



India

# Green Finance Landscape and Access to Green Finance in the Tourism Sector in India

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## List of Abbreviations

Abbreviation	Full Form
ADB	Asian Development Bank
BEE	Bureau of Energy Efficiency
BoB	Bank of Baroda
CBSL	Central Bank of Sri Lanka
CBI	Central Bank of India
CSR	Corporate Social Responsibility
DFI	Development Finance Institution
EAC	Environmental Appraisal Committee
EMC	Energy Management Centre (Kerala)
ESG	Environmental, Social, and Governance
FI	Financial Institution
GCF	Green Climate Fund
GDP	Gross Domestic Product
GoI	Government of India
HVAC	Heating, Ventilation, and Air Conditioning
IFI	International Financial Institution
KIIFB	Kerala Infrastructure Investment Fund Board
KSFE	Kerala State Financial Enterprises
KSIDC	Kerala State Industrial Development Corporation
KSWMP	Kerala Solid Waste Management Project
LPG	Liquefied Petroleum Gas
MSME	Micro, Small, and Medium Enterprise
MSE-GIFT	Micro and Small Enterprises – Green Investment and Financing for Transformation
MSE-SPICE	Micro and Small Enterprises – Scheme for Promotion and Investment in Circular Economy
NBFC	Non-Banking Financial Company
NDC	Nationally Determined Contribution
PLI	Production Linked Incentive

Abbreviation	Full Form
PRASHAD	Pilgrimage Rejuvenation and Spiritual Heritage Augmentation Drive
PROMISE	Prevention of Marine Litter in the Lakshadweep Sea
PV	Photovoltaic
RBI	Reserve Bank of India
RT	Responsible Tourism
SDG	Sustainable Development Goal
SIDBI	Small Industries Development Bank of India
SMILE	SIDBI Make in India Soft Loan Fund for MSMEs
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNWTO	United Nations World Tourism Organization

## 1. Executive Summary

This *Green Finance Landscape and Access to Green Finance in the Tourism Sector in India* report examines the availability, accessibility, and impact of green finance for tourism micro, small, and medium enterprises (MSMEs), with a focus on Kerala, a coastal state bordering the Lakshadweep Sea. Kerala's tourism sector is vital for the state economy, generating significant employment and revenue, but it also contributes to increased energy use, water consumption, and plastic and solid waste generation. The PROMISE project seeks to prevent marine litter and promote sustainable tourism by enabling MSMEs to adopt renewable energy, energy efficiency, and zero-waste technologies through targeted green finance interventions (UNEP, 2021; adelphi, 2024).

India's national green finance ecosystem has expanded rapidly, underpinned by policy reforms, RBI guidance, and development finance initiatives. National instruments such as SIDBI's MSE-GIFT and MSE-SPICE schemes, priority sector lending for renewable energy, and commercial bank products provide MSMEs with access to financing for energy efficiency, waste management, and circular economy investments (SIDBI, 2025; Central Bank of India, 2025). Kerala further supplements these instruments with state-specific schemes, including the Green Kerala Loan (KSFE) and KSIDC Sustainability Incentive Scheme, which provide concessional financing, interest subvention, and technical support to local tourism MSMEs. Technical facilitation from the Energy Management Centre (EMC) and BEE strengthens MSMEs' readiness to secure green finance.

PROMISE interventions in Kerala included two MSME workshops (Kochi and Thiruvananthapuram), one-on-one technical visits, and bilateral sensitisation of financial institutions. These efforts led to the sensitisation of **53 MSME stakeholders** and **21 bank representatives**, with targeted support enabling **6 MSMEs to apply for green finance**, resulting in **5 successful financings**. Investments primarily supported rooftop solar systems and a glass water bottling plant, delivering both environmental and economic benefits. The project demonstrated that one-on-one engagement, technical advisory support, and flexible financing mechanisms are critical to converting green finance awareness into actionable investments, particularly for geographically dispersed tourism MSMEs.

Key lessons highlight that **green finance adoption is constrained more by awareness, technical readiness, and institutional coordination than by funding availability**. For tourism MSMEs, high upfront costs, complex procedures, and lack of technical expertise remain barriers, while financial institutions benefit from **capacity-building, sector-specific appraisal frameworks, and partnerships with technical intermediaries**. By addressing these gaps, stakeholders can expand green finance uptake, reduce environmental impacts, enhance business resilience, and support Kerala's sustainable tourism objectives—demonstrating a replicable model for other coastal states in India.

## 2. Background

India is one of the world's largest and fastest-growing economies, with the services sector—particularly tourism—playing an increasingly important role in economic growth and employment generation. Following the economic disruption caused by the COVID-19 pandemic, India experienced a strong recovery supported by public investment, domestic consumption, and sectoral reforms (World Bank, 2023). At the same time, India has strengthened its commitment to climate action through its updated Nationally Determined Contributions and a **long-term target of achieving net-zero emissions by 2070**, alongside ambitious renewable energy and resource efficiency goals (UNFCCC, 2022).

Within this national context, the state of Kerala holds particular relevance for sustainable tourism and green finance interventions. Kerala is located along the southwestern coast of India, bordering the

**Lakshadweep Sea**, and is highly exposed to marine litter, coastal pollution, and climate-related risks such as flooding and coastal erosion (UNEP, 2021). Tourism is a cornerstone of Kerala's economy, built around its beaches, backwaters, biodiversity, and cultural heritage. However, the growth of tourism has intensified pressures on waste management systems, plastic consumption, water use, and energy demand, with direct implications for marine litter leakage into the Lakshadweep Sea.

Kerala, is a state located on the southwestern coast of India and is renowned for its unique geographical features, including serene beaches, lush hill stations, and tranquil backwaters. It accounts for 2.8% of India's population and 1.2% of its land area, contributes more than 4% to the GDP of India. The state's Gross State Domestic Product (GSDP) is projected to grow by 11.7% in the financial year 2024-25, reaching Rs 13,11,437 crore (approximately \$158 billion USD). Kerala's economy is primarily based on the concept of "democratic socialist welfare state".

Kerala's high GDP and productivity figures with higher development figures is often dubbed the "Kerala Model" of development by economists, political scientists, and sociologists. This phenomenon arises mainly from Kerala's land reforms, social upliftment of entire communities initiated from the first democratic government of Kerala led by E. M. S. Namboodiripad and subsequently implemented by various governments ruled the state. The state targets to reach net-zero carbon emissions by 2050 and, interest subsidy will be given to loans availed by consumers for installing solar panels in their houses.

Kerala has demonstrated leadership in sustainable development through initiatives such as the **Responsible Tourism Mission**, decentralised waste management programmes, and renewable energy promotion. Nevertheless, **tourism MSMEs continue to face structural barriers in accessing finance for green investments**, particularly for high upfront-cost technologies related to renewable energy, wastewater treatment, and zero-waste solutions. Addressing these barriers through targeted green finance mechanisms is essential for aligning tourism development with environmental protection objectives. Against this backdrop, the **PROMISE project implemented green finance activities in Kerala** to support tourism MSMEs and financial institutions in advancing sustainable, low-pollution tourism practices.

### 3. Tourism sector in India

Tourism is a major pillar of India's services-led economy, contributing approximately **5.2% to national GDP** and playing a critical role in employment generation and regional development (Ministry of Tourism, Government of India, 2023). Following the COVID-19 pandemic, the tourism sector demonstrated strong resilience, generating **over 87.5 million jobs in 2022**, supported largely by domestic tourism demand and gradual revival of international travel (WTTC, 2023). Government-led initiatives such as the **Swadesh Darshan** and **PRASHAD** schemes have further strengthened tourism infrastructure and accessibility, particularly in lesser-known destinations, while India has also emerged as a key global hub for **medical and wellness tourism** due to affordable, high-quality healthcare services (Ministry of Tourism, 2023; UNWTO, 2022). These trends position India as a leading and diversified global tourism destination.

Within the Indian tourism landscape, **Kerala occupies a unique and strategic position**. Internationally recognised for its beaches, backwaters, hill stations, biodiversity, and Ayurveda-based wellness tourism, Kerala attracts both domestic and international visitors throughout the year. Tourism is a cornerstone of the state economy and is predominantly driven by **micro, small, and medium enterprises (MSMEs)** such as hotels, resorts, homestays, houseboats, restaurants, and tour operators (Kerala Tourism Department, 2023). In **2023, Kerala recorded 21.87 million domestic tourist visits**, reflecting a **15.92% increase** compared to the previous year, while **international tourist arrivals increased by 87.83%** to

**649,057 visitors**, indicating a strong post-pandemic recovery (Kerala Tourism Department, 2024). Tourism generated an estimated **₹30,000 crore in revenue in 2023**, underscoring the sector’s economic importance to the state.

Kerala’s geographic location along the **Lakshadweep Sea** makes tourism activities directly relevant to marine litter prevention efforts under the PROMISE project. Coastal tourism facilities, backwater resorts, and hospitality establishments generate significant volumes of plastic waste, food waste, and wastewater. Without effective segregation and treatment systems, these waste streams pose a high risk of leakage into rivers, backwaters, and coastal ecosystems (UNEP, 2021). As tourism demand continues to grow, the environmental footprint of tourism MSMEs is expected to increase, making resource-efficient and circular practices increasingly urgent.

The Government of Kerala has actively promoted sustainable and responsible tourism through initiatives such as the Responsible Tourism Mission, which has been implemented across the state and integrates environmental protection, community participation, and local economic development (Government of Kerala, 2023). Long-term policy ambitions are reflected in **Mission 2030**, which aims to increase tourism’s contribution to the state GDP from **12% to 20%** by attracting private investment, developing new tourism models such as cruise and heli-tourism, and fostering public–private partnerships (Kerala Tourism Department, 2023).

However, rapid tourism growth has also intensified pressures on waste management systems. In response, the Kerala Solid Waste Management Project (KSWMP)—supported by the World Bank and the Asian Infrastructure Investment Bank (AIIB)—is improving solid waste management infrastructure in **93 urban local bodies** across the state (World Bank, 2022). Complementing this, the **Harithakarma Sena – Garbage Free Kerala initiative** promotes decentralised waste management through source segregation, composting, and bio-digestion at community level, supported by targeted subsidies and local employment generation (Government of Kerala, 2023). Together, these initiatives reinforce Kerala’s commitment to sustainable tourism while highlighting the importance of **green investments and access to finance** to ensure that tourism growth does not undermine environmental integrity or marine ecosystems (adelphi, 2024).

## 4. Green Finance Ecosystem in India

India’s green finance ecosystem has gained momentum in recent years, underpinned by national climate commitments, growing policy support for sustainable investments, and an expanding set of financial instruments for MSMEs. The Government of India has aligned its climate goals with financial sector reforms by prioritising renewable energy adoption, energy efficiency improvements, circular economy approaches, and climate resilience investments in its Nationally Determined Contributions and economic planning frameworks (Government of India, 2021; UNFCCC, 2022). The Reserve Bank of India (RBI) has also encouraged financial institutions to integrate Environmental, Social, and Governance (ESG) considerations into risk management and lending policies, establishing a foundation for scaling green finance across sectors including tourism (RBI, 2023).

Despite this policy momentum, access to green finance for tourism MSMEs — particularly in geographically dispersed states like Kerala — remains constrained by limited awareness, perceived risk, and limited product innovation tailored to high-impact investments such as renewable energy and waste management technologies. Within this landscape, both **international development finance flows** and **domestic schemes** play a catalytic role in expanding financing options for MSMEs (World Bank, 2023). Key actors include multilateral institutions, national development banks, and ministries engaged in sustainability financing. The following sub-sections outline the key international finance players active

in India's green finance ecosystem (**Table 1**) and existing green finance schemes for MSMEs (**Table 2**), with a focus on circular economy, waste management, and energy efficiency financing.

## 4.1 International Financial Institutions in India

International Financial Institutions (IFIs) have been instrumental in shaping India's green finance ecosystem by providing concessional finance, technical assistance, policy dialogue support, and capacity building. These engagements are critical for de-risking investments in renewable energy, circular economy solutions, and climate resilience, as well as for broadening private sector participation. **Table 1** summarises the major IFIs active in India's green finance landscape, their focal areas, and contributions to sustainable finance and MSME support.

**Table 1: International Financial Institutions and Green Finance Engagement in India**

International Financial Institution	Green Finance Commitments, Initiatives, and Objectives
Asian Development Bank (ADB)	ADB supports India's climate action through investment in renewable energy, sustainable transport, and climate-resilient infrastructure. It provides policy-based lending, technical assistance, and green credit lines to domestic banks for MSME energy efficiency and clean tech adoption ( <i>ADB, 2024</i> ).
World Bank Group	The World Bank facilitates green financing through concessional loans, credit guarantees, and advisory support for renewable energy, waste management, and market transformation. It supports national schemes that enhance MSME access to finance and strengthens regulatory frameworks for sustainability investing ( <i>World Bank, 2023</i> ).
International Finance Corporation (IFC)	IFC mobilises private capital for clean energy, energy efficiency, and circular economy projects in MSME sectors. It provides blended finance, risk-sharing instruments, and ESG advisory services to banks for green product development ( <i>IFC, 2024</i> ).
United Nations Development Programme (UNDP)	UNDP supports climate finance readiness and policy development through programmes such as BIOFIN, which helps align public and private finance flows with sustainability objectives. It also facilitates capacity building for MSMEs and financial institutions ( <i>UNDP, 2024</i> ).
Climate Investment Funds (CIF)	CIF provides concessional finance to support transformational projects, including renewable energy, climate resilience, and adaptation initiatives across India. These funds help de-risk early stage investments and crowd in private capital ( <i>CIF, 2024</i> ).
Global Environment Facility (GEF)	GEF provides grant finance for biodiversity, pollution prevention, and climate mitigation projects, often complementing larger IFI investments. It supports pilot projects and innovation in circular and low-emission technologies relevant to MSMEs ( <i>GEF, 2024</i> ).

## 4.2 Green Finance Schemes for SMEs in India

India's green finance market for SMEs has expanded beyond national programmes to include **bank-led financing products** for renewable energy, energy efficiency, and waste/circular solutions. In addition to SIDBI's strategic schemes, several commercial banks and development finance partners have introduced MSME-focused green products, often in **collaboration with technology partners or NBFCs**. These schemes target investments in rooftop solar, energy-efficient equipment, and other sustainability upgrades that reduce operating costs and environmental impact while improving competitiveness.

**Table 2** below summarises key green finance schemes accessible to MSMEs in India, including both national (SIDBI, commercial banks) and Kerala state-specific schemes.

**Table 2: Green Finance Schemes for MSMEs in India (special focus on Kerala)**

Financial Institution / Scheme	Green Finance Scheme Details
Small Industries Development Bank of India (SIDBI)	<b>MSE Green Investment and Financing for Transformation (MSE-GIFT):</b> Concessional finance for MSMEs adopting renewable energy, energy efficiency, and sustainable technologies ( <i>SIDBI, 2025</i> ). <b>MSE Scheme for Promotion and Investment in Circular Economy (MSE-SPICE):</b> Credit-linked capital subsidies and concessional loans for recycling, waste management, and circular technology adoption ( <i>SIDBI, 2025</i> ). <b>Energy Efficiency and Green Finance Scheme (4E &amp; GFS):</b> Loans for energy efficiency upgrades and renewable energy (e.g., rooftop solar), with competitive interest rates and generous funding support ( <i>SIDBI, 2025</i> ).
Central Bank of India	<b>Green Financing and Energy Efficiency Financing Cell:</b> Supports energy efficiency and renewable energy financing, including solar rooftop and clean tech loans for MSMEs, plus participation in SIDBI-linked schemes ( <i>Central Bank of India, 2025</i> ).
Bank of Baroda	<b>MSME Solar Project Finance:</b> Loans for rooftop and ground-mounted solar with flexible financing options (collateral-free up to specified limits) and long repayment tenures ( <i>ET EnergyWorld, 2022; Business Standard, 2025</i> ). <b>SME Green Financing &amp; ESG-Linked Products:</b> Tailored financing for energy-efficient equipment and sustainability upgrades ( <i>Bank of Baroda, 2025</i> ).
Federal Bank	<b>MSME Green Loan for Rooftop Solar (in partnership with Ecofy):</b> Dedicated financing for commercial rooftop solar installations, reducing upfront cost barriers for MSMEs ( <i>ETBFSI, 2024; FIDC, 2025</i> ).
Indian Bank	<b>Green Loan Products for MSMEs:</b> Loans targeting eco-friendly machinery and renewable energy upgrades; aligns with priority sector lending frameworks ( <i>Indian Bank disclosures</i> ).

Financial Institution / Scheme	Green Finance Scheme Details
Energy Management Centre (EMC) / BEE-Linked Support	<b>Technical &amp; Financial Facilitation:</b> EMC/BEE help MSMEs identify energy efficiency options and connect with financing sources via digital platforms and advisory support, increasing readiness for green finance uptake.
Kerala State Financial Enterprises (KSFE) – Green Kerala Loan	<b>Green Loan for Renewable Energy and Waste Solutions:</b> Concessional loans for solar PV installations, waste composting units, and energy-efficient equipment targeted at MSMEs and households in Kerala, with subsidised interest and flexible terms ( <i>KSFE, 2025</i> ).
Kerala State Industrial Development Corporation (KSIDC) – Sustainability Incentive Scheme	<b>Sustainability and Energy Efficiency Grants/Loans:</b> Financial support (partial grants, interest subventions) for MSMEs investing in renewable energy, water recycling, and zero-waste technologies that improve environmental performance ( <i>KSIDC, 2024</i> ).
Kerala Renewable Energy (KRE) Support Fund	<b>Subsidised Solar Financing:</b> Through coordination with state energy departments, KRE offers subsidies and low-interest credit linked to rooftop solar and mini-grid projects benefitting MSMEs, tourism facilities, and community clusters ( <i>Kerala Energy Policy, 2022</i> ).
Kerala Infrastructure Investment Fund Board (KIIFB) – Green Infrastructure Window	<b>Debt Support for Local Green Projects:</b> Provides co-financing, concessional debt, or credit enhancement for sustainable infrastructure including waste management facilities, bio-digestion systems, and resource recovery systems that can benefit clusters of MSMEs ( <i>KIIFB, 2023</i> ).

## 5. PROMISE Efforts in Supporting Financial Institutions and MSMEs on Green Finance

Under the PROMISE project, targeted efforts were undertaken in Kerala, India, to strengthen both the supply side (Financial Institutions – FIs) and the demand side (tourism MSMEs) of green finance. Recognising the structural, geographic, and institutional realities in Kerala—such as the dispersed nature of MSMEs and time constraints faced by banking professionals—the project adopted adaptive and context-specific engagement strategies rather than a one-size-fits-all workshop model.

PROMISE focused on building awareness, improving technical readiness, and facilitating direct access to finance by combining workshops, one-to-one sensitisation, and hands-on transaction support. These efforts were closely aligned with the project’s broader objective of **preventing marine litter in the Lakshadweep Sea** by enabling investments in **renewable energy, zero-waste solutions, and resource-efficient technologies** within the tourism sector.

### 5.1 Green Finance Sensitisation with Financial Institutions

Unlike in Sri Lanka and Maldives, stand-alone green finance workshops with financial institutions were not feasible in India, as banking professionals are among the most time-constrained stakeholders. In response, the PROMISE in-country team adopted a **decentralised sensitisation approach**, engaging financial institutions through **short, focused bilateral sessions** lasting one to two hours.

During these sessions, PROMISE technical consultants presented the **Green Finance Toolkit**, with a strong emphasis on:

- **High-cost zero-waste solutions** relevant to tourism MSMEs (e.g. glass water bottling plants, decentralised waste treatment systems),
- **Case studies from India and global best practices** in green finance product design,
- **Critical success factors for developing viable green finance products**, including risk assessment, technology validation, and demand aggregation.

These sensitisation meetings also highlighted the business case for green lending, particularly the potential for reduced credit risk through energy cost savings and improved environmental compliance. In total, 21 representatives from financial institutions—including public sector banks, private banks, and technical support agencies—were sensitised on green finance concepts and opportunities relevant to Kerala’s tourism sector.

### 5.2 Green Finance Workshops with MSMEs

PROMISE organised **two Green Finance Workshops for MSMEs** in Kerala:

- **Kochi – 18 January 2023** (13 MSME representatives)
- **Thiruvananthapuram – 20 January 2023** (8 MSME representatives)

Both workshops followed the same agenda and were designed to demystify green finance for tourism MSMEs. The sessions covered:

- Green finance terminology and concepts relevant to small tourism enterprises,

- Overview of existing green finance schemes available in India,
- Practical discussion on challenges and opportunities in accessing finance,
- Technology showcases by four local green technology providers, focusing on zero-waste solutions and energy efficiency technologies.

Two national institutions—SIDBI and the Bureau of Energy Efficiency (BEE)—presented their online platforms and schemes for accessing green finance and energy efficiency support.

However, due to the geographical dispersion of MSMEs across Kerala and travel constraints, workshop participation remained limited. In response, PROMISE adapted its strategy by:

- Developing and using an **MSME Green Finance Sensitisation Brochure**, and
- Conducting **one-to-one green finance discussions** during routine technical assistance visits to PROMISE MSMEs.

This flexible approach significantly improved engagement and allowed for tailored financial guidance based on enterprise-specific needs.

### 5.3 Outcomes of PROMISE Green Finance Activities

PROMISE's adaptive engagement model in Kerala led to tangible and measurable outcomes, moving beyond awareness-raising to actual financial closures.

As a result of the combined workshops, sensitisation efforts, and one-to-one technical support:

- **53 MSME stakeholders** were sensitised on green finance concepts and existing financing schemes.
- **6 tourism MSMEs** formally requested one-to-one support for accessing green finance.
- PROMISE technical consultants directly connected these MSMEs with Central Bank of India, Federal Bank, Indian Bank, and the Energy Management Centre.
- **5 out of 6 MSMEs successfully secured financing**, including:
  - 4 MSMEs receiving bank finance, primarily for rooftop solar installations, and
  - 1 MSME using internal corporate funds to install a glass water bottling plant, significantly reducing single-use plastic consumption.
- PROMISE provided **end-to-end transaction support**, including assistance with:
  - Technology selection,
  - Application preparation and documentation,
  - Financial negotiations with banks and service providers.

Key quantified outcomes include:

- **53 MSMEs sensitised** on green finance and access-to-finance pathways
- **21 FI representatives engaged** through targeted sensitisation
- **6 MSMEs supported** through customised access-to-finance assistance

- 5 MSMEs successfully financed (~83% conversion rate)
- Majority of investments in rooftop solar, directly contributing to emissions reduction and operating cost savings

Overall, PROMISE's India experience demonstrates that flexible engagement models, strong technical backstopping, and direct facilitation between MSMEs and financial institutions are critical for translating **green finance awareness into actual investment outcomes**—especially in dispersed tourism economies such as Kerala.

## 6. Challenges and Opportunity Mapping

Based on PROMISE project implementation in **Kerala, India**, including green finance workshops, bilateral sensitisation with financial institutions, and hands-on access-to-finance support for tourism MSMEs, several structural and operational challenges were identified across the green finance ecosystem. These challenges span the **demand side (MSMEs)**, the **supply side (financial institutions)**, and the **enabling environment**, including policies, technical support systems, and market linkages.

At the same time, the project experience revealed **clear opportunities** to strengthen green finance uptake through targeted awareness, institutional capacity building, simplified procedures, and stronger collaboration between banks, MSMEs, and technology providers. This section summarises these insights and maps **practical solutions** that can support the scaling up of green finance in India's tourism sector, particularly in coastal states such as Kerala.

### 6.1 Challenges and Suggestions for Financial Institutions

Financial institutions in India, including those operating in Kerala, have shown growing interest in green finance. However, PROMISE interactions highlighted that **institutional constraints, limited technical capacity, and perceived sectoral risks** continue to limit proactive green lending—especially to tourism MSMEs.

Key challenges and corresponding opportunities identified through PROMISE engagements are summarised in **Table 3**.

**Table 3: Challenges and Suggestions for Financial Institutions in Promoting Green Finance**

Key Challenge	Description	Opportunities / Suggested Actions
Limited sector-specific understanding	Many banks lack in-depth knowledge of tourism-sector green technologies (e.g. waste systems, bottling plants, decentralised treatment solutions).	Develop <b>sector-specific green finance toolkits</b> and case studies; engage technical partners for due diligence support.
Perception of tourism as a high-risk sector	COVID-19 and economic volatility have led banks to classify tourism MSMEs as high-risk, even for viable green investments.	Use <b>cash-flow-based lending approaches</b> and recognise operational cost savings from solar and efficiency investments.

Lack of staff training on green finance	Green finance products exist, but frontline staff are often unfamiliar with eligibility, appraisal criteria, or benefits.	Conduct <b>targeted internal training</b> and short sensitisation sessions, similar to PROMISE's bilateral approach.
Absence of low-cost, dedicated green credit lines	Banks rely on standard MSME lending products, limiting affordability for green investments.	Expand access to <b>SIDBI refinancing, co-lending models, and blended finance instruments.</b>
Complex approval and documentation processes	Lengthy appraisal timelines discourage MSMEs from pursuing green loans.	Introduce <b>simplified appraisal pathways</b> for standardised technologies such as rooftop solar and energy-efficient equipment.

PROMISE experience demonstrates that short, focused sensitisation sessions and practical case-based discussions are more effective than large workshops in engaging Indian financial institutions.

## 6.2 Challenges and Opportunities for MSMEs

Tourism MSMEs in Kerala, particularly small hotels, resorts, and homestays—face a distinct set of barriers when attempting to access green finance. These challenges are compounded by limited internal capacity, high upfront investment costs, and fragmented access to reliable information.

PROMISE's one-to-one engagements provided valuable insight into both the constraints MSMEs face and the conditions under which green finance becomes viable.

**Table 4: Challenges and Opportunities for MSMEs in Accessing Green Finance**

Key Challenge	Description	Opportunities / Suggested Actions
Low awareness of green finance schemes	Many MSMEs were unaware of existing schemes from SIDBI, banks, or state agencies.	Scale up <b>targeted awareness campaigns</b> using brochures, digital tools, and local networks.
High upfront cost of green technologies	Investments such as solar PV or bottling plants require significant capital.	Promote <b>subsidised credit lines</b> , phased investments, and <b>CSR-linked financing options.</b>
Difficulty preparing bankable proposals	MSMEs often lack the technical and financial expertise to develop viable proposals.	<b>Provide technical assistance</b> and pre-feasibility support, as demonstrated under PROMISE.
Collateral and documentation constraints	Many small tourism operators lack sufficient collateral or formal documentation.	Encourage banks to adopt flexible collateral norms and cash-flow-based assessment methods.

Limited perception of green investments as business assets	MSMEs often view green technologies as compliance costs rather than value-adding investments.	Demonstrate business cases highlighting cost savings, branding benefits, and customer demand.
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PROMISE results showed that hands-on transaction support significantly increases financing success rates, with over **80% of supported MSMEs successfully securing finance**.

### 6.3 Cross-cutting Observations

Across both financial institutions and MSMEs, several cross-cutting themes emerged:

- **Information asymmetry** remains a major bottleneck: MSMEs do not know where to access finance, while banks lack clarity on viable green technologies.
- **Technology validation and standardisation** are critical for scaling green finance in tourism, especially for waste and circular solutions.
- **Geographical dispersion of MSMEs**, particularly in Kerala, requires decentralised and flexible engagement models rather than centralised workshops.
- **Blended finance approaches**, combining loans, subsidies, and technical assistance, are more effective than standalone credit products.
- **Trusted intermediaries**, such as PROMISE technical consultants, play a crucial role in bridging gaps between MSMEs and financial institutions.

Overall, the India experience highlights that **green finance is not constrained by the absence of schemes**, but rather by **institutional readiness, awareness, and coordination**. Addressing these gaps through structured capacity building and facilitation can unlock significant investment potential in sustainable tourism.

## 7. Key Considerations for Financial Institutions in India

The implementation of PROMISE green finance activities in Kerala, India, provided valuable insights into how financial institutions can more effectively assess and support tourism MSMEs seeking green finance. Unlike traditional manufacturing or trading enterprises, tourism MSMEs operate with seasonal cash flows, location-specific risks, and service-oriented business models, which require adapted appraisal approaches—particularly when financing green technologies.

Based on direct engagement with banks, MSMEs, technical consultants, and technology providers, the following key considerations are recommended for financial institutions operating in India, especially in coastal and tourism-intensive states.

**Assessing MSME Readiness and Financial Viability:** Financial institutions should move beyond purely asset-based lending and adopt **cash-flow-based assessments** for tourism MSMEs. PROMISE experience showed that enterprises investing in **rooftop solar systems or energy-efficient equipment** often demonstrated improved operating margins and repayment capacity due to reduced energy costs.

Key aspects to consider include:

- Historical and projected seasonal cash flows, especially peak and off-season tourism cycles.

- Existing debt obligations and restructuring status post-COVID-19.
- Ability of green investments to generate predictable cost savings, which can be factored into repayment schedules.

**Technology Appraisal and Selection:** A major bottleneck identified during PROMISE implementation was the **limited familiarity of banks with green technologies** relevant to tourism MSMEs, particularly in waste and circular economy solutions.

Financial institutions are encouraged to:

- Prioritise proven and standardised technologies (e.g. rooftop solar PV, energy-efficient HVAC systems) during initial scale-up.
- Engage technical experts or empanelled consultants to validate technology feasibility, cost structures, and performance benchmarks.
- Recognise that high-cost zero-waste solutions, such as glass water bottling plants, may require longer tenures or blended finance structures.

**Sector-specific Considerations for Tourism MSMEs:** Tourism MSMEs in Kerala often operate in **coastal, ecologically sensitive areas**, making environmental compliance and community acceptance critical.

Banks should consider:

- Alignment of proposed investments with local environmental regulations and tourism sustainability initiatives.
- Potential for green investments to enhance brand value, guest satisfaction, and market positioning, especially among international tourists.
- Location-specific risks such as flooding, monsoons, and coastal erosion, which may influence asset life and insurance requirements.

**Risk Perception and Credit Appraisal:** PROMISE engagements revealed that tourism is often perceived as a **high-risk sector**, resulting in conservative lending decisions even for technically viable green projects.

To address this, financial institutions can:

- Differentiate between operational business risk and investment-specific risk related to green technologies.
- Apply risk-mitigation instruments, such as partial guarantees, SIDBI refinancing, or insurance products.
- Pilot portfolio-based green lending for standard technologies to spread risk across multiple MSMEs.

**Institutional Capacity and Product Development:** For green finance to scale, banks must invest in **internal capacity building** and product innovation.

Key actions include:

- Training relationship managers and credit officers on green finance schemes, eligibility criteria, and appraisal methodologies.

- Developing simplified green loan products tailored to MSMEs, with clear documentation and faster turnaround times.
- Leveraging partnerships with SIDBI, BEE, EMC, and NBFCs to access concessional funds and technical support.

**Role of Intermediaries and Facilitation:** PROMISE demonstrated that **trusted intermediaries** significantly improve loan conversion rates by supporting MSMEs throughout the financing process.

Financial institutions should:

- Actively collaborate with technical assistance providers and project facilitators.
- Accept pre-screened and technically validated proposals from recognised programmes.
- View facilitation costs as an investment in portfolio quality and loan performance.

The experience from Kerala shows that green finance for tourism MSMEs is both viable and scalable when financial institutions adopt sector-specific appraisal approaches, strengthen technical capacity, and collaborate with facilitators. By aligning financial products with the operational realities of tourism enterprises, banks can unlock new lending opportunities while supporting India's broader sustainability and climate objectives.

## 8. Lessons Learned

The implementation of PROMISE green finance activities in **Kerala, India**, provided rich insights into the practical challenges, success factors, and replicable strategies for scaling green finance in tourism MSMEs. Lessons learned highlight the importance of **context-sensitive approaches**, hands-on facilitation, and the alignment of green investments with **business and environmental outcomes**.

### Awareness Gaps Among MSMEs

- Many tourism MSMEs, particularly small hotels, resorts, homestays, and backwater service providers, were **unaware of existing green finance schemes** from SIDBI, commercial banks, or state-level programs. Unlike the manufacturing sector, where green finance adoption is more common, tourism MSMEs often lacked tailored financing options.
- PROMISE found that MSMEs were also unfamiliar with using **green investments as a business value proposition**—for example, rooftop solar systems or glass water bottling plants can enhance marketing appeal to environmentally conscious visitors, particularly international tourists.
- Addressing awareness gaps through **workshops, brochures, and one-on-one technical visits** proved critical in increasing interest and uptake.

### Perception of Risk by Financial Institutions

- During the pandemic and economic uncertainty, tourism MSMEs were widely considered high-risk by financial institutions. Banks were reluctant to extend loans, even when credit lines existed.
- Historical debt exposure and limited financial documentation of MSMEs further heightened perceived risk.

- PROMISE experience showed that **sector-specific risk assessment frameworks**—focusing on cash flow and technology feasibility rather than historical financial ratios alone—help banks make informed lending decisions.

#### Knowledge Gaps in Proposal Development

- Most green finance schemes require **technically sound, bankable proposals**. Many MSMEs lack the expertise to develop such proposals independently.
- Financial institutions often did not know where to **direct MSMEs for technical support**, highlighting the need for collaboration with technical partners or project facilitators.
- PROMISE technical consultants played a critical role in bridging this gap, providing **hands-on support from technology selection** to application submission, which significantly improved loan approval rates.

#### High Interest Rates and Financial Constraints

- Green investments often involve significant upfront costs. Although some schemes offer concessional interest rates (e.g., 7–8% via SIDBI), MSMEs frequently perceive loans as expensive.
- Blended finance solutions, subsidies, or phased investment approaches** are effective mechanisms to reduce financial barriers and increase adoption of green technologies.

#### Limited Institutional Capacity

- Few financial institutions in Kerala had **dedicated expertise for green finance product development**, including assessing environmental and operational risks.
- Partnerships with technical agencies such as the Energy Management Centre, BEE, and SIDBI were instrumental in supporting banks to identify viable green investments and structure financing.

#### Importance of Workshops and Sensitisation

- PROMISE organised MSME workshops in Kochi and Thiruvananthapuram and bilateral sensitisation sessions with banks.
- One-on-one technical support during site visits** proved more effective than centralised workshops, especially for geographically dispersed MSMEs.
- Financial institution sensitisation, although limited to **short bilateral meetings**, significantly improved understanding of high-cost zero-waste solutions, renewable energy financing, and global best practices.

#### Tailored Technologies and Investment Outcomes

- MSMEs were more likely to adopt technologies with **clear operational and financial benefits**.
  - Most financed projects involved rooftop solar PV systems.
  - One MSME invested corporate funds in a glass water bottling plant, reducing plastic bottle usage and improving environmental compliance.
- Providing technical validation and financial advisory increased confidence for both MSMEs and banks, reducing perceived risk.

## Recommendations for Scaling Green Finance

Based on PROMISE's India experience, the following recommendations are critical for replicable success:

1. **Increase awareness campaigns** targeting tourism MSMEs on the availability, benefits, and eligibility criteria of green finance schemes.
2. **Strengthen bank capacity** to advise MSMEs, assess green projects, and leverage technical support agencies.
3. **Encourage partnerships** between banks, MSMEs, and technology providers to streamline loan application, approval, and disbursement processes.
4. **Reduce upfront financial barriers** through concessional rates, phased investments, and blended financing mechanisms.
5. **Expand institutional accreditation** and capacity to access international funds or guarantee schemes (e.g., SIDBI, GCF, IFC) to increase the availability of green finance.
6. **Focus on high-impact technologies** with measurable operational benefits, such as rooftop solar, energy-efficient equipment, and circular economy solutions.
7. **Promote hands-on facilitation**, including technical advisory support, to translate awareness into actual financing uptake.

PROMISE's experience in Kerala confirms that green finance adoption is constrained less by availability of funds and more by knowledge, awareness, and technical readiness. Integrating technical assistance, flexible financing, and targeted awareness campaigns creates an enabling ecosystem that allows MSMEs to invest in sustainability while improving profitability and resilience.

These lessons are replicable for other coastal states in India, particularly those with tourism-dependent MSMEs facing similar environmental and resource challenges, and provide a practical roadmap for financial institutions, project developers, and policymakers seeking to expand green finance adoption in the tourism sector.

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