



International Year
of Cooperatives

Cooperatives Build
a Better World



EDITION 3

COOP CONNECT

JUNE 2025

HARVESTING INNOVATION: THE FUTURE
OF AGRICULTURAL TECHNOLOGIES



SUSTAINABLE FARMING: ADVANCING
GREEN AGRICULTURE



Chairman's Message

Dear Members and Readers,

*As we step into an era where sustainability is not just an option but a necessity, it gives me immense pleasure to share this special edition of our newsletter focused on **Sustainable Farming: Advancing Green Agriculture and Innovation**.*

The agricultural landscape is undergoing a significant transformation, and we are proud to be at the forefront of this movement. Under the guidance of esteemed institutions such as IIT Ropar, PI-RAHI-Northern Region Science & Technology Cluster under the Office of the Principal Scientific Advisor (PSA), Government of India (PI Rahi), and CSIR IHBT, we have conducted several training programs aimed at enhancing sustainable agricultural practices especially for the development of FPOs. These collaborations have led to the development of innovative solutions that contribute to both environmental sustainability and economic growth for our farmers.

Our recent programs have not only focused on green farming techniques but have also emphasized the importance of technology, research, and community involvement. With these collaborations, we are optimistic that the future of agriculture will be more resilient, resource-efficient, and environmentally friendly.

As we continue our efforts to promote green and innovative agricultural practices, I invite you all to take a moment to reflect on how sustainable practices within cooperatives can positively impact your own communities. Together, we can contribute to the global vision of a greener, more sustainable world.

Thank you for your continuous support.

Best Wishes

**Pankaj Kumar Bansal (IAS)
Chairman, NEDAC**

SUSTAINABLE FARMING IN THE ASIA-PACIFIC: ADVANCING GREEN AGRICULTURE FOR A RESILIENT FUTURE

As the world celebrates the **'International Year of Cooperatives'**, it is essential to highlight the role of cooperatives in fostering sustainable agricultural practices. In the Asia-Pacific region, where agriculture is a cornerstone of many economies, the need for sustainable farming has never been more urgent. This region faces complex challenges—climate change, population growth, resource scarcity, and environmental degradation—that are putting pressure on the agricultural systems that millions depend on. In this context, green agriculture has emerged as a key solution for ensuring food security while protecting the environment.

The Growing Importance of Sustainable Farming in Asia-Pacific

The Asia-Pacific region is home to over 60% of the world's population, and agriculture employs a large portion of the workforce. From rice paddies in Southeast Asia to large-scale farming operations in Australia, agriculture sustains millions of livelihoods.

However, traditional farming practices have come at a high environmental cost. Intensive use of chemical fertilizers, water over-extraction, and deforestation have led to soil degradation, loss of biodiversity, and rising greenhouse gas emissions.

As climate change impacts become more pronounced, Asia-Pacific countries are increasingly turning to **sustainable farming** practices to protect both the environment and their agricultural industries. Sustainable farming strikes a balance between economic growth and environmental stewardship, ensuring that future generations can meet their needs without depleting natural resources.

Key Facts on Sustainable Farming in the Asia-Pacific Region

1. **Climate Change Impact:** According to the Asian Development Bank (ADB), climate change is expected to reduce crop yields by up to 10% for major staples like rice, wheat, and maize by 2050. This poses a significant threat to food security for over **4 billion people** in the region, many of whom depend directly on agriculture for their livelihoods.

2. **Water Scarcity:** Agriculture is the largest consumer of freshwater in the Asia-Pacific region, accounting for around 70% of total water usage.

In countries like India, China, and Pakistan, over-extraction of groundwater for irrigation has resulted in significant water shortages, affecting farming communities. Sustainable water management practices, such as **drip irrigation** and **rainwater harvesting**, are being increasingly adopted to mitigate these challenges. The dynamics are changing day by day which is a threat for the agriculture front.

3. **Biodiversity Loss:** The Food & Agriculture Organization (FAO) reports that more than 50% of the world's biodiversity hotspots are located in the Asia-Pacific region. However, unsustainable agricultural practices, such as deforestation, monocropping, and excessive pesticide use, have led to severe biodiversity loss, which in turn impacts ecosystem services and food production systems.

4. **Soil Degradation:** Approximately 1.2 billion hectares of agricultural land in the region suffer from erosion, nutrient depletion, and desertification. Soil degradation directly impacts agricultural productivity, making it essential to implement soil conservation techniques like agroforestry, cover cropping, and organic farming.



Across the Asia-Pacific, countries are adopting a range of innovative and sustainable farming techniques to mitigate environmental harm while boosting agricultural productivity. These methods not only promote ecological balance but also enhance farm resilience in the face of climate change.

- **Agroforestry:** Countries such as Indonesia, the Philippines, and India are integrating trees into agricultural landscapes through agroforestry systems. This practice improves soil fertility, prevents erosion, and provides additional income streams for farmers. Agroforestry systems are also more resilient to extreme weather conditions like floods and droughts.
- **System of Rice Intensification (SRI):** The SRI method, which emphasizes water conservation, organic farming, and biodiversity, has gained traction in countries like Vietnam, Cambodia, and Sri Lanka. By reducing water usage and improving soil health, SRI has increased rice yields while reducing environmental impact.
- **Regenerative Agriculture:** In Australia, regenerative practices like no-till farming, cover cropping, and rotational grazing are being used to restore soil health, sequester carbon, and improve farm resilience. These methods are also helping to reverse the negative effects of soil erosion and drought.
- **Smart Agriculture:** Precision farming technologies—such as drones, sensors, and data analytics—are increasingly being deployed in China, Japan, and India. These technologies allow farmers to monitor crop health, optimize water use, and reduce fertilizer and pesticide application, improving both efficiency and sustainability.

The Path Forward: A Collaborative Approach

The transition to sustainable farming in the Asia-Pacific is not a one-size-fits-all solution. Each country faces unique challenges based on its agricultural systems, climate, and socio-economic context. However, regional collaboration, investment in research and development, and community engagement can help overcome these challenges.

To accelerate the shift to green agriculture, organizations like Network of Agricultural Development Agencies) and national FPOs (Farmer Producer Organizations) are working in collaboration with cooperatives and local farmers to provide the tools, knowledge, and financial support needed to make the transition to more sustainable farming systems.

The following steps are crucial for the continued success of green agriculture:

Policy Incentives: Governments must create favorable policies, such as subsidies for eco-friendly farming methods, carbon credits, and financial support for farmers transitioning to sustainable systems.

Training and Education: the critical component for advancing sustainable agriculture is training and education. To effectively transition to sustainable farming practices, it is essential to provide farmers with the necessary resources, knowledge, and skills. Cross-regional collaboration can play a key role in facilitating this by offering farmers access to a wide range of tools, experiences, and expertise.

Farmers must be equipped to adopt sustainable agricultural practices—from soil health management to efficient water use and agroecological techniques. Extension services, workshops, and peer-to-peer learning networks are powerful tools for enabling this transition. There should be a direct "Liasoning" between the trainers and the farmers.

Farmer Engagement and Value Chain: Raising awareness among Farmer Producer Organizations (FPOs) about the importance of fertilizers, their correct usage, and the networking opportunities available for product supply is essential for enhancing sustainability and boosting agricultural productivity. The collective approach will not only help improve agricultural practices but also enhance the economic and social resilience of farming communities.

Sustainable farming is not just a trend—it is the future of agriculture in the Asia-Pacific region. With the right policies, technologies, and partnerships in place, the region can ensure a resilient and food-secure future for the billions of people who depend on agriculture. Through the collective efforts of governments, cooperatives, farmer organizations, and consumers, we can advance green agriculture to build a more sustainable and equitable food system.

The HARVEST Asia Pacific Summit on Smart & Sustainable Agriculture



The HARVEST Asia Pacific Summit on Smart & Sustainable Agriculture, held at IIT Ropar, successfully concluded after five inspiring days of discussions, collaborations, and knowledge-sharing.

This event, which celebrated the Year of Cooperatives, brought together a wide range of stakeholders—including Farmer Producer Organizations (FPOs), cooperatives, policymakers, industry experts, and thought leaders—to shape the future of agriculture in the Asia Pacific region.

During the HARVEST Asia Pacific Summit, a special session focused on Global Best Practices brought together FPOs (Farmer Producer Organizations) and cooperatives from different countries to showcase their successful models of sustainable agriculture. The experts shared real-world examples of how their organizations have implemented cutting-edge solutions in areas such as AI, IoT, and climate-resilient crops.

The session also highlighted a range of Agri-Tech innovations that are transforming farming practices. Delegates from these cooperatives shared the challenges they face in scaling their impact, such as access to technology, financing, and market linkages. This session underscored the importance of knowledge exchange and collective action in overcoming barriers to sustainable and tech-driven agriculture.

The summit, focused on driving smart agriculture and sustainability, was a significant platform for addressing the critical challenges faced by the agricultural sector today. With an emphasis on cutting-edge technologies, precision farming, and sustainable farming practices, the event aimed to empower farmers and cooperatives with the tools they need to succeed in a rapidly changing world.

In this programme almost 50+ Farmer producer Organization and 20 members has participated.

One of the key highlights was the opportunity for cooperatives and FPOs to explore innovative solutions that promote collective action, enhance market access, and improve productivity.

Throughout the summit, the role of digital transformation and agri-tech innovations was underscored as vital components for improving the resilience of the farming community and ensuring environmental sustainability.







NEDAC DELEGATION VISIT AT CSIR IHBT, PALAMPUR

As part of the **HARVEST Asia Pacific Summit**, the delegation visited the **CSIR IHBT (Institute of Himalayan Bioresource Technology), Palampur**, where they participated in a series of enlightening sessions on Himalayan Biodiversity and Agri-Innovation. This visit was especially relevant for the FPOs (Farmer Producer Organizations) from the Himalayan regions, who are grappling with unique challenges in their agricultural practices. The sessions focused on Sustainable Farming with Medicinal & Aromatic Plants (MAPs), an area of growing interest for cooperatives and FPOs seeking to diversify and enhance their agricultural models.

The experts at IHBT shared valuable insights into the immense potential of medicinal and aromatic plants as high-value crops that can significantly improve the economic viability of farming communities in the region. Through innovative cultivation practices, these crops not only support environmental sustainability but also open new opportunities for export and value-added products. The delegation was particularly impressed by the **CSIR's mission programs, including the Aroma Mission, Floriculture Mission, and Phytopharmaceutical Mission**. These initiatives have led to the formation of farmer clusters and the establishment of direct linkages with the industry, creating sustainable livelihoods for local communities.

In addition, the session provided a comprehensive overview of how FPOs and cooperatives can integrate MAPs into their business models. By adopting this approach, these organizations can increase their income streams, promote sustainable farming practices, and improve the livelihoods of smallholder farmers. The delegation learned about successful case studies where cooperatives have effectively created supply chains for medicinal plants, developed processing units, and tapped into international markets for essential oils, herbal products, and other natural goods.

FPOs gained valuable knowledge about the floriculture and herbal product value chains, from cultivation to extraction. The hands-on learning experience equipped them with practical knowledge on setting up processing units and handling value-added products like essential oils and herbal extracts, giving them the tools to boost their market competitiveness.

The visit not only provided practical exposure to sustainable farming practices but also emphasized how Agri-Tech innovations and local biodiversity can be leveraged to create a more resilient and profitable agricultural ecosystem for cooperatives and FPOs across the Asia Pacific region. The delegation left with a deeper understanding of how to integrate these practices into their own business models and a renewed sense of purpose in fostering sustainable agriculture within their communities.



NEDAC Signs MoU with PI - RAHI (PU-IIT Ropar Regional Accelerator for Holistic Innovations Foundation) for joint capacity-building and tech deployment.

In a significant development for the agricultural cooperative sector, the Network for the Development of Agriculture in Asia and the Pacific (NEDAC) signed a Memorandum of Understanding (MoU) with (PU-IIT Ropar Regional Accelerator for Holistic Innovations Foundation) for joint capacity-building and tech deployment. This strategic partnership aims to enhance cooperative development through shared knowledge, innovative training, and capacity-building initiatives.



The MoU was signed during the five-day training program under the theme “**HARVEST Asia Pacific Summit on Smart and Sustainable Agriculture.**” The signing took place in the gracious presence of Dr. Virgilio Lazaga, Vice Chairman, NEADC; Dr. Jatindra Kaur Arora, Advisor to the Northern Region S&T Cluster; and Mrs. Shailender Kaur (IFS), Director of Horticulture, Government of Punjab and Mr. Jyoti Saroop, Director of The Unati Co-operative Marketing-cum-Processing Society Ltd.

During the signing ceremony, **Dr. Jatinder Kaur** expressed her enthusiasm about the collaboration, emphasizing the crucial role that technology and research institutions play in the success of cooperatives.

She stated, “As agriculture and cooperatives are the backbone of the nation, we must focus on agritech innovations and directly engage with Farmer Producer Organizations (FPOs). This partnership represents a valuable opportunity for our organizations to come together and create a lasting impact on the agricultural sector.” She further added, “We are open to NEDAC and the participating FPOs sharing their challenges with us, and we will work towards creating a mechanism to effectively address those issues.”



NEDAC’s **Vice Chairman Dr. Lazaga** highlighted the growing dependency on technology and innovation in modern agriculture. He emphasized that research and technological institutions should be involved from the very beginning in the training of farmers and their organizations. While farmers may be familiar with the technology itself, they are often unaware of its after-effects and the post-production processes associated with it.

NEDAC and CLT Collaborate to Promote the Development of Agricultural Cooperatives in Thailand

In a significant step towards fostering agricultural cooperative development in Asia, the Network for the Development of Agricultural Cooperatives (NEDAC), in collaboration with the Cooperative League of Thailand (CLT), successfully organized a seminar titled “**The Development of Agricultural Cooperatives in Thailand**” at the CLT Convention Center in Bangkok. The event, held on 28-29 May 2025, brought together 10 key participants from various agricultural cooperatives, educational institutions, and government organizations, marking an important milestone in cooperative growth within the region.

The “Development of Agricultural Cooperatives in Thailand” seminar, held as part of NEDAC’s ongoing efforts to foster collaboration among cooperatives in the Asia-Pacific region, brought together key representatives from various cooperatives, institutions, and organizations.

The seminar was designed to address the challenges and opportunities in strengthening agricultural cooperatives in Thailand and the wider Asia-Pacific region. The discussions were structured around seven primary focus points:

Focus Areas and Key Discussions



The seminar on the “Development of Agricultural Cooperatives in Thailand” saw active participation from key figures in the agricultural and cooperative sectors. The following officials attended and contributed to the insightful discussions:

1. Mr. Sanan KhamPhaeng – Chairman, Sam Chuck Agricultural Cooperative Ltd., Suphanburi Province
2. Mr. Nimit Sawangsri – Vice Chairman, Sam Chuck Agricultural Cooperative Ltd., Suphanburi Province
3. Mr. Prasit Santiwong – Manager, Muang Chingrai Agricultural Cooperatives Ltd., Chiang Rai Province
4. Ms. Chaiporn Kimzea – Treasurer, Tha Zae Land Settlement Cooperative Ltd.
5. Mr. Suttipong Chaladthanyakit – Chairman, Nakhon Partum Fishery Cooperative Ltd. and Chairman of the National Federation of Fishery Cooperatives, Member of CLT Board
6. Prof. Dr. Poomtan Rungkakunnuwatana – Cooperatives Department, Faculty of Economics, Kasetsart University
7. Mr. Chaninwatchara Todkaew – Director, Pityalongkorn Institute
8. Ms. Luksana Pongkawong – Chief of Training Department, Phramongkutklo Institute and CLT Representative

Reflections and Open Forum

The seminar also featured an open forum, where participants shared their perspectives on the importance of joining networks like NEDAC. They discussed the challenges that cooperatives face, such as limited knowledge and capacity, and the need for mutual learning through experienced networks. Many cooperatives have faced issues such as delayed solutions and operational inefficiencies, but the forum provided a platform for exchanging solutions and strategies for overcoming these challenges.

Participants recognized that cooperation and experience-sharing are essential for the success of cooperatives, helping them improve their business operations and overcome hurdles more effectively.

Cooperatives: The Best Remedy for Local Development

Prof. Dr. Poomthan Rungkakoolnuwatana on the Role of Cooperatives in Community Development

“Cooperatives are not merely business entities—they are powerful forces for positive change.” As we look toward the future, we must recognize that cooperatives are one of the best remedies for local development. Their primary role should always be to benefit the community, and this is where the true power of cooperatives lies.

When cooperatives focus on addressing local needs—whether it’s in education, healthcare, or creating sustainable local economies—they do more than just improve the lives of their members. They build a more connected, resilient, and thriving society. Cooperatives, when done right, are the backbone of community empowerment.

One key area where cooperatives can make a significant impact is in promoting self-sufficiency, particularly in agriculture. By providing resources, knowledge, and support for self-reliant farming, cooperatives help reduce dependency on external systems. *This fosters sustainable food production, ensuring that communities can meet their needs locally while preserving resources for the future.*

Financial discipline also plays a critical role. For cooperatives to truly benefit the community over the long term, they must operate responsibly. Their financial health is the foundation upon which their ability to support local development rests. Encouraging savings and responsible investment not only helps individual members but also strengthens the cooperative as a whole.

Finally, cooperatives must think long-term. A clear and sustainable strategy ensures that these organizations will continue to grow and evolve to meet the needs of future generations. It is only through forward-thinking plans that we can guarantee the lasting success of our cooperative efforts.

Let us remember that cooperatives should not only serve as engines of local economic development but also be instruments of social and environmental change. Through collective action, we have the power to build a more sustainable, self-sufficient, and equitable future for all.



About the ABCs of Cooperatives

The **ABCs** of Cooperatives



**International Day
of Cooperatives**
Driving Inclusive
and Sustainable Solutions
for a Better World
5th July 2025

The ABCs of Cooperatives is a value-laden and principle-based framework conceptualized by Assistant Secretary Virgilio R. Lazaga, Head of the Agriculture Cluster of the Cooperative Development Authority (CDA), with the invaluable support of Atty. Leah Banagui-Han, Deputy Administrator of the Legal Affairs Services Division, and Regional Director Salvador "Buddy" Valeroso of Region IV-A. This collaborative initiative reflects the CDA's enduring commitment to cultivating a strong, resilient, and values-driven cooperative sector across the country.

This framework creatively uses the alphabet, from A for Accounting to Z for Zeal of Governance, to highlight the foundational pillars of cooperative development. Each letter represents an essential component of a thriving cooperative ecosystem, encompassing a broad spectrum of themes such as sound financial stewardship, effective leadership, democratic governance, member empowerment, youth engagement, sustainability, and a shared dedication to national progress.

The ABCs of Cooperative is not merely a guide; it is a unifying blueprint that captures the spirit and direction of the cooperative movement in the Philippines. It aims to serve as both a practical reference and a source of inspiration for cooperatives, urging them to embrace excellence, integrity, inclusivity, and social responsibility in their operations and engagements.

By launching this framework, the CDA reiterates its mission to promote the development of cooperatives as vital engines of inclusive economic growth, poverty alleviation, and community transformation, guided at every step by values that truly matter.



Cooperative Development Authority



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PHDCCI: 120 Years of Driving India's Growth and Prosperity



Our new member: PHD Chamber of Commerce and Industry

For over 120 years, the PHD Chamber of Commerce and Industry (PHDCCI) has been at the forefront of shaping India's industrial, trade, and entrepreneurial landscape. As a forward-thinking, proactive, and dynamic PAN-India apex organization, PHDCCI has played a pivotal role in catalyzing the growth of India's economy, supporting industries of all sizes, and driving national development.

At the heart of our mission, PHDCCI continues to be a vital partner in progress—working closely with both industry leaders and the government to foster an ecosystem of sustainable growth, innovation, and prosperity. Through grassroots engagement and robust national and international linkages, we strive for integrated development that propels India's economy to new heights.

The Voice of Industry & Trade

With a reach extending to over 1,50,000 large, medium, and small industries, PHDCCI has become the “Voice of Industry & Trade” in India. Our deep legacy and extensive industry knowledge across multiple sectors have enabled us to effectively advocate for the interests of the Indian business community, leveraging opportunities that help propel the Indian economy onto the global stage.



Global Collaborations: Bridging Opportunities

On the international front, PHDCCI continues to strengthen India's global ties by collaborating with Embassies, High Commissions, and key global stakeholders. Through these partnerships, we bring international best practices to the Indian business landscape, creating a pipeline of new business opportunities and ensuring that India remains competitive and adaptable in an ever-evolving global marketplace.

As we continue on this journey, PHDCCI remains dedicated to fostering the growth, success, and integration of Indian industries, ensuring a lasting impact on the economy and contributing to the global marketplace.

Welcome to PHDCCI from NEDAC!

We are delighted to announce that NEDAC warmly welcomes PHDCCI as our newest member! Together, we will work towards a shared global vision for cooperatives, exchanging knowledge and collaborating on initiatives that foster cooperative growth on a global scale. With PHDCCI's legacy and expertise, we look forward to contributing to the development of a more inclusive and sustainable global economy.

**Let's continue to build stronger, more resilient communities through collective action!
Welcome aboard, PHDCCI!**



Day-1, Glimpses of.....

CIRDAP - NEDAC International Collaborative Training, “Startups, Technology, Entrepreneurship and Partnerships for Vibrant Agri Cooperatives”



In Collaboration with NEDAC Upcoming Programs You Can't Miss!



The banner features a background image of a red tractor in a field. At the top, there are three logos: 'International Year of Cooperatives 2025' with a globe icon, 'CIRDAP' with a gold emblem, and 'NEDAC' with a blue emblem. The main text is centered and reads: 'International Training Programme On Startups, Technology, Entrepreneurship and Partnerships for Vibrant Agri Cooperatives'. Below this, it says 'Jointly Organized by The Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP), Bangladesh & The Network for the Development of Agricultural Cooperatives in Asia and the Pacific (NEDAC), Thailand'. At the bottom right, there are two boxes: 'July 21-23, 2025' and 'Bangkok, Thailand'. The background also has faint circular graphics with numbers like '23.0', '83%', '1016', '1%', and '15'.

International Year of Cooperatives 2025
Cooperatives Build a Better World

CIRDAP

NEDAC

International Training Programme On

Startups, Technology, Entrepreneurship and Partnerships for Vibrant Agri Cooperatives

Jointly Organized by

The Centre on Integrated Rural Development for Asia and the
Pacific (CIRDAP), Bangladesh

&

The Network for the Development of Agricultural Cooperatives in
Asia and the Pacific (NEDAC), Thailand

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