✦ Issue no.37 | January 2026

The Postharvest Education Foundation Newsletter

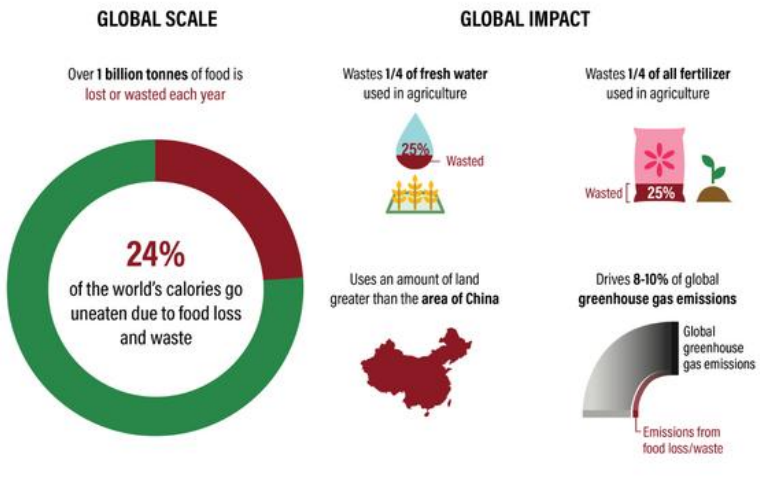
President's message

The year 2025 has been a positive year for accelerating global action on food loss and waste, with strong international momentum along with the global networks like Champions 12.3, UNEP, and the Zero Food Waste Coalition, and also recognition of ground-level initiatives across the globe. New toolkits, regulatory frameworks, innovative cooling and cold-chain solutions, and large-scale community programmes collectively demonstrated that practical, scalable action is now underway across regions and value chains. These are precisely the developments that were aspired when PEF was formed in 2011, reflecting the vision of catalyzing global momentum towards reducing food loss and waste. PEF will continue to contribute to this momentum in all ways possible and looks forward to a productive year ahead in advancing solutions that deliver meaningful impact for food systems worldwide.

President
Dr. Vijay Yadav Tokala

The Global Benefits of Reducing Food Loss and Waste, and How to Do It- World Resource Institute (WRI)

Approximately 40% of global food production by weight is lost between farm and fork, enough to provide three complete daily meals to every food-insecure individual for an entire year, with surplus remaining. Under current trajectories, this waste is projected to double by 2050.



Redirecting just 10% of the annual $1 trillion food waste economic burden could substantially enhance global healthcare investments. This analysis explores the magnitude of the food waste crisis, its worldwide implications, and actionable strategies across individual, community, and national scales to optimize existing production and yield transformative benefits.

Read full article

2025 Wins in Food Waste and What's Next in 2026- News Report by NRDC

Food waste being emptied into an anaerobic digester in Chicago
Credit:Stacey Wescott/Chicago Tribune via ZUMA Press Wire

International momentum in food waste reduction accelerated significantly in 2025. The Champions 12.3 network launched "Maximizing Food," a messaging toolkit to align food waste strategies with broader policy and economic priorities. At the Milan Urban Food Policy Pact Global Forum, U.S. cities including Austin, Baltimore, and Columbus received awards for urban food system innovations, particularly waste reduction efforts.

Global collaboration intensified ahead of COP30, with the Zero Food Waste Coalition (ZFWC) engaging in Bonn roundtables on agriculture and food systems. UNEP introduced the Food Waste Breakthrough initiative at COP30—a $3 million Global Environment Facility-funded program targeting national and subnational methane mitigation through waste reduction.

Read more

The Big Giveaway in November 2025

Approximately 1,200 families received free food boxes/bags during **The Big Giveaway**, including fresh produce (tomatoes, sweet potatoes, potatoes, and leafy greens), canned items, and whole chickens. PEF supported The Company of Heaven (Destin, Florida), Greater Shiloh Missionary Baptist Church, and five smaller churches in Birmingham, Alabama by providing food rescue and distribution planning, resources, and fundraising assistance. Over 200 local volunteers contributed to the event, with additional giveaways planned in Birmingham and other cities.

Watch video

Rethinking How to Measure Circular Food Systems: Lessons from Rwanda

Rethinking How to Measure Circular Food Systems: Lessons from Rwanda

WRI and its partners plan to scale CIRF's impact across Africa through the Accelerating the Circular Economy for Food (ACE4Food) initiative. As the project expands from pilot efforts to a multi-country programme, the focus will shift from individual enterprises to engaging governments and shaping policies, markets, and value chains. Systems-level measurement will be critical to track transformation, manage trade-offs, and reinforce change across actors.

Read more

2026 ReFED Food Waste Solutions Summit

Date: 19-21 May 2026

Venue: The Westin Charlotte, Charlotte, NC

Link to register

Secure your spot now for the 2026 ReFED Food Waste Solutions Summit—on of the most ambitious event to date—at the exclusive early bird discounted rate. Last year's summit sold out completely, so act swiftly to avoid disappointment!

Field trip registration details will be announced shortly.

Register now

Portable and Mobile Forced-Air Evaporative Cooling Chambers

CoolVeg, supported by the Efficiency for Access Research and Development Fund, developed innovative forced-air evaporative cooling chambers. These were successfully deployed through partnerships with Artisana in India and ColdHubs in Nigeria.

Design documentation and the complete research report from this project are available for download below.

Download full report

Jacinta Nyaika in Malawi

Jacinta (PEF graduate) resumed her active research at LUANAR–Lilongwe University of Agriculture and Natural Resources after completion of her PhD at the Natural Resources Institute, University of Greenwich. She looks forward to rejoining her colleagues on the Market-led Transformation of the Root and Tuber Crops Subsector in Malawi (RTC-MARKET) Programme, supported by the Embassy of Ireland through the International Potato Center (CIP)–Malawi.

Her work with root and tuber crops began in 2009, following her BSc graduation, when she promoted potato production in Malawi from the Tissue Culture Laboratory to the greenhouse and field. Her MSc in Horticulture later focused on eliminating potato viruses through micropropagation, while her PhD examined the drivers of cyanide production in cassava and control measures to ensure product safety.

Now she will be contributing to enhancing the availability and access to quality RTC seed and other inputs. This project represents both a continuation of her professional journey and a new opportunity to create impact at scale. We wish her the best for the future.!

Green Technology Book Expo Edition

Energy powers modern civilization, with fossil fuels—oil, gas, and coal—traditionally dominating daily activities from living and working to transportation and consumption. However, this dependence must end urgently to avert severe climate impacts. The 2023 COP28 agreement marked a historic milestone, signaling the beginning of the fossil fuel era's conclusion and accelerating the global energy transition—a commitment that demands sustained action.

The Green Technology Books series, linked to the WIPO GREEN Database of needs and solutions, modestly accelerates this progress. These free UN resources bridge knowledge gaps through active matchmaking, showcasing available and emerging technologies to facilitate rapid adoption and deployment worldwide.

Download book

She leads African Food Futures (SHEAF)- Call for Applications

The She Leads African Food Futures (SHEAF) Fellowship has launched its 2026 application call, targeting African women professionals transforming agrifood systems. This intensive program builds leadership capacity, gender-responsive policymaking expertise, and strategic networks for women across agriculture, food policy, research, governance, civil society, and the private sector.

Funded by the Alliance for a Green Revolution in Africa (AGRA) and delivered by African Women in Agricultural Research and Development (AWARD), SHEAF equips participants with essential tools to drive high-level influence and foster more equitable, effective agrifood systems.

Read more

Food rescue trucks

Emerald Coast Food Rescue is working with **The Company of Heaven, PEF and Help Someone Today's** campaign in Florida.

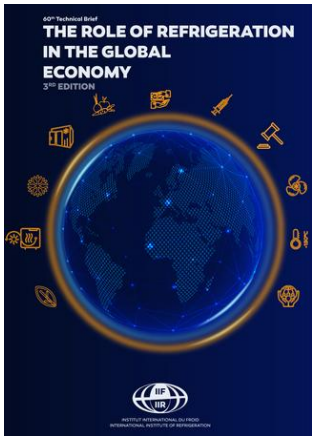
Donations are needed in order to Help Repair ECFR Trucks in time for the first Community Care Day in Okaloosa county.

Donate now

Food Waste in the U.S.- Factsheet by ReFed

ReFed offers a snapshot in which the extent and impact of food waste across the United States is presented.

Download now



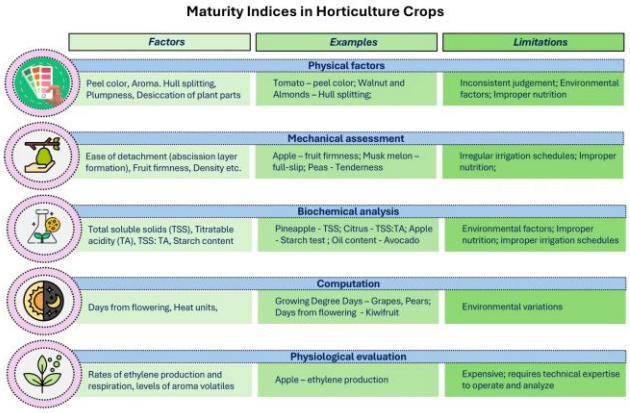
The Role of Refrigeration in the Global Economy 3rd edition, 60th IIR Technical Brief on Refrigeration Technologies

2024 marked the warmest year on record, underscoring the urgent need for sustainable refrigeration as a climate adaptation and mitigation tool. Recognised by the United Nations as a development priority, refrigeration is vital for food security, healthcare, economic growth, and achieving the Sustainable Development Goals, particularly in developing and emerging economies.

Download now

Understanding Maturity Indices for Postharvest Quality in Horticultural Crops

Quality deteriorates rapidly once fresh produce is detached from the plant, making correct harvest maturity essential for shelf life, retail quality, and consumer acceptance. Immature harvesting leads to poor quality and uneven ripening, while early-picked vegetables may stay green but lack taste and texture. Delayed harvesting increases disease and decay, reducing market value. Since most crops are hand-harvested, workers must accurately assess maturity.



Read more

The Paris Agreement at 10: A Celebration and a Call to Action

Before the 2015 Paris Agreement, global warming was projected to reach up to 4.8°C by 2100, posing catastrophic risks to billions of people. Current projections, assuming countries meet their commitments, estimate warming at 2.3–2.9°C—still dangerous but significantly lower. This shift is driven by increasingly ambitious national climate plans and rapid clean technology growth, including electric vehicles and cost-competitive renewable energy.

Read more

Impactful Global Food Systems conversations at MIT J-WAFS, Boston & IFPRI, Washington DC

Mr. Gurbinder Singh Gill, Member, Board of Directors, PEF, had participated in two deeply impactful meetings and events focused on food systems and sustainability. MIT J-WAFS, Boston: Exploring Food Systems and Collaboration and IFPRI–Tata Cornell Event, Washington DC: Addressing Food Loss and Waste.

Learn more

Closing the Loop: Evaluating Food Waste-to-Feed Pathways for a Circular Food System

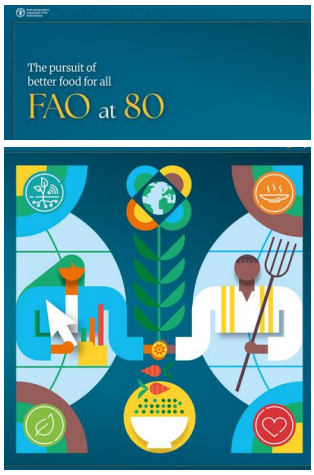
This report assesses eight waste-to-feed technologies, with in-depth analysis of four innovative, underutilized approaches: swill, single-cell proteins, insect farming, and biochar feed additives. It evaluates production processes, commercial viability—including regulatory status and business economics—environmental footprints, and relevant case studies to determine which pathways are achieving market traction and where the largest opportunities for sustainable impact exist.

Read more

FAO at 80- The pursuit of better food for all

This publication traces 80 years of FAO's work in shaping global food and agriculture systems amid a changing world. Through narrative and imagery, it documents key milestones against major global events, structured across four phases—More, Deeper, Broader, and Better—reflecting the Organization's expanding mandate. From foundational initiatives to innovation-driven agrifood transformation, the history highlights FAO's achievements while underscoring its continued commitment to advancing sustainable development.

Read more



Ensuring safe food and fair trade: how Latin American and Caribbean countries are teaming up to close data gaps for Codex MRLs

This piece highlights a Latin American consortium formed to address data gaps for Codex maximum residue limits (MRLs) for veterinary drugs, particularly off-patent compounds produced by generic manufacturers with limited incentive to generate required evidence. The initiative supports consumer safety and fair trade by enabling relevant Codex standards. It also demonstrates how Codex Members implement Codex texts and the practical value of Codex work, offering a model for other regions.

Read more

Vincent Gasasira (PEF Leadership Awardee in Rwanda)

Vincent led a successful 10-day capacity-building programme on fish and horticultural value addition from 1–10 December 2025 as part of the Kwihaza Project, with funding from the European Union and Luxembourg Cooperation. The programme focused on enhancing practical skills, product quality, and competitiveness in local and regional markets.

Thirty SMEs received training in value-addition methods, including processing, preservation, packaging, and product diversification. Participants gained hands-on experience in producing high-value fish products from locally available species and in processing fruits and vegetables into market-ready items. By the end of the programme, SMEs demonstrated increased confidence, stronger technical capacity, improved food safety practices, and greater income-generating potential.

Haryana-UK Centre of Excellence on Sustainable Crop Post-Harvest Management and Cold-Chain (CoE-SPMCC)

The Government of Haryana, in partnership with The Clean Cooling Network, has launched the development of a state-of-the-art, first-of-its-kind Haryana–UK Centre of Excellence (CoE-SPMCC) in Panchkula.

Haryana, traditionally known as the food bowl of India, is rapidly diversifying into fresh fruits and vegetables, increasing the need for effective cold-chain management to reduce post-harvest losses. Food loss remains substantial in the state, directly affecting farmers for whom horticultural produce is a primary income source. Annually, an estimated USD 156 million (₹13 billion) in income is lost by farmers and the state.

Read more

Kenya's first "Try Before You Buy" (TBYB) sustainable cooling and cold-chain unit

In March 2025, ACTS, in partnership with CCN, the Lari Horticultural Farmers' Cooperative Society Limited, and other key stakeholders, launched Kenya's—and Africa's—first "Try Before You Buy" (TBYB) sustainable cooling and cold-chain unit in Kinale, Lari Sub-County, Kiambu County.

The TBYB initiative represents the second phase of the SPOKE community engagement programme developed by CCN and ACES. In this phase, essential static and transport cold-chain equipment was installed for the harvest season, enabling the community to test its business model under real operating conditions with ongoing technical support and mentoring.

Read more

2025: A Year of Building the Technology Base at ACES

This year marked a significant period of progress for the Africa Centre of Excellence for Sustainable Cooling and Cold-Chain (ACES), particularly in advancing technology deployment. Accelerated installation of refrigeration equipment enabled system demonstrations, expanded training, and delivery of essential services to support the development of refrigeration markets across Africa.

Notably, 2025 began with an empty demonstration and testing hall at the Kigali campus and concludes with a diverse suite of installed equipment strengthening ACES's technology base.

Read more

Preserving Quality and Freshness of Horticulture Produce Using Passive Cooling Solutions

Post-harvest losses largely result from poor post-harvest practices and the absence of an integrated cold-chain infrastructure, particularly in rural areas. Gaps exist across the value chain—from harvest and aggregation to transport, wholesale, and distribution. The 2019 India Cooling Action Plan identifies major infrastructure shortfalls, including pack-houses, ripening chambers, and refrigerated transport. Addressing these gaps offers an opportunity to deploy energy-efficient, low-GWP technologies. An efficient cold chain could deliver up to 30% energy savings and reduce refrigerant demand by 11%, supporting rural energy needs and climate mitigation goals.

Read more

Thriving Solutions

Thriving Solutions is an impact-driven sustainability consultancy dedicated to advancing a circular, low-carbon economy, safeguarding biodiversity, and strengthening food, nutrition, and water security.

This report, offers a comprehensive guide for policymakers to design effective regulatory and policy frameworks to reduce food loss and waste. It presents 14 proven strategies and a practical assessment framework to help governments evaluate, strengthen, and optimize national FLW strategies.

Best Practices for Food Loss and Waste Regulatory Enabling Environment – A Guideline for Government

This report, introduces a comprehensive Assessment Framework to help governments evaluate and strengthen regulatory and policy environments for food loss and waste (FLW) prevention. The framework offers a practical Target–Measure–Act checklist to identify policy gaps and design evidence-based, context-specific interventions.

Assessment Framework of the Regulatory Enabling Environment for Food Loss and Waste Prevention

Applications of dry chain technology to maintain high seed viability in tropical climates


Applications of dry chain technology to maintain high seed viability in tropical climates

ABSTRACT

High humidity, temperature, and limited access to drying and refrigeration systems significantly reduce seed storage life in tropical regions, leading to rapid loss of viability and increased fungal and insect damage. This paper reviews evidence on the dry chain approach—rapid seed drying followed by moisture-proof storage—as an effective method for maintaining seed quality in humid climates without refrigeration. It highlights the efficiency and cost-effectiveness of zeolite drying beads and presents new large-scale application data from South Asia, Latin America, and Pacific Island countries. The findings demonstrate that reusable drying beads combined with waterproof containers can substantially improve seed viability and security in tropical farming systems, and the paper outlines strategies for scaling up adoption.

Read more

January Webinar: Tech-Drive Food Waste Solutions

The Consumer Food Waste Monthly Webinar Series, Tech-Driven Food Waste Solutions on 12 January 2026 with Brett Evans, VP of Global Sales at Leanpath, and Nemo Keller, Founder and CEO of Free Food Alert organised a webinar, recording of which can be found here: ***January Recording***

The next webinar of this series will be on 9 February 2026, 12:30pm ET.

Register for the Webinar on K-12 Food Waste Education here: ***Register here***

Comparative matrix of food loss and waste reduction policies in different countries

Jurisdiction	Reduction Target	Scope	Target Type	Source
European Union	10% (processing); 30% per capita (retail/consumption)	Supply chain segmented	Binding	Waste Framework Directive (2018)
Germany	50% (retail/consumer)	Retail and household	Binding	Germany's National Strategy to Reduce Food Waste (2019)
Norway	50% (aggregate supply chain)	Full chain	Voluntary	Norway's Food Waste Reduction Agreement (2017)
China	Not explicitly quantified by 2030	All sectors	Binding	Wang et al. (2021)
United Kingdom	50% per capita	Supply chain	Hybrid	Malik et al. (2024)60
France	50% (distribution/catering by 2025); 50% (full chain by 2030)	Full supply chain	Binding	European Environment Agency (2025)61
USA	50% (SDG 12.3 alignment)	Supply chain	Voluntary	USFDA (2023)62
Japan	60% (commercial FLW from FY2000 baseline); 50% (household already achieved)	Commercial/household	Binding	MoE – Japan (2025)
South Korea	Ongoing management; no explicit 2030 target	All waste streams; Pay-as-you-throw system and ban on food disposals in landfills	Binding (system)	Korea Law (2025)63
Brazil	50% (SDG 12.3 alignment)	Production to consumption	Binding	RAES (2025)64

Our mission

The Postharvest Education Foundation (PEF) has a mission to provide innovative programs that motivate and empower people to reduce global food losses and maintain quality, market value, nutritional value and food safety.

Our Strategy:

- Conducting a variety of postharvest e-learning programs for young professionals who work with small-scale farmers in developing countries.
- Providing free access to postharvest training materials for those who are involved in extension work and training of farmers, produce handlers, small-scale food processors and marketers.
- Supplying postharvest tools and basic equipment for use in applied research and for improving practical field operations.
- Organizing postharvest workshops for e-learners who complete their online programs.
- Long-term mentoring for participants in e-learning programs via social networking websites
- Conducting short courses, study tours and workshops
- Providing advice and guidance for establishing local postharvest training centres

PEF's 'Global Postharvest E-learning Program' is FREE to all
NOW AVAILABLE IN *ESPANOL* AND *FRANCAIS*
Check the website for further details :
https://postharvest.org/programs-e-learning-capacity-building/

Thank you for reading!

THE POSTHARVEST EDUCATION FOUNDATION	Email: vijayyadav.t@postharvest.org
Website: www.postharvest.org	Connect with us on: