We are Launching!

Community of practice on Food Loss and Waste (FLAW)

Flaw in the FLAW

Every year, over 20% of food produced in parts of Central and Southern Asia is lost before it even reaches our plates!

Be a part of the discussion!

DATE: May 08, 2025

TIME: 2 PM - 3 PM (Bangkok time)

Register Now

Contact us:
Ms. Dipika Trivedi d.trivedi@apaari.org,
Dr. Ravi Khetarpal ravi.khetarpal@apaari.org

Our Speaker

Dr. Ravi Khetarpal
Executive Director, APAARI

"The Silent Famine: Asia-Pacific's Hidden Emergency of Food Loss and Waste"

www.apaari.org

Proceedings of the 1st Meeting: Launch of FLAW- CoP – A Platform for Food Loss and Waste- (Flaw-in-the-FLAW)

Date: 08 May 2025

Time: 14:00 – 15:00hrs (GMT+7)

Join Zoom Meeting

https://us06web.zoom.us/j/86884788815?pwd=nkvGblnVOTwgrUKOXvCEGqsmjzJPf X.1

Meeting ID: 868 8478 8815

Passcode: 204037

1. Background and Welcome (2:00 PM – 2:05 PM)

- **Welcome Remarks**: Dipika Trivedi (Research Associate, APAARI)
    - Officially opened the session, provided an overview of the newly established Community of Practice (CoP) on food loss and waste. The CoP aims to foster collaboration across sectors such as food security, climate action, and sustainable development, with APAARI playing a central role in facilitating partnerships and knowledge exchange.

2. Launch of the CoP (2:05 PM – 2:20 PM)

- **Speakers**:

  Ravi Khetarpal (Executive Director, APAARI): Highlighted the CoP's objective to create a regular platform for dialogue, building partnerships and influencing policy.

"He emphasized the need to address food loss and waste as a critical issue for food security and sustainable development, noting the Asia-Pacific region's significant contribution to global food loss and waste and the associated economic costs".

3. Panel Discussion (2:20 PM – 2:47 PM)

Moderator: Dipika Trivedi (APAARI)

Panelist Contributions:

1. **Dr. Kavya Dashora, Professor, IIT Delhi: Role of FLAW in Innovation and Technology**

Dr. Kavya discussed the need for targeted innovation in agriculture, emphasizing the importance of identifying blind spots where innovation is required. and advocating for micro IoT devices, to monitor the entire value chain and reduce food waste. frugal cold

chains, biodegradable smart packaging, and a techno-economic decision support systems for farmers. She highlighted the need for a platform like Apari or flaw to encourage innovation and suggested the creation of a sandbox for idea generation. Kavya also stressed the importance of tracking food waste and implementing a circular economy to reduce the problem of emerging contaminants and landfills. She concluded by emphasizing the need for careful consideration of the customer when developing new technologies. She proposed the development of a "FLAW census" for real-time geospatial data collection along the value chain, integrating carbon and water footprint metrics.

2. **Mrs. Sireesha Bantu, Director, Office of Sustainable Campus, AIT : Role of FLAW in Food Waste Reduction Initiatives**

Sireesha shares several examples of food waste reduction initiatives in Thailand and Hong Kong. She highlights Anilo, a platform in Thailand that connects farmers with consumers to sell rejected produce, and Bangkok Patana School's practice of donating leftover food to farmers and converting waste into compost. Sireesha also mentions Food Angel in Hong Kong, which collects surplus food to create meal packs. She emphasizes the importance of individual responsibility in reducing food waste at home and the potential of AI and IoT in improving agricultural efficiency and food utilization.

3. **Mr. Jewel Rana, Senior Research Officer (Agriculture), Australian Government – DAFF, Australian High Commission**

Jewel Rana addressed the need for how food loss and waste can be addressed by the national policy, particularly in least development countries. Jewel highlighted the need for a systematic reform and cross-sectoral alignment in Bangladesh's national policy system to address food loss and waste. He emphasized the importance of integrating measurable food loss reduction targets, encouraging public-private partnerships, and reducing trade barriers. Jewel also noted the challenges faced by smallholder agriculture in developing nations, such as limited access to modern technologies and infrastructure, and the need for better market access.

4. **Key Issues Raised:**

- Asia-Pacific causes 50% of global food loss and waste.
- Losses mainly from post-harvest, processing; waste from overbuying, poor storage.
- Real-time geospatial data is lacking.
- Small farmers lack tech, infrastructure, and market access.
- Innovation needed: IoT, smart packaging, cold chains.
- Raise awareness via education and campaigns.

- Multi-stakeholder collaboration is key.
- Share success stories to guide best practices.
- Address hidden food system costs; ensure safety and reduce waste.

5. **Open Discussion (2:47 PM – 3:10 PM)**

Key Contributions:

Real-Time Geospatial Data for Post-Harvest Value Chain Monitoring

Dr. Ravi and Prof. Kavya Dashora emphasized the urgent need for real-time geospatial data, especially in the post-harvest phase of the food value chain. Prof. Kavya proposed the concept of a "flaw census" — a system to track the entire journey of food from harvest to market, aiming to detect pilferage, inefficiencies, and loss points. She also advocated for linking this data with carbon and water footprint metrics to support climate-smart decision-making.

However, DR raised a valid concern regarding the financial burden of such an infrastructure-heavy system, questioning who would bear the cost of its implementation. Dr. Ravi acknowledged these concerns, agreeing that while funding is an important issue, the focus should first be on gathering scientific evidence and reliable data. He emphasized that building a strong factual foundation should precede budgetary planning and resource mobilization.

The discussion highlighted the need for a data-driven yet economically viable approach to addressing food loss and waste across the supply chain.

Food Industry Challenges and Solutions

The meeting addressed several key challenges and potential solutions in the **food industry**, with a focus on improving **harvest practices, transportation, and cross-country knowledge sharing**.

- **Dr. Ahsan** emphasized the importance of understanding the **maturity index** of fruits and vegetables to optimize harvesting and reduce losses during transportation. He highlighted how these early-stage issues impact the entire food value chain.
- **Nguyen**, representing Vietnam, discussed the country’s major challenges, particularly **climate change** and its contribution to increased **food waste**. He emphasized the need for resilient practices to adapt to environmental pressures.

- **Mr. Jewel** raised an insightful question, requesting a **real-life example from South Australia** to illustrate successful interventions, although no specific example was provided in the transcript.
- **Dr. Dhingra** from the **Indian Council of Agricultural Research (ICAR)** was present during the meeting, though no detailed contributions were recorded.
- The discussion concluded with a shared understanding of the need to **exchange global experiences**, promote **localized solutions**, and **enhance communication** across regions to tackle persistent food system challenges.

Dr. Devinder Dhingra, Principal Scientist (Process Engg.) ICAR: Food Waste Awareness and Interventions in India

Dr. Dindra offered valuable insights into the state of food loss and waste in India. He challenged the commonly cited figure of 20–21% food loss, particularly for durable food items such as cereal grains, and argued that the actual loss is closer to 6% in these categories.

Dr. Dindra highlighted recent positive developments in India's storage and distribution systems, notably the transition toward silo storage for grains and the adoption of hermetic storage methods for spices and other perishables. These technologies are helping to significantly reduce post-harvest losses.

He also emphasized the important role of the Indian Food Banking Network, which collects surplus food and redistributes it to underserved communities. This initiative is a step forward in bridging the gap between food surplus and food insecurity.

To promote broader public engagement, Dr. Dindra proposed that September 29th—already recognized as the International Day of Awareness of Food Loss and Waste—should be observed more actively in India. He suggested using the day to raise awareness and educate the general public about the causes, impacts, and solutions related to food loss and waste. He is insights underscore the need for evidence-based data, technological interventions, and community awareness to drive sustainable change in India’s food system.

6. Action Points and Next Steps (3:10 PM – 3:35 PM)

- Organize the next CoP session in July, focusing on furthering the FLAW census concept and regional policy alignment
- APAARI to follow up with interested participants for potential speakers and contributions

- Dr. Kavya to develop the FLAW census for real-time data collection
- Dr. Dhingra to share updates on food banking and surplus food distribution
- APAARI to explore collaborations with ICAR and investigate international best practices
- Consider integrating food loss and waste topics into educational curricula
- Compile and share success stories and challenges from different countries.

7. Opinion from Chat box-

L V V Rajesh Kumar : Community Action from India: Telangana's Food Sharing Program

L V V Rajesh Kumar shared a compelling real-world example from Telangana, India, where the state government installed refrigerators at public places like bus stops and railway stations. The idea was to encourage people to donate surplus, non-spoiled food, which could then be accessed by the poor and homeless. However, the initiative eventually failed due to the lack of a dedicated agency to oversee food safety and quality control. This highlighted a broader challenge in public food redistribution efforts — without a strong regulatory or quality assurance framework, well-intended ideas can falter in implementation. The discussion emphasized the need for systemic monitoring and accountability to make such efforts sustainable.

One of the reasons for high food waste in Asian countries is the preference for home-cooked meals over packaged foods. In contrast, Western countries are major consumers of processed and packaged foods, designed for convenience but often leading to "eat-and-dispose" habits. Transitioning entirely to packaged foods would introduce a new set of problems related to health and the environment. Therefore, it is crucial to strike a balance between these two extremes, minimizing food waste while considering both environmental sustainability and health.

Mahesh Chander: Philosophical Insight: "Nothing is Waste"

A participant beautifully summarized a circular economy ethos with the statement:

"Nothing is waste – we just need to integrate innovative circulatory agriculture practices into agri-food systems."

Fruit & vegetables wastes can be used as animal feed by converting them into pallets-ICAR-IVRI supported one entrepreneur to fabricate a machine to convert fruit & vegetables to pallets.

This sentiment captured the central philosophy of the CoP — that every output or byproduct in agriculture has potential value, and with the right innovation, it can be reincorporated into the system. Whether it's through composting, reprocessing, or transforming waste into energy or animal feed, the conversation stressed that waste is a design flaw, not an inevitability.

Look at Israel how they deal with loss & waste- import oranges- make use of everything from orange- its pulp, peal, seed, juice- nothing is wasted- such examples should motivate us to be creative & innovative! may be these are very small things but at the same time small things matter much

What are the key strategies and mechanisms that APAARI members can adopt to strengthen future cooperation, enhance knowledge-sharing, and promote sustainable agricultural trade across the region?

Pramod Pandey: Hi Dipika: Thank you for organizing this meeting. It is a great meeting! Pramod Pandey, UC Davis

Marianne Naungayan Thank you to all the speakers for your insightful presentations!

I am from the Asian NGO Coalition for Agrarian Reform and Rural Development (ANGOC). ANGOC greatly appreciates the discussions on food loss and waste.We would also like to highlight the critical role of tenure security in addressing these challenges. Secure land tenure enables smallholder farmers to invest in long-term solutions that reduce food loss, strengthen food systems, and promote sustainability. Secure land rights encourage farmers to adopt climate-resilient techniques, preventing losses due to unpredictable weather and land degradation. Community-led land governance, which ANGOC advocates for, ensures that smallholder farmers are able to practice their sustainable practices (by securing tenure), have access to resources, and infrastructure that minimize food waste.We see great value in the FLAW-COP initiative and would greatly be interested to be part/a Member of this collaborative space.

Sotha Sok – CFAP In Cambodia, we need to build the capacity of the community people and the public of how-to consumer foods correctly, and at the same time building agriculture and the community to be resilient to climate change.

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