strong business companies. Within a Greenport cluster, we can find growers, auctions, sales organizations, trading companies, exporters and horticultural service suppliers. Most often there are breeders and propagation companies, knowledge institutions, service and technology providers and financial institutions. Due to the proximity of all partners, there is an intensive exchange of knowledge and cooperation in many areas.

*Growers in the farm*





The Netherlands Vietnam Horti Business Platform is a cooperative organisation of and for Vietnamese and Dutch companies, institutes and governmental organizations active in the horticultural sector. The platform is a unique bundling of forces covering knowledge, technologies and experience of the entire horticultural value chain in Vietnam and the Netherlands. Collaboration is key – members work together in order to establish long-term working relationships through sharing expertise and resources to join the Vietnamese growth market and by promoting, sharing and commercializing Dutch horticulture technologies.

The platform aims to bring the Vietnamese horticulture sector to the next level by establishing and applying efficient and effective Dutch methods and techniques throughout the entire supply chain of fresh-cut flowers, plants, vegetables and fruits. This results in high quality, sustainable, healthy and safe horticultural produce. Proven and innovative technologies, and the knowledge and experience of the members of the Platform, covering all stages of the entire supply chain, such as propagation materials, greenhouse equipment and technology, sustainable energy and water management, cultivation methods and techniques for greenhouses and open field, climate control and post-harvest management, will be used with the aim to:

- Produce safe and healthy food by applying smart farming, such as pest and disease management, and cultivation techniques to protect the soil and groundwater conditions or restore and rehabilitate soil and water resources for agricultural use;
- Shorten the food supply chain in order to secure ultra-fresh, safe products for consumers and minimise waste;
- Increase the revenue and profit margins for (small) farmers by minimizing waste and losses of fresh produce.

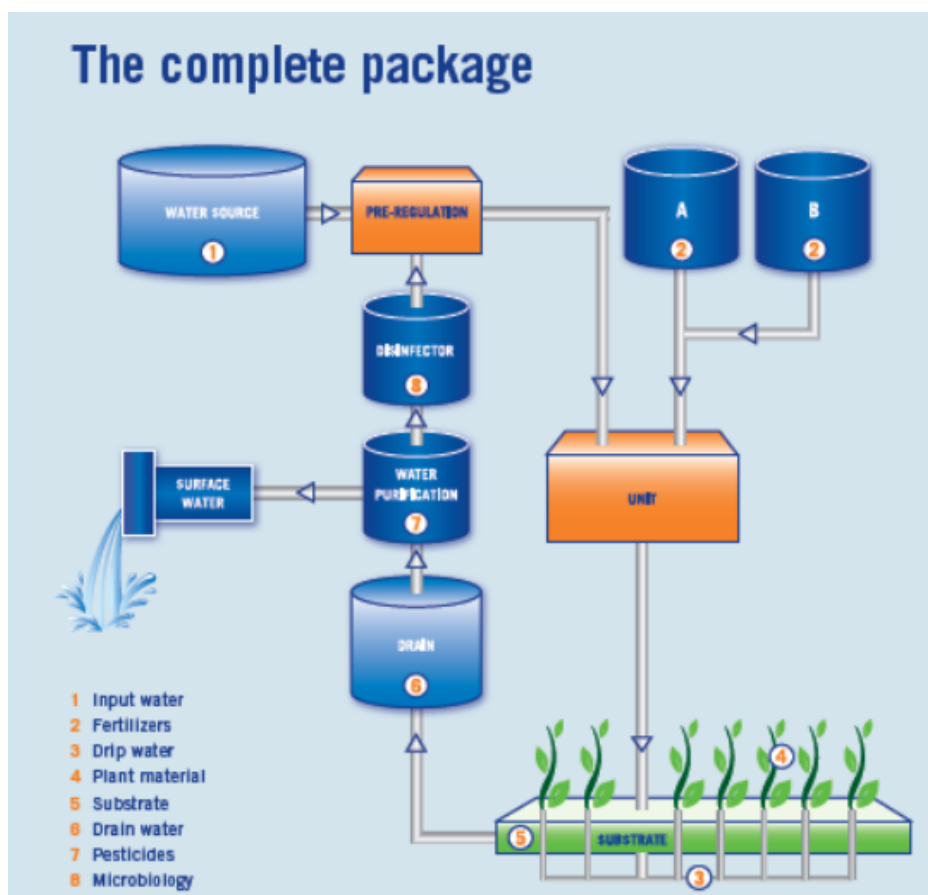
The Vietnam Cooperative Alliance (VCA) ([www.coste.vn](http://www.coste.vn)), a member of Netherlands Vietnam Horti Business Platform and ICA-AP, is the apex organization representing cooperatives, unions of cooperatives and other volunteer members in Vietnam. With the motto, “Cooperation – Innovation – Development – Efficiency”, VCA strives to successfully implement the Resolution of the 6th National Congress of Vietnam Cooperative Alliance for the 2020 – 2025 term. The organization plays an important role in developing the collective economy and cooperatives, promotes the building of a stronger Vietnam Cooperative Alliance system; productively performs the role of representing and protecting the legitimate rights and interests of members. In addition, VCA has the Center of Science Technology and Environment in Hanoi to support the innovation of the cooperative sector in Vietnam.



NVHB Platform member  
selling her produce

## Case - Eurofins Agro testing and MimosaTEK - A good example of true collaboration

Eurofins Agro in Wageningen, the Netherlands, is the world-leading laboratory in horticultural analyses. Over 90 years of their experience in the horticulture sector has resulted in a complete portfolio of innovative analyses and reliable crop advice. Eurofins Agro offers a complete package of analyses to optimize production.



*Eurofins Agro offers a complete package of analyses to optimize production*

For several years, some Vietnamese growers have been sending their soil and water samples to Eurofins Agro to seek reliable results, crop specific target values and recommendations for fertilization. Since Vietnamese horticulture is developing very quickly, Eurofins Agro started looking for a local partner to make its service known and easier to access for other growers as well. Since the end of 2019, MimosaTEK has been operating as the exclusive local partner for Eurofins Agro in Vietnam.

MimosaTEK was founded in 2014 to enhance the traditional farming experience based on 4.0 technology. It wants to create more sustainable farming models where farmers can use fewer resources but get more output in the same cultivation area. This goal fits well with Eurofins Agro's philosophy. Their team of young people with a lot of enthusiasm, passion and responsibility brings analytical services to every farmer.

The model of MimosaTEK is simple. It is the single point of contact for Vietnamese growers. They take and collect samples and prepare them for transportation. Eurofins Agro analyses the samples within 24 hours after they reach the lab.

The results, target values and recommendations are sent to MimosaTEK. The team of MimosaTEK translates the reports for Vietnamese growers and provides explanations and advice, if necessary. The picture below explains how it works:



To confirm its interest and motivation to invest in Vietnamese horticulture, Eurofins Agro decided to join the Netherlands Vietnamese Horticulture Business Platform (NVHBP) as a Gold member. This directly leads to an extra advantage for members of the platform. They can order a soil sample analysis (including target values and fertilization recommendation) from Eurofins Agro for free. Ms. Mai Hong, a horticulture vegetable grower and Coordinator of NVHP in Vietnam was the first to take advantage of this offer.

Sapa Hightech has been cultivating lily flowers in Sapa area for about 5 years. The farm is about 400 km from Hanoi City and has a good climate for flower cultivation but not rich soil. In 2019, Sapa Hightech collaborated with Thien Dieu and became a member of NVHBP. They made use of the support by Eurofins and MimosaTEK and sent soil samples for testing. Through the analysis and advice from Eurofins, Sapa and Thien Dieu could understand the structure and nutrition of the current soil so that they can grow lily flowers better and in more variety.

Do you want to be part of this cooperative or want to know more about the platform, please contact Ms. Mai Hong, Coordinator Vietnam and Ms. Mirjam Boekestijn, Coordinator The Netherlands at [info@nvhortiplatform.com](mailto:info@nvhortiplatform.com).

# Fostering Social Innovation through Cooperatives



**Hema Yadav, Director**  
VAMNICOM, India



**Manisha Paliwal, Professor**  
VAMNICOM, India

"Innovation as a methodical creation of the human spirit, a novelty that once created can be usefully and repeatedly applied" (Gabor, D. (1970). Innovation covers the application of knowledge for the creation and introduction of something new. Innovation is all about bringing change (Holt, 1971). Deployment of new technology is an outcome of technology innovation. However, "Social Innovation is the process of developing and deploying effective solutions to challenging and often systemic social and environmental issues in support of social progress. Solutions often require the active collaboration of constituents across government, business, and the non-profit world" (Sarah A. Soule, Neil Malhotra, Bernadette Clavier).

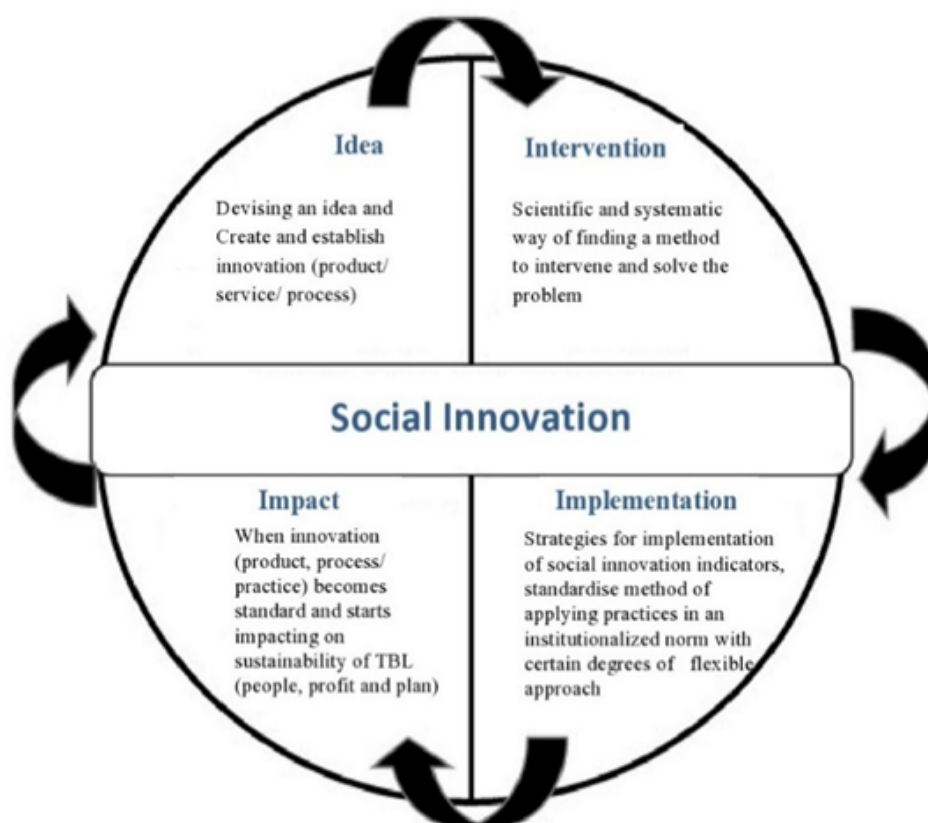
According to OECD, "Social innovation refers to the design and implementation of new solutions that imply conceptual, process, product, or organisational change, which ultimately aim to improve the welfare and wellbeing of individuals and communities". According to Mulgan (2006), social innovations can be defined as: "innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly developed and diffused through organizations whose primary purposes are social." In recent years, social innovation is being discussed widely across policy circles. However, this is not a new phenomenon. People have always tried to find new solutions to pressing social needs through "bottom-up strategic initiatives with local roots" that emphasize the improvement in social relations through solidarity, reciprocity, shared values and association. Over the period, Social innovation is perceived as a driver of social change (Cajaiba-Santana, G. (2014).



## Social Innovation Process

A social innovation process is a series of activities aimed at finding answers to a particular problem. The method itself introduces a novel approach with societal implications in both its means (process) and outcomes (results) (solution). Apart from the better solution created, other social outcomes such as a common and shared better understanding of the local issue by a larger group of local stakeholders, community capacity building, citizen resilience, new alliances, team building, or wider engagement locally are achieved through the development of a social innovation process. Social innovation is exemplified by experiences produced in the fields of mutual aid and solidarity, with a focus on social value rather than profit. Individuals/communities, private entrepreneurs, public organisations, and combinations of these are all part of social innovation. They may become totally private, fully public, or a public-private partnership through time.

The innovation journey is a process model that looks at drivers and impediments, such as innovation managers, investors, setbacks, adaptation, and infrastructure, and distinguishes between the initiation, developmental, and implementation/termination periods of innovations. Below is the 4 'I' model of the social innovation process which starts from an idea presented as a social problem, challenge or crisis, followed by finding an appropriate method to intervene to solve the problem. The third and most critical stage of social innovation is to convert the idea into innovation through proper implementation strategies. The final phase of the life cycle of this innovation model is Impact which would have social dimensions and a bigger impact on the lives of people (Hochgerner, J. (2013).



*Model of Social Innovation Process (Adapted from (Hochgerner, J. (2013)*

## Social Innovations and Cooperatives

Cooperatives, as economic institutions founded on the ideals of the society, also have a significant need to enhance human welfare. Like other businesses, cooperatives must remain efficient, provide products and services to customers and be financially viable (Tripathy K. K., Paliwal M., Nistala N. (2021). But they differ from other businesses in one fundamental respect: cooperatives and mutual are owned by a member community, not by shareholders. In cooperatives, it is the needs of a paramount community, with profit generation being a secondary concern. The existence of cooperatives is driven by both social and economic concerns. Cooperatives internationally are pursuing horizontal and vertical integration at a time when businesses globally are increasingly focussing on limited sets of value-adding activities to satisfy customer needs and maintain competitive advantage. One of the main challenges of cooperatives today is how to build and/or retain their competitive advantages in a globalised economy. To be effective and successful, a cooperative federation must continuously achieve two interrelated goals:

1. strengthen the autonomy of its affiliates but maintain social networks, enhance the viability and improve the ability to service its members;
2. remain an economically viable, innovative and competitive enterprise. Innovation in cooperatives revolves around creating new social structures that allow issues of justice, education, environmental protection, sustainability and/or community development to be reframed so that new solutions can come forward.

“Social innovation refers to innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly diffused through organizations whose primary purposes are social.”(Mulgan, G. (2006). The process of social innovation. *Innovations*, 1(2), 145–162.) Social innovation in cooperatives may work through a variety of organizational architectures to enable change. We can think about organizations as being on a spectrum: At one end of the spectrum are cooperative entities that fill vital social and environmental needs through traditional approaches, relying on membership as their primary source of funding. At the other end of the spectrum are for-profit businesses, which fill customer needs through market-based mechanisms: selling the product or service for what the market will bear. Many for-profit companies incorporate sustainability and socially responsible practices into their operations and culture, but they are still primarily focused on the financial bottom line. (Campopiano, G., & Bassani, G. (2021).



*Frontline warriors at a Covid Center in Maharashtra, India*

Cooperatives, mutuals, foundations and associations typically seek to collectively satisfy insufficiently-met human needs. They can also contribute to building more cohesive social relations and more democratic communities. Cooperatives may be perceived as strong social enterprises which are integral to development.

Social enterprises are the most efficient in solving environmental and social issues in a sustainable way (Yunus and Weber, 2010, Vickers, 2010). The purpose of a social enterprise is to fulfil its social and environmental mission by earning profits. The social enterprise creates environmental and social benefits for communities (Abu-Saifan, 2012). Moreover, switching from the linear economy model to the circular model will not only reduce costs for enterprises but will also reduce the environmental and social impact of those enterprises. Many large and medium-sized enterprises have paid attention to the environment and social problems, but researchers claim that initiative is part of their internal marketing plan (Stratan, 2017, 17). The social enterprises, however, have given special attention to environmental problems.

For bringing inclusivity and growth amongst the members of the cooperative, social innovations based on products, services and processes are very essential. Cooperatives have the potential to adopt innovative approaches in order to solve the socio-economic problems rooted in society. (Durgam et al, 2020). Cooperatives are important community-level democratic business units. The cooperative sector has been playing a crucial role in the process of socio-economic development with a special focus on rural population and livelihood. Its dual role as a venture with social and economic outputs may be a defining characteristic as is its collective ownership. (Mazzarol, Simmons, and Mamouni Limnios 2012).



*To bring inclusivity and growth amongst the members of the cooperative, social innovations based on products, services and processes are very essential.*



*The path to prosperity, particularly rural prosperity lies in implanting the concept of design thinking among the cooperative leaders and re-imagining the cooperative sector.*

The economy of India cannot be solely dependent upon urban areas and industrialisation. The rural sector will continue to play a prominent role and to facilitate this, the cooperative sector has a critical role to play. Therefore, it is important to recognize this sector and encourage it. A cooperative based economic model will be a great lever to strengthen the rural economy. For India to achieve USD 5 trillion economy, there should be a huge impetus on professionalizing and innovating the cooperative sector. With more than 800,000 cooperatives covering 90% of the villages, cooperatives have substantially contributed to raising the income of their members and achieving rural prosperity.

Cooperatives have been proactive on all fronts – in tackling the crisis and are considered an important plank of development. Cooperatives have inherent advantages in tackling the problems of poverty alleviation, food security and employment generation, especially for disadvantaged and vulnerable communities at the grassroots. Cooperatives have immense potential to deliver goods and services in areas where both the state and private sectors have failed. Thus, it has the potential to contribute its best to India becoming a USD 5 trillion economy. Cooperatives have the potential to revolutionize the rural economy if it becomes part of our inclusive development strategy. The path to prosperity, particularly rural prosperity lies in implanting the concept of design thinking among the cooperative leaders and re-imagining the cooperative sector.

The current article brings out the social innovation model of the most successful women-centric cooperative and social enterprise “Mann Deshi Urban Cooperative Bank and Mann Deshi Foundation in India.



**Mann Deshi**  
**Bank**

#### **From Idea to impact- the 4-i process at Mann Deshi**

The Mann Deshi Sahakari Bank was set up in 1996 by Mrs. Chetna Gala Sinha. It is the first bank run by and for rural women in India. The Mann Deshi Foundation has since grown to supplement the bank by providing access to financial education, skills and a support network for rural women and their communities. The present outreach of the bank is 90,000 bank accounts, USD 15 million in deposits and USD 25 million in total business.

This social enterprise was founded to support marginalised rural women and empower them to have more control over their lives. Encouraging women to be entrepreneurs, the enterprise makes them believe in their capacities. Running a business means producing something that others appreciate and want to buy, explaining the value of your product, negotiating with buyers and sellers, taking risks, and learning from failures (Tripathy et al. (2021). Success in business, however small, has the power to transform the way women feel about themselves and their abilities. As their business grows, so does their confidence. Women can own more, make and control more money, spend on things and negotiate more for themselves in their personal and social life. They work with rural women micro-entrepreneurs in the Indian states of Maharashtra, Gujarat and Karnataka.

Their programmes are catered to encourage women to discover their capabilities, develop their confidence, and fulfil their dreams. Every year, the ‘Successful Businesswomen’ awards are attended by thousands of women and their families. The Foundation’s Business Schools for Rural Women provide the training, skills and support women need to set up and expand businesses. They additionally also provide advisory services, customized marketing training, platforms for peer networking and collective bargaining, and access to new markets.



Mann Deshi Mahila Sahakari Bank, the first-ever women's bank under the umbrella of Mann Deshi Foundation promotes micro-entrepreneurship amongst rural women. The banking activities and foundation's interventions complement each other to serve the larger cause of sustainability.

While the bank caters to the customized needs of women for affordable finance, it nurtures and promotes women entrepreneurs. It continues to serve them throughout their business growth phases with a spectrum of financial products, catering to basic as well as advanced fund requirements.

The bank has invested heavily in technology-enabled banking like biometric-based transactions rather than PIN-based transactions which seem complex to women. It has undertaken special initiatives to promote digital literacy and support rural women to learn and benefit from a cashless economy.



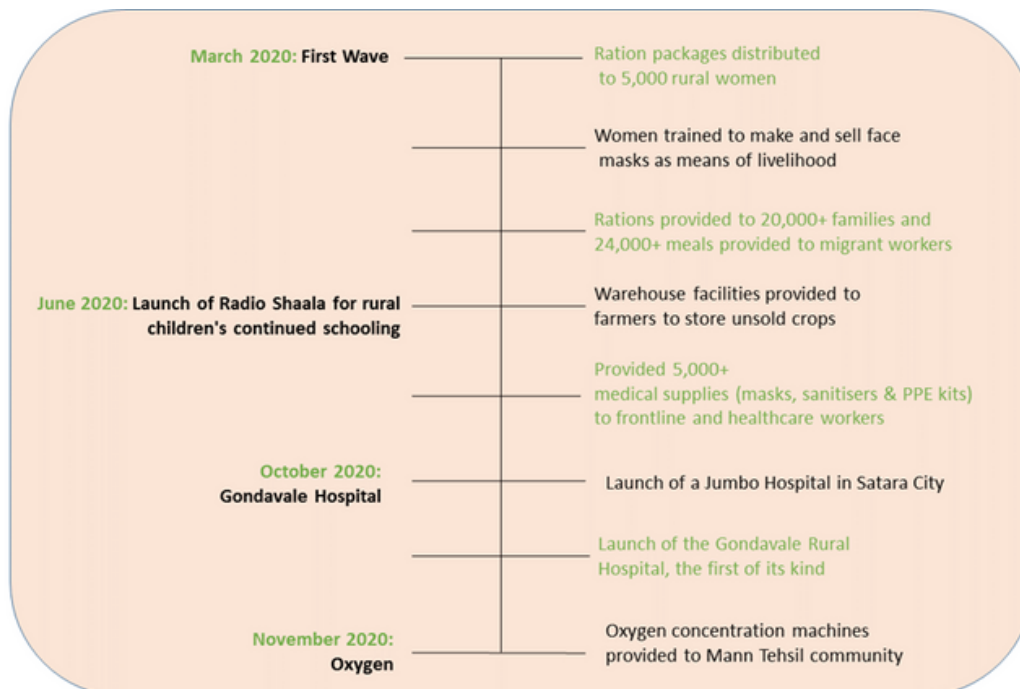
*Mann Deshi members  
during Covid-19 relief work*

During demonetization in India, it was clear that Rs 2,000 notes would not be useful for small and marginal clients. These women were micro-entrepreneurs who operated in weekly markets and transacted in small amounts. The situation had to be addressed immediately. The bank contacted the local State Bank of India Branch and collected their change. Local teams worked overtime to make and distribute pouches worth Rs.500 and converted Business School on Wheels into a Bank on a Bus. More than 5,000 people from 6 weekly markets benefitted from this innovative approach. To address collateral issues, the bank has fostered the group lending approach. Women can form a group of three to four members and take a loan together. While these are individual loans, they serve as guarantors for each other. The repayment schedules are quite flexible and worked out after a careful discussion, post which the funds are disbursed.

### **Innovative approach during Pandemic**

Ever since the lockdown was imposed due to COVID-19, the Mann Deshi Foundation has been encouraging women to stitch masks. Their ability to adapt and train so efficiently and rapidly has redefined and reinvented the manufacturing processes and has supported them through the COVID crisis. Mann Deshi's mask initiative required a lot of planning, coordination and patience. Pamphlets and videos on the design, sizes and stitching of masks were prepared and circulated as well as sanitization of sewing machines and other equipment.

Amongst many challenges, one of them was procuring cloth and stitching material since all local shops were closed and there were restrictions in the movement. However, Mann Deshi women got permission to go to Pune and Ichalkaranji to procure the material. Since women were working from their homes and were primarily coordinating with each other through audio/video calls, special attention had to be given to quality control.



*Timeline of Innovative operation during COVID*

Masks made by Mann Deshi women have been tested and certified by the South India Textile Research Association. They are made with single, double and triple layers, are washable, and in different colours. They've been sold in bulk to medical stores, panchayat samitis, doctors, government offices, government hospitals, NGOs as well as corporations. The Indian Institute of Chemical Technology (IICT), Hyderabad, also placed bulk orders for multi-layered, washable face masks.

## Conclusion

While global sustainable development projects have been using social innovation concepts and practises for many years, they have only lately begun to use the name and engage in social innovation. Both cooperatives and social innovation attempt to improve the world through effecting social change. Whereas cooperatives are concerned with the business side of change, social innovation is concerned with the methods through which change occurs. The contribution of cooperatives through social innovation is increasingly recognised as an important component of the new innovation framework necessary for sustainable development. The SDGs currently encompass and strive to connect all factors necessary for sustainable development, with four impact pillars and a governance capstone promoting and enabling their achievement. Cooperatives collaborate across and support all 17 SDGs.





# Impact of Mann Deshi on the Community

65,000+

Rural women

24

14 Business schools; 10 mobile business schools

10

Chambers of Commerce to help women expand businesses

17

Water reservoirs

7,000+

Young athletes trained under sports for development program

50,000

People empowered to become business owners

100,000+

Regular listeners of their community radio

# Mapping Innovation in Indonesian Cooperatives: Priorities, Obstacles & Challenges to Survive



Novita Puspasari, Universitas  
Jenderal Soedirman, Indonesia



Yudha Aryo Sudibyo, Universitas  
Jenderal Soedirman, Indonesia

*Indonesia has the largest number of cooperatives in the world, however, cooperatives have not been able to contribute optimally to the country's economy. Therefore, innovation is needed to develop Indonesian cooperatives. This research aims to measure cooperatives' innovation priorities and map such innovations in Indonesia. The method used was mixed-method through survey and in-depth interviews sequentially. A thousand and fifty (1050) cooperatives were respondents to the survey, while one hundred and thirteen (113) cooperatives participated in interviews. The study found that innovation priority in cooperatives varies among provincial clusters and quadrants. The implications of this research will be a baseline for conducting necessary interventions to build a cooperative innovation ecosystem in Indonesia.*

The rapid development of information technology and the internet have brought major changes in all sectors of life, including economic and business sectors. Various institutions and companies experience disruption from these developments. For instance, in the financial sector, technology provides users with a variety of services. The conventional banking sector is directly affected by the presence of financial technology, e-money and various cashless payment facilities. In this big transformation, cooperatives are also affected when various services are accessible through smartphones. Furthermore, the dynamics of Indonesia's cooperatives have not yet demonstrated the ability to adapt to this major change.



Most cooperative business models are still conventional, dominated by three major types: financial, consumption and production. The business model has not developed in the past few decades due to the lack of research and development work. As a result, cooperatives have stagnated in both business and institutional terms. Birchall and Ketilson (2009) found that cooperatives are one of the resilient business models in the crisis era. In contrast to other business models, cooperatives are resilient despite their community-based economic activities. Thus the community is the strongest support system for the cooperatives.

Indonesia will experience a demographic dividend where 70% of its citizens are of productive age. There is also a shift in the demographic percentage and about 35% of the population is young (Kominfo, 2019). In the next 10–20 years, the workforce will be dominated by millennials (Y and Z) and Alpha generations. In the cooperative sector, big challenges will be faced by cooperatives wherein most cooperatives in Indonesia are still led or controlled by the baby boomer generation and generation X.

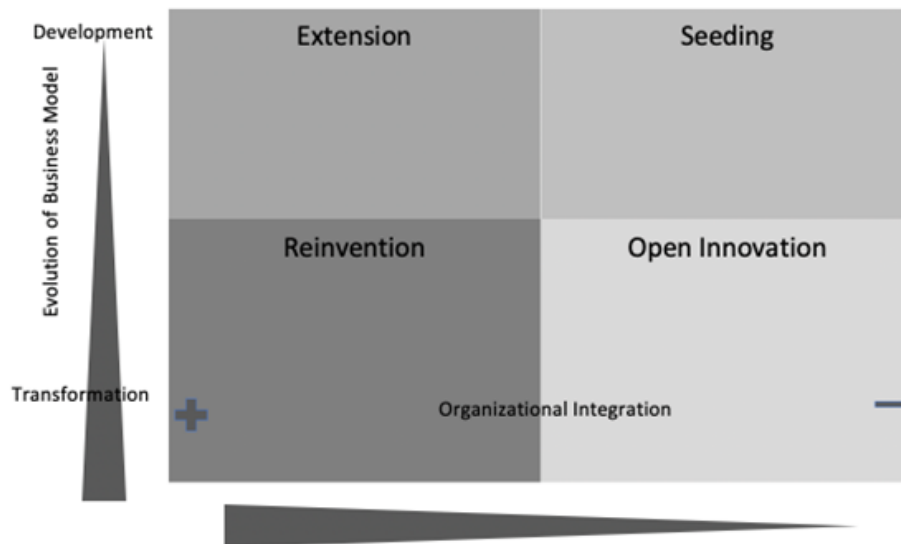
This research aims to measure the priority of cooperative innovation and map cooperative innovation in Indonesia. The implications of this research for stakeholders are as a baseline for conducting the necessary interventions regarding the cooperative innovation agenda in Indonesia.

## **Pillar of Innovation**

Innovations made by various parties have produced major changes, which have been directly or indirectly, enjoyed by the wider community. Innovation answers various problems with new solutions. Public services become more efficient with innovation and businesses become more efficient and productive. In the results of his research Brat, et al (2016) found that there are two key dimensions of innovation: innovation goals and organisational models that support innovation.

In the dimension of innovation goals, the focus is on transforming the current business model to better serve existing members or expand the business model to new members and new services. While on the dimensions of the organisational model that supports innovation, the focus is on two things. The first is innovation which depends on internal resources and structures. Second is innovation that depends on external mechanisms such as incubator institutions or accelerators.

In the report of the research conducted by Brat, et al., (2016), there are 4 logics of cooperative innovation, namely: 1) extension, 2) seeding/placement, 3) reinvention and 4) open innovation. In reinvention, living labs are needed, space for creativity and experimentation available to employees, members and outside cooperatives. While open innovation requires cooperative openness to the experimentation and adaptation of technology that has the potential to transform business models. The second key is experimentation space.



*Four innovation logic of cooperative*  
Source: Brat. Et. al (2016)

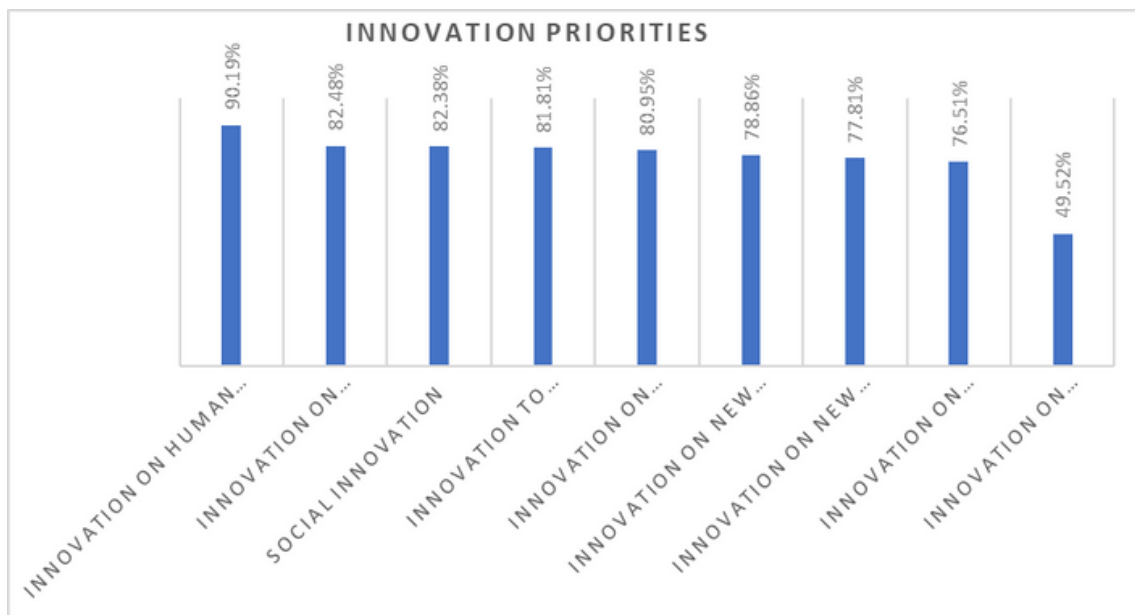
This research used quantitative and qualitative methods sequentially. The data collection method used in the quantitative approach was an online survey. Data collection methods used in the qualitative approach were in-depth interviews. Respondents from the online survey were 1050 cooperative respondents from all regions in Indonesia, except Papua. In-depth interviews were conducted with 113 cooperatives from 5 clusters consisting of 5 Provinces and 10 Regencies. Provincial clustering was based on village potential data (availability of cooperatives, credit receipts, number of banks, sea use, main income sources), labour force surveys (trends in type of work), competitiveness index, severity of poverty, and human development index (Bappenas, 2019).

1	2	3	4	5
Nusa Tenggara Timur	Maluku	Bengkulu	Sulawesi Barat	Gorontalo
Papua	Maluku Utara	Jambi	Sulawesi Selatan	Nusa Tenggara Barat
Papua Barat		Kalimantan Barat	Sulawesi Tengah	
*Kalimantan Utara		Kalimantan Selatan	Sulawesi Tenggara	
		Lampung	Sulawesi Utara	
		Sumatera Selatan	Sumatera Barat	
		Sumatera Utara		
6	7	8	9	
Aceh	Banten	Bali	DKI Jakarta	
Jawa Tengah	Kalimantan Tengah	D.I. Yogyakarta	Kepulauan Riau	
Jawa Timur	Kalimantan Timur	Jawa Barat		
		Kepulauan Bangka Belitung		
		Riau		

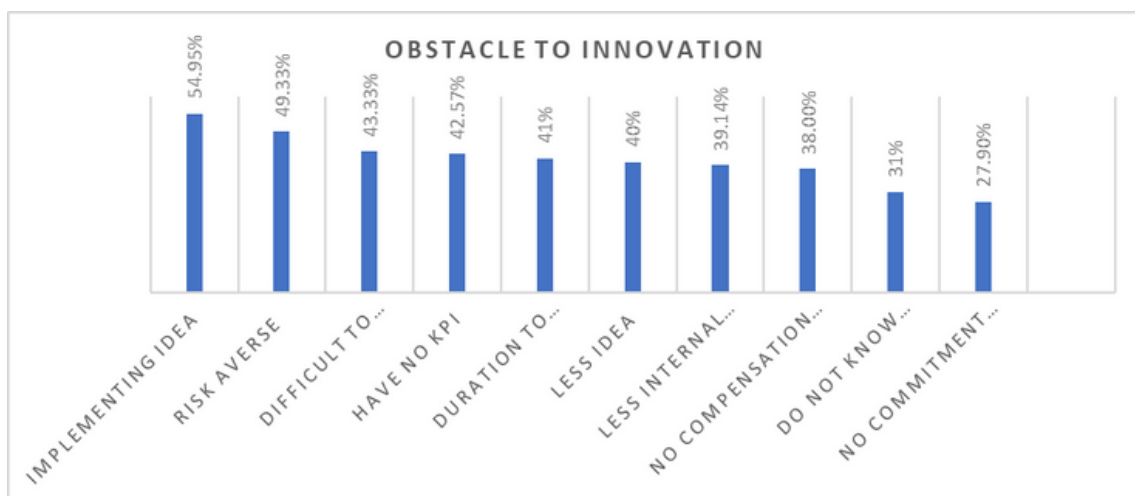
*Regional cluster versions of Bappenas*

Of the nine Bappenas version clusters, this study only used five clusters. The selection of five clusters is due to a consideration that several clusters have similar characteristics.

The results showed cooperative innovation priorities in the next few years. The majority of respondents answered that they strongly agree with the item "innovation in human resource development" by 90.19%, followed by innovation in marketing, social innovation, innovation in increasing the number of members, innovation in products and existing services, innovation in technology adoption, and so on. Innovations in human resources referred to the recruitment process that can attract high-quality and highly-educated young human resources, training and mentoring programs, and more promising salary/incentive schemes.



*Innovation Priority: Online Survey Results and In-Depth Interviews*



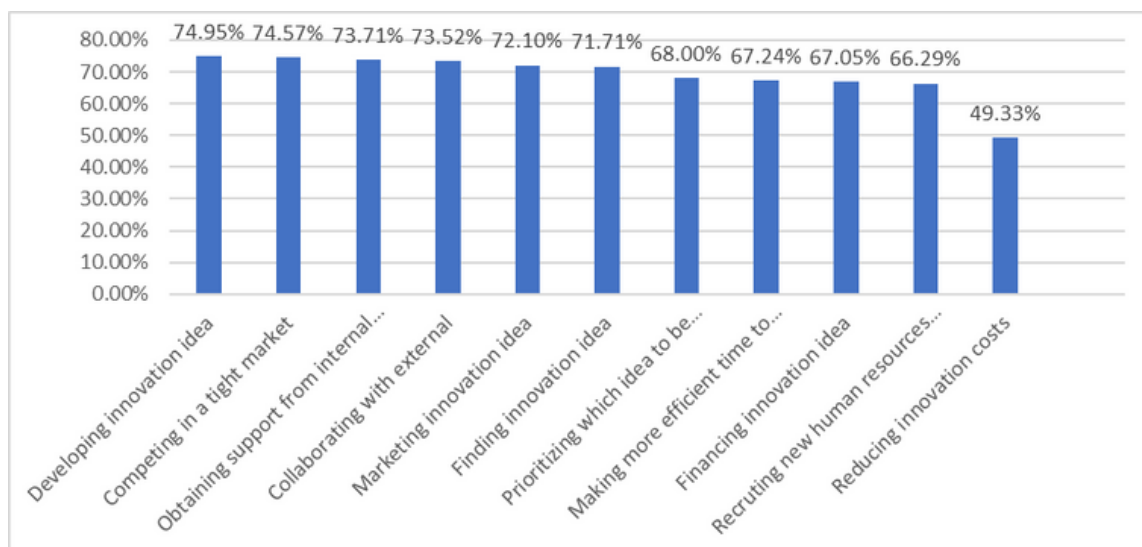
*Obstacles to Innovation: Survey Results and In-Depth Interviews*

Based on the results of the online survey that can be seen in Figure 3, the three biggest obstacles to innovation are: implementing an innovative idea, (preferring) to avoid risk, and difficulties in marketing an innovation idea. From the results of in-depth interviews, the difficulty in implementing ideas in cooperatives in Indonesia returned to the HR factor. While the problem of risk aversion (risk averse culture) turns out to be a problem, both in cooperatives in Indonesia and cooperatives abroad. The in-depth interviews found the fact that the management and management of cooperatives mostly play in the "comfort zone" because even with small risks their cooperatives can survive.

### Challenge of Innovation: Survey Results and In-Depth Interviews

From the results of the online survey, it is known that three main factors that constitute challenges in innovation are: developing innovation ideas, being able to compete in a tight market, and getting internal support. From the results of in-depth interviews, it is known that the development of innovative ideas in cooperatives, again returning to the HR limitation factor both in quantity and quality. Age factor is one of the obstacles according to some cooperatives because the human resources involved in cooperatives are quite old. There are rarely young people who want to get involved or work in cooperatives. This has resulted in hampered production of knowledge and skills in cooperatives.

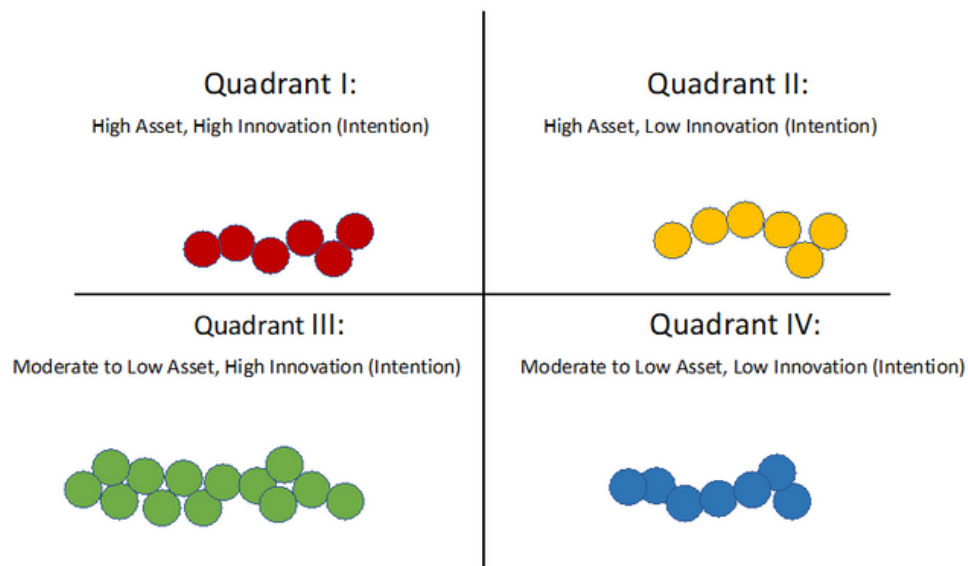
Another factor encountered in the field is the challenge of getting internal support. Internal support in question is the manager and members. In some cases, it was found that the management or manager was willing to innovate, but members who did not understand the importance of innovation and so the innovation was forced to fail. But in some cases, innovation can be done with the approach of massive management and managers (i.e. Credit Union in West Kalimantan).



*Challenge of Innovation*



## Additional Analysis: Cross Analysis and Cluster Analysis



*Asset versus Innovation Quadrant*

Based on assets and intentions of innovation, cooperatives that were interviewed are divided into 4 quadrants: quadrant 1 consists of cooperatives that have high assets (> 10 billion) and (intention) high innovation. Cooperatives in quadrant 2 are quadrants that have high assets but low (intention) innovation. Quadrant 3 is filled by cooperatives that have medium to low assets. Quadrant 4 is filled by cooperatives that have medium to low assets but the intention of innovation is low.

# Housing Cooperatives: An Alternative to the Housing Crisis?



Louise Crabtree-Hayes, Associate Professor, Western Sydney University



Sidsel Grimstad Senior Lecturer, Newcastle University of Australia



Annette Maguire Research Associate Housing Coop Research



Bronwyn Bate Research Associate Housing Coop Research

Like many countries around the world, Australia is currently experiencing a crisis of affordability when it comes to housing. For large sections of the population, it is becoming increasingly difficult to find an affordable, stable and dignified place to call home. This is especially the case for the growing number of people who are renters – roughly a third of the population – who are excluded from homeownership by ever-inflating property prices. Renters are often at the mercy of short-term tenancy contracts and substandard dwellings and have few protected rights. Unless broad-based solutions are created, trends indicate that the crisis will worsen dramatically in the coming years.

Housing cooperatives can offer a viable and innovative solution to the housing crisis. However, at present, they are a very small part of Australia's housing stock. Therefore, more knowledge is needed to demonstrate what they do well, so that this may be replicated on a larger scale. A team of eminent researchers from across three Universities in Australia aims to gather a sound evidence base for cooperatives as an effective alternative to the housing unaffordability crisis. The research team is embarking on the first-ever national study that seeks to capture the wide-ranging benefits created by Australia's housing cooperatives. The literature review conducted for the project found that housing cooperatives may offer wide-ranging social values such as a sense of belonging, connection, empowerment, and strengthening coop members' prospects for improved work and education outcomes.

The project looks to understand and assess the social value of housing cooperatives and examine how that value is generated. To achieve this, the research team has developed a very innovative and member-focused research design. This is the first study to recognise and count the inputs of cooperative members in generating both social values and the cost-effective nature of their housing. The study aims to produce an evidence base to justify the growth of a model that supports positive social outcomes and housing choices for Australian households. The research design has also attracted interest internationally, providing a starting point to measure the value of the work performed by cooperative members.

Australia's affordable rental cooperatives are increasingly incorporated into the regulated Community Housing sector, designated for people who live on small incomes, which is different to some contexts around the world. The literature review (Crabtree et al, 2019) conducted for the project examined cooperative housing research across eight countries (United States, Canada, United Kingdom, Australia, Sweden, Norway, Denmark, and Austria). While not a truly global review, it found that housing cooperatives provide benefits to member residents as stated above. However, evidence for these benefits has gaps. In particular, it isn't clear from existing research if the cited benefits of living in a housing coop are the result of living and participating in a coop or another factor such as location or demographics. For the housing cooperative sector to lobby for policy support, there is a need to articulate and demonstrate the values, benefits, and limitations of housing cooperatives.



*Murundaka Housing  
Cooperative, Australia*

#### **Four areas of enquiry**

To test the claim that housing cooperatives generate social value, the project focuses on four areas of enquiry that will be investigated across the states and the different types of cooperatives in Australia. Firstly, there is the input of Community Housing Providers (CHP), who resource individual cooperatives involved in housing provision. To capture this data, a CHP costing worksheet developed for AHURI by Pawson et al (2015) has been modified to account for the work performed by cooperative members.

Secondly, cooperative input into their housing provision will be investigated using the following research tools:

- A short Cooperative Survey – to provide data on the age and condition of housing stock.
- A short weekly Time-use Survey – to capture data on the time spent on running the cooperative.

- A yearly Calendar of Activities – to contextualise the time-use survey in a yearly calendar.
- The cooperative's most recent yearly Audit – to provide data on rents and expenditures in monetary terms.

Thirdly, a quantitative survey will enquire into tenant members' experiences of living and participating in their cooperatives. And lastly, qualitative interviews will round out the picture, with finer-grain detail about tenant-member experiences of living and participating in a cooperative.

## Research Team and Funding

The research is being conducted by Associate Professor Louise Crabtree-Hayes, Dr Neil Perry, and Dr Emma Power, Western Sydney University; Dr Sidsel Grimstad, Newcastle University of Australia; and Associate Professor Wendy Stone, Swinburne University of Technology. The Research Associates attached to the project are Dr Bronwyn Bate, Dr Piret Verooja, Ms Annette Maguire, Mr Nestor Guity Zapata, and Mr Jeremy Niass. The research is being funded by the Australian Research Council (ARC) and the Australian Cooperative Housing Alliance (ACHA).

## Conclusion

The innovative methods of data collection which aim to capture both social values and cost-efficiency are intended to provide an important evidence base to support the growth of cooperatives as an alternative housing model to private ownership or private rental. It has been uniquely designed to capture the social values generated by housing cooperatives and the role of members in this. This evidence base is vital to suggest what measures may be needed, in terms of finance and institutional support, to expand the housing cooperative sector in Australia.

To find out more, please visit the project website:  
[www.housingcoopresearch.org.au](http://www.housingcoopresearch.org.au)  
 or contact Dr. Bronwyn Bate,  
 Postdoctoral Research Fellow,  
 Institute for Culture and Society,  
 Western Sydney University.  
 Email:  
[b.bate@westernsydney.edu.au](mailto:b.bate@westernsydney.edu.au)

Internationally, the research design has also attracted interest, as it may offer a rationale for the growth of, and policy support for, socially beneficial housing. Globally, large population groups are increasingly locked out of secure, quality housing, as publicly funded social housing stock declines, and the only models appear to be either private rental or private ownership. The shortfall in affordable housing is becoming wider by the day. Therefore, building evidence for the efficiency of innovative cooperative housing models that deliver affordable, socially beneficial housing, is an urgent global issue. Developing affordable cooperative housing models can contribute to future proofing not only the lives of those who live in coops but also strengthens the social fabric of the community that the cooperative is embedded within.

Check out this short animation for an overview of the project:

<https://www.youtube.com/watch?v=l2YtHzCyhOs>



# Changing Trends Towards Innovation and Cooperatives' Resilience in the Post-Covid Era



**T.P. Sethumadhavan, Professor,  
Transdisciplinary University of Health  
Sciences & Technology in India**

A lot of transformations took place across the globe during and after the COVID-19 pandemic. In tune with these transformations, new challenges in the business environment are emerging. The demand-supply mismatch is the biggest issue during this period leading to the emergence of many innovations and technologies. Across the world, 8% of the total number of employees are working in cooperatives. Whether the cooperatives are in a position to undertake these challenges in the agriculture, industry and services sectors? Cooperatives need to consider future Innovations and the world of work to position their institutions at the global level. But highly politicised cooperatives find it very difficult to cope with the changing needs of society including the trends in innovation and entrepreneurship.

There are umpteen numbers of successful cooperatives in the Asia Pacific region that are functioning in tune with the changes in technology, trends in the services sector, innovation, entrepreneurship and skill development. The sustainability of cooperatives assumes more significance nowadays. To sustain, cooperatives are in the process of diversification using technology and business opportunities. Good practices from the region reveal that dairy, agriculture, banking, and worker cooperatives are implementing innovative processes to excel in the market. Many of these business innovations position cooperatives to acquire the status of role models at the global level. This paper highlights the changing trends and the innovations which are undertaken before and after the COVID-19 pandemic to build cooperatives resilience.

## Need for innovation in the changing world of work

International Labour Organization (ILO) forecasts reveal that by 2040, based on future innovations, the world of work will change. Many of the sectors will become obsolete and new employment opportunities will emerge in unknown technology-based sectors. Digital technologies, automation, health care, skill development, e-commerce, e-learning, data analytics, augmented reality, machine learning, cyber security, process automation, food processing and self-service capabilities will exhibit spectacular growth during this period. Annually, skill development institutes across India are training 10 million youth to improve their employability. These centres are trying to reduce the skill gap between available and required skills. Post COVID-19 phase witnessed reduced face to face classes and an increase in online classes. Gradually, higher education and the skilling systems are on the verge of moving towards a blended learning system. A lot of technology-enabled e-learning platforms have emerged across the world.

This allows cooperatives to offer stakeholder-based market centred programmes in primary, secondary and tertiary sectors. Cooperatives can make effective collaboration with industries, edutech companies, skill councils which in turn will pave the way to offer short term to medium level courses.

Cooperatives functioning in the Asia-Pacific region play a key role in ensuring sustainable development goals. Taking into account the growing changes towards future innovation, future of work, technology and entrepreneurship, cooperatives can effectively undertake to implement innovative projects in the services sector to position them at the global level.

*ILO) forecasts reveal that by 2040, based on future innovations, the world of work will change. Many of the sectors will become obsolete and new employment opportunities will emerge in unknown technology-based sectors.*



## Changing trends

2022 is the year of new trends and innovations in science, technology, entrepreneurship, the future of work and space races. The new year is dominated by the need to adjust to the new pandemic realities including the emergence of Omicron, climate change challenges, crypto growth and fluctuating inflation issues. There are spectacular innovations and discoveries in the discipline of medicine, virtual reality and digitalization in 2022. The financial sector will exhibit crypto blockchain technology growth, booming decentralized finance and, creator economy. Shared ownership and control of online platforms will become the new normal in the changing context. In 2022, the healthcare sector will witness new products and innovations impacting the world. Technology transfer facilitates the release of new vaccines with mRNA technologies including multivalent and freeze-dried vaccines for COVID-19 strains, a pan respiratory vaccine against multiple coronaviruses, strains of influenza & vaccines to be given through subcutis or via inhalation.

## World of work

The world of work will exhibit three new normal realities – working from home with increased productivity, increasing automation, and change in policy framework towards the new normal. Communication domain and technical skills will favor the placement of students. Upskilling and reskilling will be the success mantras for career and productivity enhancement in the new year. Innovation and entrepreneurship will create a lot of new job opportunities. The involvement of women in entrepreneurship development programmes will be on the rise. Various startups serving primary, secondary and tertiary sectors will be evolved. Across the world, job scenarios started transforming the industry. Individuals after working for five years become redundant and are interested in skilling. Learning, relearning, upskilling and reskilling are emerging as successful mantras across the sectors. Changing the nature of the workforce and the future of work necessitates the need for reskilling and upskilling. It facilitates job prospects, new skills, remote working and promotes digital transformation.

Skilling reduces the time lag to achieve employability. Skilling coupled with knowledge and attitude will facilitate employment. Within the global context, transformation is toward a knowledge economy and digital technologies. The knowledge economy's basic objective is to enhance economic wealth and growth. Innovation, human capital, knowledge and advanced technologies facilitate this transition.

*Changing the nature of the workforce and the future of work necessitates the need for reskilling and upskilling.*



*Youth receive skill-based training at UL Cyber park*



Digital transformation in education, financial services, retail, manufacturing and agriculture is on the rise. Since decentralisation and technology-enabled aggregation is taking place at a faster pace, the cooperatives can venture into new paradigms of digitalisation, education, skill development and automation to create more employment opportunities.

Three-prong strategies for the development of the knowledge economy include knowledge creation, dissemination and applications. These can be in the form of centres of excellence, innovation, knowledge transformation, and start-ups or platform models respectively. Cooperatives require a continuous linkage between demand and supply and a focused attempt on curating talent for the new age jobs and need to substantially augment skills training, enhancement of quality and access. Skilling strategy must include enhancing the skill provider ecosystem, strengthening the educational institutions, and industry participation and immersion.

### **Agriculture and food security**

Agriculture including livestock and poultry is the backbone of the rural economy in India. However, the basic challenges include linking Indian farmers with markets around the world and converting the COVID-19 impact to explore opportunities. During the post-COVID-19 phase, Governments in the Asia Pacific region started pursuing options for sustainable agriculture as part of addressing the food security challenges. Sustainable agriculture must address social, economic and environmental issues. Agriculture cooperatives can effectively network agriculture, agribusiness and food processing sector in rural areas to increase production, productivity and value addition of agriculture produce. Food security is vital across the globe since food security challenges affect sustainability in agriculture, which in turn, creates more demand for food. Production of safe, nutritious, affordable food and its availability is a major challenge. COVID-19 has created new opportunities for entrepreneurs in agriculture and allied sectors and educated youth have started venturing into this sector with tech-enabled marketing platforms. It has been envisaged that by 2023, 70% of the total retail market in India, will be food retail. There will be huge opportunities for ready-to-eat and ready-to-cook food products. Production of animal protein sources like milk, egg, meat and their products emerge as potential measures to address food security and protein malnutrition. Policies and programmes related to this sector will be one of the thrust areas in the post-COVID phase for the cooperatives.

Agri-tech startups can make use of technologies like artificial intelligence, the internet of things, smart farming, precision farming, drones, agri and big data analytics. There will be a paradigm shift in agriculture towards agribusiness, food processing and food retail. Agri entrepreneurship will focus on market-centered production programmes and new delivery models with the use of advanced technologies. There will be an emergence of new platform models for developing input-output linkage. These linkages will ensure the supply of raw materials and the marketing of products. Cooperatives can play a major role in this arena.



## Need for innovation and the key areas of intervention

COVID-19 has created new opportunities for entrepreneurs in agriculture and allied sectors. MSME sector which has been badly affected is trying to promote agribusiness and agri industrial sector in the country. Appropriate market linkage is necessary to make agriculture operations viable and sustainable. Moreover, it requires good agricultural practices, technology and micro-irrigation methods. Cooperatives can effectively make use of these opportunities. The post-COVID phase will witness substantial changes in the way of life, market, the emergence of disruptive technologies and consumer preference. New age innovations, agriculture sector skills and technologies will position the sector on par with the global standards. Consumer preference toward organic and natural products will increase during the coming years. The government of India during the budget 2022-23 has given more thrust to organic and natural farming.

## Technology, prospects and challenges

30% of middle-class Indians have growing disposable income which would grow to 50% during the next five years. Their expenditure on food will double during the next six years which would facilitate huge opportunities for the livestock processing sector. The Ministry of food processing is offering cold chain projects in the livestock and agriculture sector to promote value addition and marketing. In India, the online market is expected to reach 530 million by 2025 and the e-commerce market will show a quantum jump in the coming years. Huge opportunities exist for fermented dairy products, probiotics, therapeutic diets and nutraceuticals in the market. Cooperatives can readily explore these opportunities.



Unemployment among educated youth is the biggest issue in India. Graduates require additional skill development programmes to augment their employability. Based on their major domains and areas of interest, they can choose industry-friendly skill development programmes. When choosing skill development programmes, it is better to choose the National Skill Qualification Frameworks (NSQF). There are huge opportunities to launch upskilling and reskilling programmes for non-resident Indians who returned to India during the COVID-19 era.

The proposed digital University in India will work under a technology-enabled platform or virtual University system. University can network with universities and institutions across the world and facilitate stakeholder-based courses at the undergraduate, graduate and post-graduate levels. Moreover, this will in turn take into account future Innovation, future skills and future jobs. Industry tuned skills were given priority as part of ensuring academia-industry interface and new-age skills envisaged in India's National Education Policy 2020.

Cooperatives can think of developing platform cooperatives to address different stakeholders including students, entrepreneurs, unemployed youth, farmers, women, workers, etc. which is the new emerging model in the cooperative sector across the world.

### **ULCCS promotes innovation and entrepreneurship through technology and future skills**

At a time when the services sector supersedes the agriculture and industry sectors across the world, the 96-year-old Uralungal Labour Contract Cooperative Society (ULCCS), a worker cooperative in Kerala, India had successfully diversified into potential sectors based on cooperative innovation and entrepreneurship. ULCCS explored new economic paradigms through digital transformation and new business models. It diversified from construction and infrastructure to information technology, IT-enabled services, tourism, education, skill development and agribusiness. Taking into account the growth of the services sector which creates 68% of employment opportunities in India, ULCCS established an IT company called UL Technology Solutions and established UL Cyber Park.

Increasing unemployment among the educated youth motivated the worker cooperative to launch UL Education to give more thrust to education and skill development. The basic objective of the project is to create a skilled workforce in tune with the future of work. ULCCS established four skilling institutions to bridge the technical and communication skills among the educated youth in the state of Kerala. All these institutions were developed with technical collaborations with academia and industry.

*ULCCS diversified from construction and infrastructure to information technology, IT-enabled services, tourism, education, skill development and agribusiness.*



These centres are functioning with the approval of Govt. of Kerala and accreditation from the National Skill Development Corporation, Govt of India. All the skilling programmes offered are at NSQF levels based on the future of work and skills envisaged by the ILO. The study reveals that identification of skilling needs and appropriate skilling interventions among educated unemployed youth could facilitate improving employability from 30% to 90%. This paved way for getting technical, supervisory and managerial positions for matriculates, diploma/technical certificate holders and graduates respectively. Sectors identified for skilling include construction, infrastructure, information technology, entrepreneurship, hospitality, management, urban planning, automation, IT-enabled services, manufacturing, housekeeping, building information modelling, quality control, facility management and data analytics.

Taking into account the advances in digitalization, ULCCS is giving more thrust to developing appropriate solutions for banking, finance, insurance, services and other IT industries by promoting digital technologies including automation, machine learning, deep learning, internet of things, blockchain technology, cyber security, geographic information system, data analytics and data management. Along with banking algorithms, ULCCS is implementing cyber security projects to secure the digital security system of financial institutions.

The COVID-19 pandemic created a lot of disruptions in various sectors including education and skill development across the World. To comply with its protocols, skilling institutions are offering online courses through appropriate digital platforms. Tech institutions and universities within the country and abroad are collaborating with this project. ULCCS is conducting a series of webinars to create awareness among the members, workers and students on potential topics based on a customized approach. ULCCS is implementing an academic project on learning and empowerment in schools; 40 interventions were identified to improve the logical, analytical, numerical, linguistic, creative, communication, digital and future technology skills of the students. The finding of the study over the last three years revealed that students' performance in curricular and extracurricular activities increased by over 150% due to the project interventions.

# Global Innovation Coop Summit



## Did you say Social Innovation?

The term social innovation has become well used and well researched in recent years:

*“Social innovation is the process of developing and **deploying effective solutions** to challenging and often systemic social and environmental issues in support of social progress. ...”—Sarah A. Soule, Neil Malhotra, Bernadette Clavier, Business Graduate School of Stanford.*

*“Social innovations are new solutions (products, services, models, markets, processes, etc.) that simultaneously meet a social need (more effectively than existing solutions) and lead to new or improved capabilities and relationships and better use of assets and resources. In other words, social innovations are both good for society and **enhance society’s capacity to act.**” Social Innovation Community Europe.*

*“Social innovation refers to the design and implementation of new solutions that imply conceptual, process, product, or organizational change, **which ultimately aims to improve the welfare and wellbeing of individuals and communities.**” Organization for Economic Co-operation and Development (OECD).*

Doesn't this sound familiar to you? Cooperative and mutual business models are by themselves a social innovation that dates back more than 100 years and are still innovating. They are the proof that they contribute actively to social innovations by deploying effective solutions to enhance society's capacity to act so they improve the welfare and wellbeing of individuals and communities.



# Global Innovation Coop Summit

**Global Innovation Coop Summit (GICS)** has been designed to propel these ideas and allows us to exchange and deepen what cooperatives do best: **INNOVATE aiming to build together a more inclusive plural economy.**

The event will address new trends in the fields of social, technological and managerial innovation. By discussing innovative ideas, the Summit aims to inspire, promote and foster the development of cooperative enterprises around the globe.

Together, we will look at the world differently; Tackle societal and climate transition; Measure the impact of digital transition on the ways of doing business, on the agri-food sector, on industrial and service sectors; Seek the generational transition by giving their full place to millennials and the impact on leadership transition; to finally ask ourselves what keeps coop leaders awake at night.

**Global Innovation Coop Summit will be an interactive hybrid event!**

**Date: September 26–27, 2022,**

**Time: 9am to 5pm**

**Place: Crédit Agricole, Paris**

**For more information, go to: [www.globalinnovation.coop](http://www.globalinnovation.coop)**

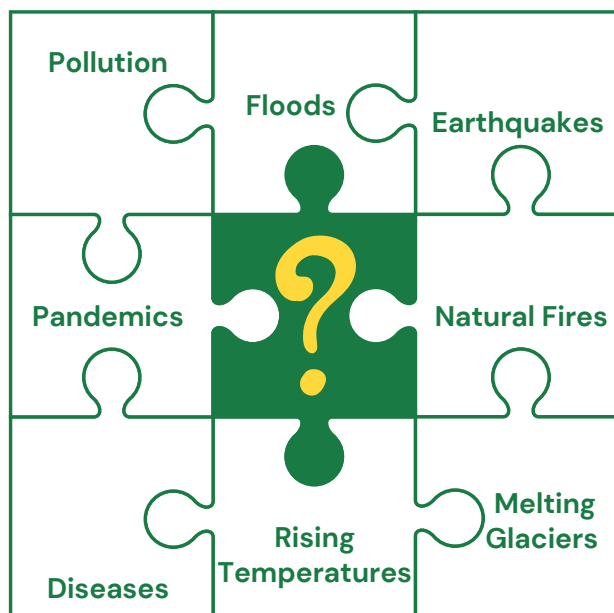
The registrations for the event are now open.  
In-person participation is limited to 200 people.  
It works on a first come first serve basis.

Use the coupon  
code **ICAA-P10**  
to get a  
discount on the  
registration fee.

*"We work together and share all our ideas. We believe in the cooperative business model and the best it has to offer: sharing of wealth and power, inclusion for all genders, an economy based on the well-being of humanity, which respects and preserves the environment. We believe in innovations that will help make it happen"*  
The GICS founders.

# COOP Dialogue 3 (November 2022): Call for Articles

*Theme: Cooperatives' Contribution to Climate Action*



According to the United Nations, [climate change](#) refers to long-term shifts in temperatures and weather patterns. These shifts may be natural but are also accelerated due to human activities. Humans are increasingly affecting climate and raising temperature levels by burning fossil fuels (coal, oil and gas), cutting down forests, farming livestock, overusing resources, and rising consumerism. All this adds hugely to greenhouse gases and increases the greenhouse effect and global warming.

Climate change can affect our health, ability to grow food, housing, safety and work. Some people living in small island nations and developing countries are already more vulnerable to climate change impact. Climate change solutions can deliver economic benefits while improving our lives and protecting the environment. There are global frameworks and agreements to guide progress, such as the [Sustainable Development Goals](#), the [UN Framework Convention on Climate Change](#) and the [Paris Agreement](#). Actions can be taken under three broad categories: cutting emissions, adapting to climate impacts and financing required adjustments.

The world today needs political will, holistic decision making, specialised skills, responsible finance, and proactive measures to come up with solutions that are mitigative, adaptive, and responsive. Climate-friendly actions are a mix of these solutions which when undertaken with the right intent will go a long way in conserving the planet and safeguarding the future generations.

Cooperatives in Asia and Pacific across all levels have demonstrated through their actions the intent and capacity to combat climate change in a people-planet friendly manner. The upcoming COOP Dialogue 3 seeks to feature cooperatives from Asia and Pacific that are taking actions to mitigate, adapt, and respond to climate change. The issue seeks to cover the perspectives of cooperators who are actively involved in climate action and engage in a dialogue with them on how we can strengthen and make our collective impact visible.

ICA-AP Regional Office invites articles, research papers, opinions, case studies, stories, and short video stories from anyone interested in cooperatives and climate action from the Asia and Pacific region. You may use this platform to publicise your work, enhance your visibility, and communicate your best practices and views with diverse stakeholders.

Please follow the guidelines given below to submit your contribution. For any queries, please contact the COOP Dialogue team at [coopdialogue@icaap.coop](mailto:coopdialogue@icaap.coop).

#### Submission Guidelines

- Submission of interest and abstract (300 words) latest by June 15, 2022
- Submission of complete written material along with pictures (in not more than 1,500 words excluding references and pictures in .jpg/ .jpeg/ .png formats of size between 500 Kb and 5 Mb) latest by July 31, 2022. The articles can also include hyperlinks to additional information, documents, or videos.
- Submission of complete videos of 3–5 minutes (in format .mp4 and max size 500 Mb) latest by July 31, 2022
- Language: English

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