

Scaling up Investment in **Clean and Efficient Cold-chain in India**



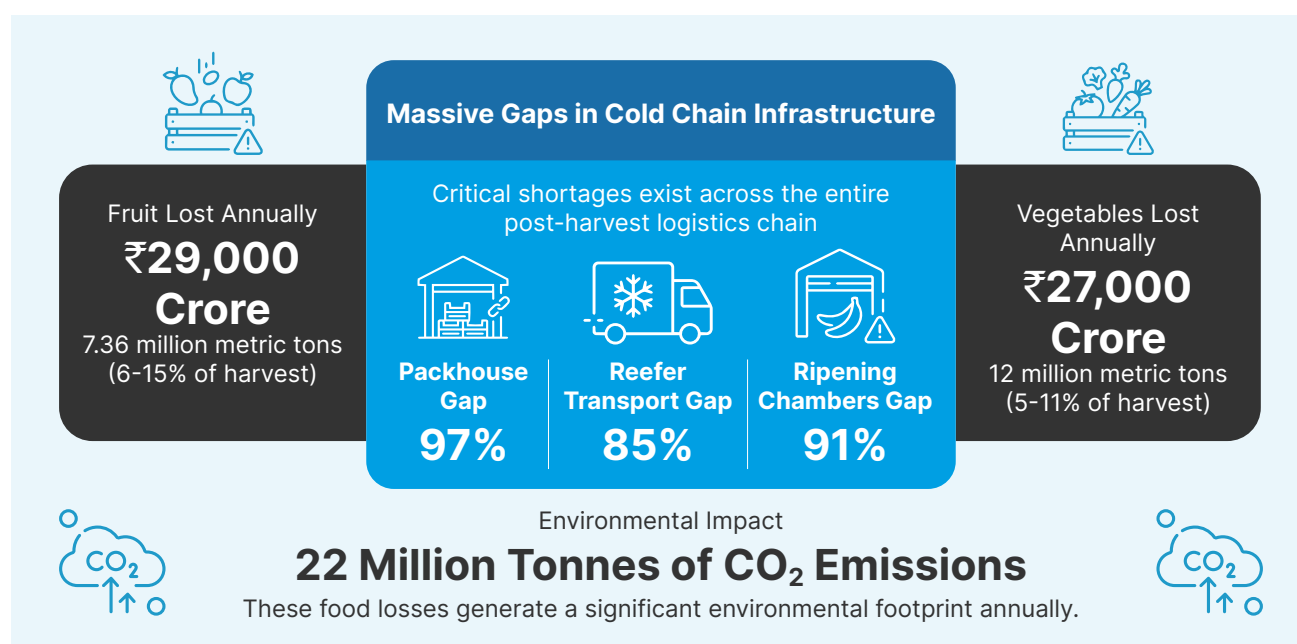
From Intervention to Impact: Scaling-Up Sustainable Cold Chain



Background and context

India's horticulture sector faces significant supply chain challenges, leading to substantial post-harvest losses that reduce farmer incomes and increase GHG emissions. The primary reason for post-harvest losses is an inefficient and fragmented cold chain. The Government of India's Mission for Integrated Development of Horticulture (MIDH) aims to improve horticultural productivity and value, and includes subsidy schemes for post-harvest infrastructure. However, there are still significant gaps in the integrated farm-to-fork cold chain.

The Hidden Cost of India's Harvest



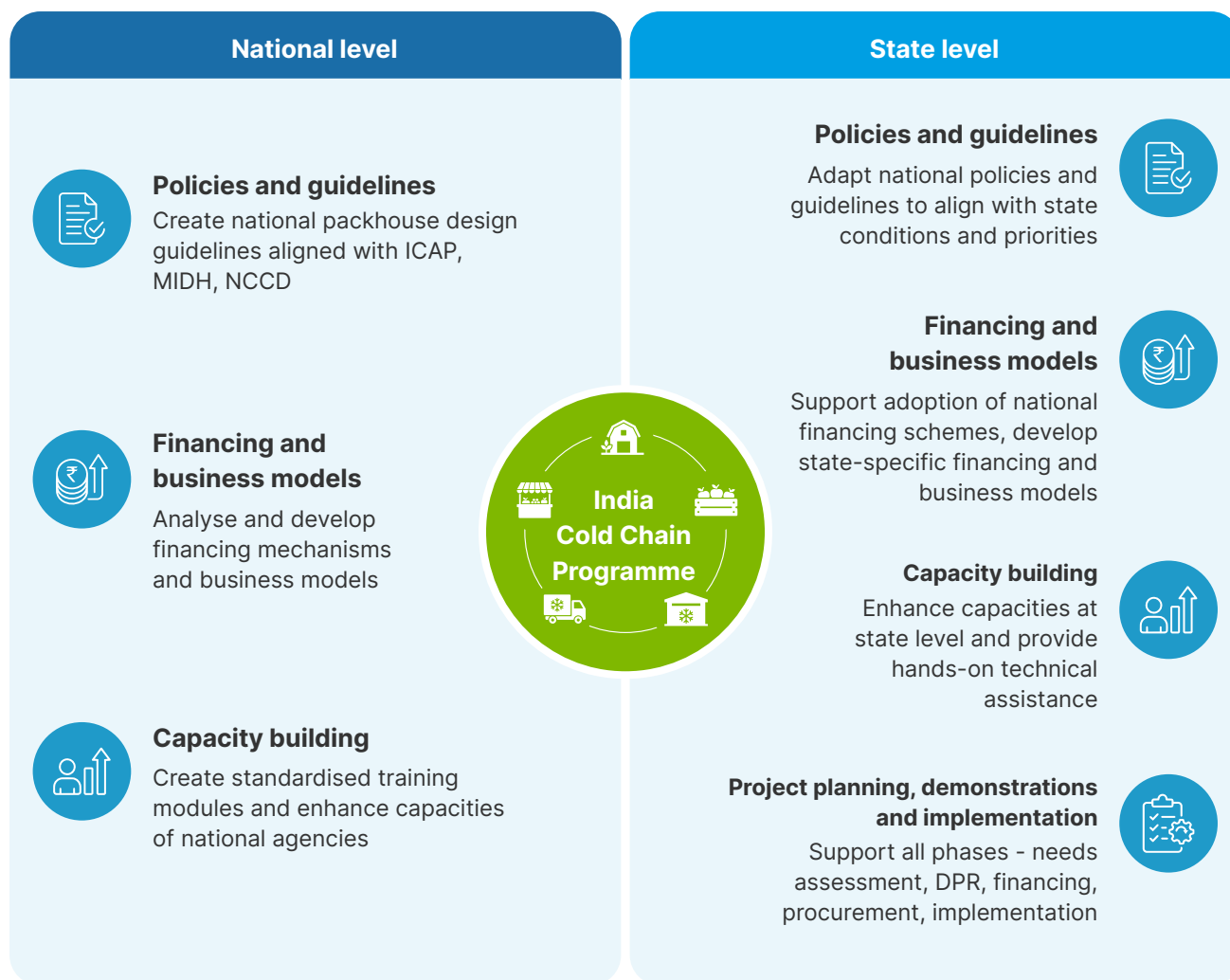
Sources: NABCONS (2022), ICAP (2019), IPCC Guidelines for National Greenhouse Gas Inventories (2006, 2019)

The India Cold Chain Programme (ICCP), which operates under the framework of the Cool Coalition, launched the project 'Scaling-up Investment in Clean and Efficient Cold-chain in India' to accelerate the development of integrated, energy-efficient, low-GWP-based and financially viable cold chain in India. Under this project, UNEP and AEEE provide strategic, technical, and coordination support to the national government and two state governments of Bihar and Haryana to enable the development of clean and efficient cold chain in line with the recommendations of the India Cooling Action Plan (ICAP).

Approach

The project activities spanned national and state-level interventions and stakeholder engagement across four pillars: 1) Policies and guidelines, 2) Capacity building, 3) Financing and business models, and 4) Project planning, demonstrations and implementation.

The rationale for integrating national and state-level activities within the India Cold Chain Programme (ICCP) is to address systemic challenges across the country while ensuring practical, location-specific implementation and replication. This dual approach is necessary because challenges exist at the national and state levels (policy, standards, finance) and the local level (infrastructure gaps, specific crop needs, farmer education). National activities focus on creating the overarching regulatory, technical, and financial frameworks necessary for a scalable, efficient cold chain system across India. State activities are crucial for tackling localised barriers, testing innovative solutions, and creating replicable models that are integrated into state planning.



Selection of two states for project demonstration

States were selected based on the following criteria

- States with a high volume of fruit and vegetable production
- States where there is an associated gap in cold-chain infrastructure or existing aged cold chain (packhouse, cold storage, ripening chambers, and reefer vehicles)
- States that have a policy direction, a strong political agenda and budgetary commitments to develop cold-chain connectivity through packhouses and reefer transport
- Ground presence of project partners to enable synergies with other projects in the country and internationally

Bihar was chosen due to its high reliance on horticulture, its production capacity, and the significant gaps in its cold chain infrastructure, which lead to significant waste and economic hardship.

- **Horticultural Significance:** Bihar is primarily a horticultural state, with 80% of its rural population engaged in horticultural practices. It is currently the country's fourth-largest vegetable producer and the eighth-largest fruit producer. It possesses vast potential to grow horticultural crops, including mango, litchi, okra, and brinjal.

- **Infrastructure Deficit:** Bihar's cold chain infrastructure is severely underdeveloped, with more focus on developing cold storages and limited knowledge of packhouses. The state needs an estimated 1600 packhouses, but currently has fewer than 30 available. Similar growth is required in refrigerated transport and ripening chambers. This deficit is a major barrier to leveraging the potential of its produce.
- **Economic and Social Impacts:** The lack of a robust cold chain holds back rural economic development and leads to significant negative outcomes. High-level analysis indicates that 2–4 million tonnes of fruit and vegetables with an estimated value of INR 14–28 billion may be lost in the state post-harvest, leading to rural poverty, inadequate nutrition, and labour migration. This situation is particularly precarious for smallholders, who make up 90% of farmers.
- **Climate Impact:** Post-harvest losses in Bihar cause an estimated 5–10 MtCO₂.eq of emissions (CCC and AEEE, 2022) annually. Intervening here supports climate change mitigation and adaptation efforts.
- **Demonstration Potential:** Activities in Bihar are designed to support the State Government in accelerating the development of sustainable, market-linked, and integrated agricultural cold chain. The project focuses on developing a packhouse demonstration project and investment plan to test technologies, innovative business models, and financing.

Haryana was selected for its high-growth agriculture sector and significant gaps in its cold chain infrastructure.

- **Horticultural Significance:** Haryana has significantly high horticulture production apart from paddy and grain, and is committed to increase it in its Haryana Vision 2030 Action Plan.
- **Policy direction:** Haryana was identified as a top contender due to its plan to establish 500 plus cold chain facilities including packhouses under CCDP and its “cross-cutting leadership,” which ensures continuity between strategy and implementation.
- **Infrastructure:** While the state has developed a plan to establish packhouses, there is a need to ensure that the new packhouses are sustainable and climate-resilient, incorporating energy efficiency, renewable energy and zero/low-GWP cooling technologies.
- **Economic and Social Impacts:** Despite high production rates, the growth in physical output does not always translate into similar growth in value for farmers. There is an urgent need to strengthen provisions that enable the prompt evacuation of perishable produce through appropriate market linkages, specifically via a networked cold chain system.
- **Demonstration Potential:** Activities in Haryana focused on systemic intervention, such as drafting a Cold Chain Policy and supporting the development of model Detailed Project Reports (DPRs) and a Centre of Excellence (CoE) to ensure scalability and integration into existing state plans.

Mapping the ecosystem: Stakeholder engagement for sustainable cold chain

National level



Government

Strategic dialogues were held with the Ministry of Environment, Forests and Climate Change (MoEFCC), Bureau of Energy Efficiency (BEE), National Centre of Cold-chain Development (NCCD) and Ministry of Agriculture and Farmers Welfare (MoAFW)



Financial Ecosystem

Engaged SIDBI, National Cooperative Development Corporation (NCDC) for workshops and consultative meetings



Industry

Consultative meetings with CII, PHDCCI, NABARD Consultancy Services (NABCONS), cold chain service providers



Non-profits

Consultative meetings with CEEW, WRI, CLASP, Shakti Foundation



Knowledge Platforms

Leveraged the India Cold Chain Conclave for the program launch and the Cold Chain Congress for refrigerant-specific sessions

State level

Bihar



Government

Discussions on policy issues, capacity building and support for project implementation with the Directorate of Horticulture (DoH), Department of Agriculture (DoA), Department of Cooperatives (DoCoop), Department of Industries (DoI), Department of Rural Development (DoRD), Vegfed, Jeevika, Bihar State Pollution Control Board, BREDA, and NHB Bihar



FPOs and agribusinesses

Field visits and assessments of FPOs, agribusinesses, storage facilities



Financial institutions

Meetings with SIDBI for sustainable cold chain financing



Cold chain service providers

Technical meetings with OEMs, cold chain facility developers, experts

Haryana



Government

Discussions on policy issues, capacity building and support for project implementation with the Directorate of Horticulture (DoH), Department of Agriculture (DoA), HAREDA, and NABCONS



FPOs and agribusinesses

Field visits and assessments of FPOs, agribusinesses, storage facilities



Finance Models

Engaged with SIDBI and State Bank of India (SBI) on financing mechanisms



Cold chain service providers

Technical meetings with OEMs, cold chain facility developers, experts

Program activities

Capacity building

Capacity building comprised 1) structured workshops, 2) guidance and support for policies, financing, business models, project planning and implementation, and 3) guidelines on developing sustainable cold chain.

Capacity building		
	Workshops	Policies and guidelines Financing and business models Project planning and implementation
	ICCP workshop for SIDBI, Delhi ICCP-SIDBI workshop, Bihar ICCP-NCCD-DoH workshop, Haryana ICCP-FEED workshop, Delhi MoAFW-NCCD Cold Chain Conclave - Design of EE packhouses - Integration of RE for net-zero operation - Use of zero/low-GWP refrigerants - O&M models - Financing schemes and models - Procurement	- Guided DoH, Haryana in developing its first ever horticulture cold chain policy - Advisory support to DoH, Haryana for the cold chain CoE - Guidelines for cold chain developers and service providers - Packhouse design guidelines for EE RE-powered packhouses with zero/low-GWP cooling technologies - Mango cold chain guidelines - Litchi cold chain guidelines - Guided DoH, Bihar with models for government-owned packhouses – DBLOT, DBOOT, participatory O&M model - Reference for cold chain developers and service providers - Compendium on business models and financial mechanisms for integrated cold chain development - Guided Mithila Vegetable Union in developing a DPR for its integrated packhouse in Darbhanga, Bihar - Supported mango and litchi FPCs in Bihar in operations assessment, post-harvest management and produce-specific cold chain - Supported DoH, Bihar and DoH, Haryana in developing DPR guidelines for sustainable packhouses
Stakeholders and beneficiaries	Agri businesses	FPOs, agripreneurs, exporters, startups
	Government	DoH, DoA, DoCoop, DoI, BEE
	Research/resource institutions	ICAR-NRC Litchi, BARC, WRI
	Finance institutions	SIDBI, SBI, Samunnati
	Cold chain sector	Manufacturers, operators, experts



Project launch workshop at Patna, Bihar



Joint workshop with SIDBI at Patna, Bihar



Cold chain awareness workshop for SIDBI, Delhi



Joint workshop with NCCD and DoH at Panchkula, Haryana



India Cold Chain Conclave in collaboration with NCCD

Policy support

The policy support provided by the India Cold Chain Programme (ICCP) operates at three coordinated levels—National, Haryana, and Bihar—to establish technical guidelines, influence high-level government strategies, and develop state-specific regulatory frameworks.

National Policy Support

The primary focus at the national level was creating foundational frameworks and aligning cold chain development with the central government's climate goals.

Packhouse Design Guidelines: The packhouse design guidelines for energy-efficient packhouses were approved by the Bureau of Energy Efficiency (BEE), and submitted to the National Centre for Cold Chain Development (NCCD) and the Ministry of Agriculture and Farmers Welfare (MoAFW). These guidelines, aligned with NCCD cold chain guidelines for the MIDH scheme, are intended for entities seeking to develop integrated packhouses and for service providers that provide engineering services to design and construct them. Taking a step towards implementing sustainable cold chain, the ICCP and BEE developed a high-level proposal for energy-efficient packhouse demonstration projects and cold storage modernisation.

Technical Working Group Structure: To oversee the implementation of cold chain guidelines, Terms of Reference (ToR) were developed for a Technical Working Group to be established under BEE and NCCD.



 **ICAP Operationalisation:** A report titled 'India Cooling Action Plan: Operationalising Cold-chain Recommendations' was shared with MoEFCC, with inputs drawn from thematic working group meetings organised by MoEFCC. The report provides practical guidance on policy actions, financing pathways, and technology interventions for policymakers, industry stakeholders, technology providers, and development partners.



 **Policy Mapping and Analysis:** The revised edition of 'Enabling Cold Chain Infrastructure Development in India' reviews India's cold chain ecosystem, policy evolution, and institutional landscape. It serves as a reference for policymakers, researchers, and practitioners working to enable an energy-efficient, climate-resilient, and inclusive cold chain infrastructure.



 **Assessment of Financing Mechanisms and Business Models for Horticultural Cold-chain:** This comprehensive report analyses diverse business models and central and state financing schemes, subsidies, private financing and grant opportunities for entities seeking to set up cold chain facilities.

Policy Support to Bihar State

Support in Bihar focussed on inputs for climate-resilient agriculture, innovative procurement, and operational models for state-developed facilities.

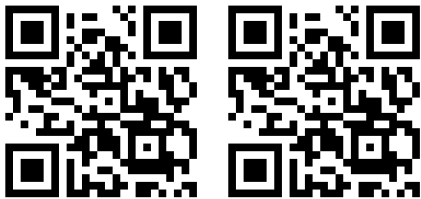


 **Sustainable Cold Chain Study:** A high-level assessment of the horticulture sector estimated that Bihar needs 1600 integrated packhouses over the next decade. Detailed analysis of existing facilities indicated the need to improve capacity utilisation, introduce energy-efficient technologies to reduce energy costs, and adopt low-GWP cooling technologies to align with the state's climate action. Findings from these assessments informed policy inputs to the Directorate of Horticulture (DoH) and Bihar State Pollution Control Board (BSPCB).



 **Climate-Resilient Agriculture Strategy and Low Carbon Development Pathway Integration:** Recommendations were developed for a climate-resilient agriculture strategy for Bihar, emphasising the need for cold chain infrastructure (including packhouses with reefer units) to address climate challenges, reduce food loss, and improve farmers' incomes. These recommendations on developing a sustainable cold chain for agriculture were incorporated into the 'Climate-Resilient and Low Carbon Development Pathway' (CRLCDP) report. In the steering committee meeting, the Chief Secretary gave his in principle approval to go ahead with the Climate Resilient & Low Carbon Pathway Report and send it for Cabinet approval.

Support to DoH, Bihar, for constructing and operationalising integrated packhouses

- **DBLOT Procurement Model:** A Design-Build-Lease-Operate-Transfer (DBLOT) model was developed and included in the tender for an integrated packhouse to be developed by DoH in Darbhanga, Bihar. The DBLOT model was developed to drive design innovation, ensure energy efficiency (EE), and leverage private finance for the construction and operation of the packhouse.
- **Participatory O&M Model:** A participatory O&M (Operations and Maintenance) model was developed for the Mithapur packhouse, Patna, to ensure efficient operations and move away from a traditional lease-based approach. Furthermore, the participatory O&M model aims to share profits among the packhouse owner, operator, and farmers or FPOs who utilise the packhouse's services.
-  **Produce-Specific Guidelines:** Cold chain guidelines detailing recommendations and best practices for post-harvest management and cold chain for litchi and mango were developed for the Directorate of Horticulture (DoH).
- **Model DPR Guideline:** A draft model DPR guideline was prepared for brownfield packhouse projects intended for FPCs supported by the Directorate of Horticulture (DoH), Bihar. The document provides guidance on upgrading existing shed-like structures to integrated packhouses, while incorporating energy-efficient, renewable energy-based, and zero/low-GWP technologies.

Policy Support to Haryana State

Policy support in Haryana focused on institutional development, integrating sustainability into large-scale state schemes, and financing mechanisms.

Assessment of the cold chain landscape: A high-level assessment of the horticulture sector estimated that Haryana needs 1695 integrated packhouses. A detailed analysis of existing facilities, including cold storages and a packhouse indicated the need to introduce energy-efficient technologies to reduce energy costs and adopt low-GWP cooling technologies. DoH, Haryana already has a programme to develop 140 integrated packhouses of various capacities and is coming up with a new DoH-JICA scheme for cold chain development targeting 500 plus cold chain facilities. Findings from these assessments informed policy inputs to the Department of Horticulture (DoH), Haryana for the packhouse development programme and the broader cold chain policy.

Draft Cold Chain Policy: On 2nd March 2026 Haryana Chief Minister Shri Nayab Saini presented the State Budget for the financial year 2026-27 in the assembly. As part of the state budget the Government of Haryana has announced that the state will implement a Cold Chain Policy which is first of its kind in India and supported by UNEP and AEEE under India Cold Chain Programme (ICCP), to strengthen integrated cold-chain systems and boost agricultural/horticulture produce supply to domestic and export markets. This policy outlines strategic objectives to 1) add value to the farmer-producer; 2) support agricultural productivity; 3) develop a farmer-centric cold-chain ecosystem. The policy is anchored on four pillars, namely 1) enable a shift in marketing strategy of perishables; 2) planned cold-chain infrastructure development; 3) smart and competitive cold-chain systems; 4) positive socio-economic and environmental impact. The policy aligns with Haryana's 2030 Vision and Viksit Bharat 2047.

DoH Programme for Packhouse Development: Recommendations on integrating renewable energy (RE) and energy efficiency (EE) into the development of integrated packhouses being implemented under the state's programme were provided to DoH, Haryana.

Financing Mechanism Proposal: A draft financing mechanism was developed and shared with DoH, Haryana for the packhouse development programme, in which SIDBI would act as the fund manager and nodal bank for a redesigned subsidy program which combines government subsidies and private financing.

Centre of Excellence (CoE) Design Input: A concept note and recommendations were prepared for the development of the CoE for post-harvest management, specifically suggesting the CoE building be designed as a net-zero energy facility and include a DPR (Detailed Project Report) helpdesk and virtual training centre.

Model DPR Support: Technical specifications for DPR templates for cold chain projects under the DoH packhouse development programme (focusing on aggregation centres and integrated packhouses) were developed for the DoH. These DPR templates can be further customised by DoH, Haryana, depending on the requirements of the projects to be covered under the scheme. The DPR templates provide guidance to individuals and entities seeking to develop packhouses and include recommendations for incorporating energy-efficient technologies, renewable energy, and zero- or low-GWP refrigeration systems.

Project planning and implementation

The India Cold Chain Programme (ICCP) focused on the technical and financial groundwork required to build modern, energy-efficient integrated packhouses that serve as “lighthouse” demonstration projects. Technical assistance to FPOs comprised needs assessment, pre-feasibility studies, DPR preparation and tendering. While the activity originally prioritised site-specific developments, it later expanded to include both site-specific DPRs and model DPR templates for greenfield and brownfield packhouse projects.

Site Identification and Pre-Feasibility

Pre-feasibility analyses and due diligence were carried out for FPOs, agri start-ups, and other community-based organisations in Bihar and Haryana to understand their business ecosystems and requirements. The pre-feasibility study assessed the FPOs’ business operations and included a SWOT analysis to short-list potential FPOs for development of a model integrated packhouse. In Bihar, a pre-feasibility study was conducted for five organisations, including FPOs, agri start-ups, and Vegetable Unions, for greenfield packhouse projects, and 19 FPOs for brownfield packhouse projects. In Haryana, a pre-feasibility study was conducted for 2 FPOs.

Development of Detailed Project Reports (DPRs)

1. Bankable DPR for a net zero packhouse for Mithila Vegetable Union, Darbhanga, Bihar

The DPR presents the layout, market assessment, technical design, and financial analysis of the proposed integrated packhouse. Designed to handle 40 MT/day in two 8-hour shifts, it accommodates current production and projected growth over the next decade. The layout ensures efficient produce flow, minimal handling and contamination risk, and protection from heat exposure to prevent quality loss. The facility includes a 5 MT/batch pre-cooler (up to 3 batches/day) and 45 MT storage capacity across three 15 MT cold rooms for short-term holding and market-aligned dispatch. It integrates energy-efficient design, ammonia (zero ODP and zero GWP) refrigeration, and renewable energy systems to enable net-zero energy operation.

Salient technical features of Mithila Union DPR	Financial assessment
• Building design and materials selected to minimise solar heat gain, ensuring thermal comfort for staff and reduced energy consumption • Walls, roof, and floor insulated with PIR (Polyisocyanurate) panels (preferred over standard PUF for superior thermal performance), with appropriate thickness for cold rooms and the sorting & grading hall • High-performance colour-coated galvalume roofing sheets with passive turbo vents to improve ventilation and lower cooling costs • Ammonia-based refrigeration system using a natural refrigerant with zero ODP and zero GWP • 80 kWp rooftop solar PV system to meet ~50% of electricity demand, with provision to lease nearby space for an additional 40 kWp system to achieve net-zero energy operation	• An Excel-based financial model was developed for the site-specific DPR for Mithila Vegetable Union, which includes total capital expenditure, operating costs, a profitability statement, cash flow, break-even analysis, sensitivity analysis, and the internal rate of return (IRR). This model can be customised for developing DPRs for other sites. • To secure financing for Mithila Vegetable Union's packhouse, the DPR and financial analysis were presented to the Secretary, Cooperatives Department, Bihar. • Additional consultations to secure financing were held with financial institutions such as SIDBI and SBI, as well as NCDC. • A monitoring framework to assess the impact of the proposed packhouse in Darbhanga was developed, as impact assessment is crucial to replicating and scaling integrated packhouses in Bihar.

2. Model DPR guidelines for brownfield packhouse projects in Bihar

A DPR guideline for brownfield packhouse projects was developed specifically for mango and litchi FPCs supported by the Directorate of Horticulture (DoH). The guideline provides guidance on upgrading the existing shed-like structures at the FPC premises into integrated packhouses with energy-efficient design and technologies, low-GWP refrigerants and solar PV.

3. Model DPR Templates for greenfield packhouse projects in Haryana

ICCP program supported DoH-JICA scheme financing facility of USD 320 Million in developing DPR templates including packhouse design and construction for two categories of projects - 1) farm-level aggregation centres handling up to 2 MT/day; 2) integrated packhouses handling up to 10 MT/day. The key guidelines are to incorporate energy-efficient design and technologies, renewable energy, and zero-GWP natural refrigerants.



Packhouse site inspection with Mithila Union, Darbhanga, Bihar



ICCP team's visit to a cold-chain facility in Haryana

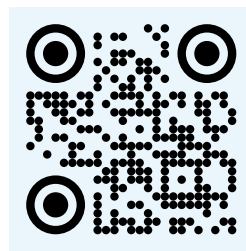
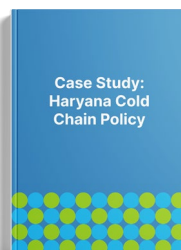
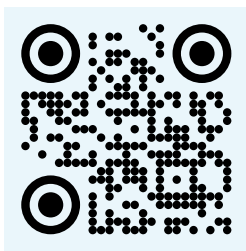
Observations and way forward

Observations		Recommendations
Bihar	Haryana	
Cold chain infrastructure		
• Cold chain dominated by large cold storages • Several packhouses built under government schemes and by FPCs exist as shed-like structures lacking pre-cooling, sorting, grading, and cold rooms. • High dependence on grid electricity and DG sets; limited adoption of energy efficiency measures and renewable energy.	• Cold chain dominated by cold storages, with some focus on integrated packhouses. • 88 integrated packhouses sanctioned; 34 operational as of 2021–22. • DoH-supported initiatives underway for new packhouse development. • Limited integration of energy efficiency, renewable energy, and low-carbon design principles.	• Shift from standalone cold storages to energy-efficient integrated packhouses with strong first-mile connectivity. • Prioritise facilities with sorting, grading, pre-cooling, cold rooms, transit areas, and reefer transport. • Adopt “Lean, Mean, Green” design principles with energy efficiency and renewable energy integration. • Mandate use of zero- and low-GWP natural refrigerants for all new investments. • Implement structured retrofitting strategies to upgrade existing sheds into functional packhouses.
Business models and operations		
• Predominantly rental-based cold storage operations. • FPC-owned facilities operate limited procurement and distribution models with 60–70% utilisation. • No evidence of pay-as-you-go or Packhouse-as-a-Service (PaaS) models.	• Rental and lease-based models dominate, including government-built packhouses leased to private operators. • Utilisation levels remain moderate; service-based models largely absent.	• Transition from rental-only models to service-oriented models such as PaaS and Pay-As-You-Go. • Promote Design–Build–Lease–Operate–Transfer (DBLOT) and participatory O&M models for government infrastructure. • Encourage aggregation, logistics, and value-added services to improve utilisation and farmer returns.

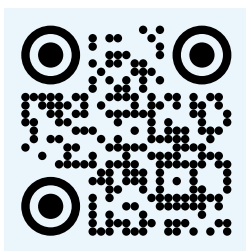
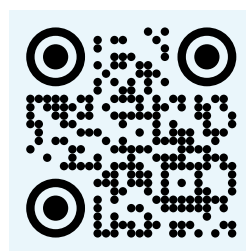
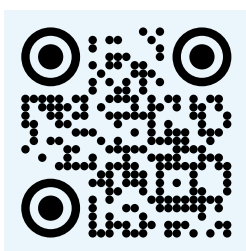
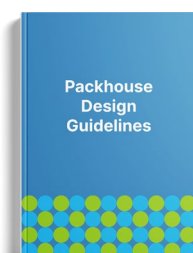
Observations		Recommendations
Bihar	Haryana	
Financing		
• Small FPCs face low creditworthiness and limited access to bank finance. • Government subsidies cover only part of project costs; accessing schemes is cumbersome. • Sustainable technologies face higher upfront costs with limited financial support.	• Better access to institutional finance than Bihar, but similar gaps for energy-efficient and RE-based technologies. • Existing schemes insufficient to cover higher CAPEX of green solutions.	• Develop dedicated green financing products for energy-efficient and RE-integrated cold chains. • Expand credit guarantee mechanisms to de-risk lending for FPOs and small agribusinesses. • Align subsidies to support higher upfront costs of sustainable technologies. • Enable access to carbon credit revenues under the Indian Carbon Credit Trading Scheme (CCTS).
Awareness and capacity building		
• Limited technical know-how on integrated packhouse design, pre-cooling, and reefer logistics. • FPCs seek guidance on upgrading existing sheds into modern packhouses. • Awareness of sustainable cooling technologies remains low.	• Capacity gaps persist among operators and service providers, despite relatively stronger infrastructure base. • Need for technical training on energy-efficient design and operations.	• Institutionalise capacity building across the ecosystem—farmers, FPOs, service providers, and government officials. • Establish and strengthen Centres of Excellence (CoEs) as regional hubs for training and research. • Mainstream model DPR templates and produce-specific protocols to standardise planning and improve project viability.

Reports and guidelines

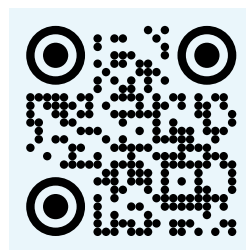
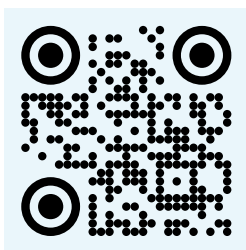
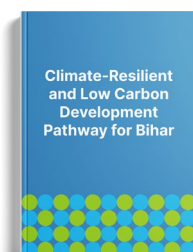
Case studies



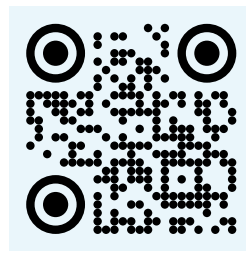
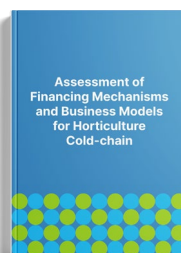
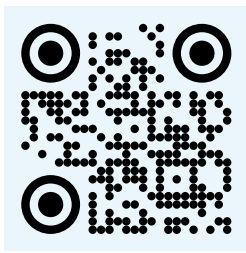
Guidelines



Policies



Reports





United Nations Environment Programme (UNEP) Cool Coalition in partnership with the Alliance for an Energy Efficient Economy (AEEE), is implementing the project “Scaling-up Investment in Clean and Efficient Cold chain in India.” The project aims to accelerate the development of sustainable and integrated cold chain in India and selected states. It is supporting the national government and two states, namely Bihar and Haryana, in mainstreaming energy-efficient, renewable energy-powered, and low-GWP refrigerant cold chain infrastructure and services in rural areas, particularly focusing on packhouses and reefer transport as part of an integrated cold-chain. The project is contributing to the implementation of India’s Cooling Action Plan and is working to enhance rural livelihoods.



The Cool Coalition is a global multi-stakeholder network that connects a wide range of key actors from government, cities, international organizations, businesses, finance, academia, and civil society groups to facilitate knowledge exchange, advocacy and joint action towards a rapid global transition to efficient and climate-friendly cooling.



Alliance for an Energy Efficient Economy (AEEE) supports policy implementation and enables the energy efficiency market with a not-for-profit motive. AEEE promotes energy efficiency as a resource and collaborates with industry and government to transform the market for energy-efficient products and services, thereby contributing toward meeting India’s goals on energy security, clean energy, and climate change.