

Full Project Title

**GEF 11170: Eliminating hazardous chemicals from supply chains in Cambodia**

Project Objective

Enhance sustainable sourcing from raw materials promoting net zero, nature positive, and pollution-free approaches to scale up fashion and construction sector transformation

Budget

6.025 Million in GEF grant funding | 28.2775 Million in co-financing

Target sectors

Fashion and Construction

Governance

Implementing Agency



Executing Agency



Cambodia



Global Environmental Benefits



Mitigate **0.93 million tons** of GHG emissions



Restore **89,112 hectares** of land and ecosystems



Improve the lives of **95 thousand** people



Reduce and/or avoid **25.76 gTeQ** emissions of persistent organic pollutants (POPs) into air and **50,714.44 MT** POPs & their waste



Reduce **34,589 tons** of chemicals of global concern and their waste

Focus materials

- Recycled fabric cuttings (textile waste production)
- Cement
- Brick production
- Fly ash

Project components and activities

Component 1: Circular Economy Approaches & Responsible Sourcing of Materials

- Green building certification
- Eco-labelling schemes
- Financial incentives
- Responsible sourcing
- Marketing local sustainable alternatives

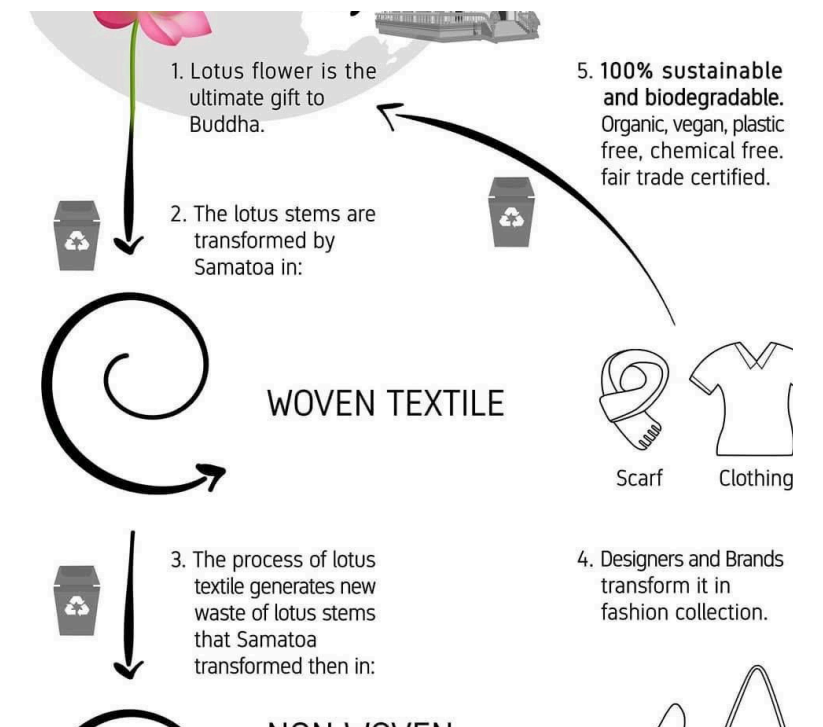
Component 3: Post-use 9Rs

- Recycling/upcycling material innovative solution pilots
- Circular reverse logistic system

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Eco-bricks Convert plastic waste to Eco-bricks



Component 4: Monitoring & Evaluation



Component 2: Cleaner Production

- National capacity building programme
- Regulatory controls eg on use of forest firewood
- Piloting hazardous chemical & sustainable energy projects

Co-finance partners



Planned Interventions with Co-finance partners

- Finalization & piloting of green building certification & construction materials and fashion eco-labelling schemes
- Piloting hazardous chemical & sustainable energy projects for SMEs
- Piloting innovative solutions for recycling/upcycling materials
- Strengthening national capacity in applying reverse logistic system and for resource recovery, cleaner production & hazardous chemical management

Contact

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Full Project Title

# GEF 11171: Eliminating hazardous chemicals from supply chains in Mongolia

Project Objective

Promote transformation change in the cashmere and leather supply chains by replacing resource-intensive chemical processes and materials with sustainable alternatives and by eliminating/reducing chemical waste in Mongolia.

**Budget**

3.3 Million in GEF grant funding | 40.1 Million in co-financing

**Target sector**

Fashion

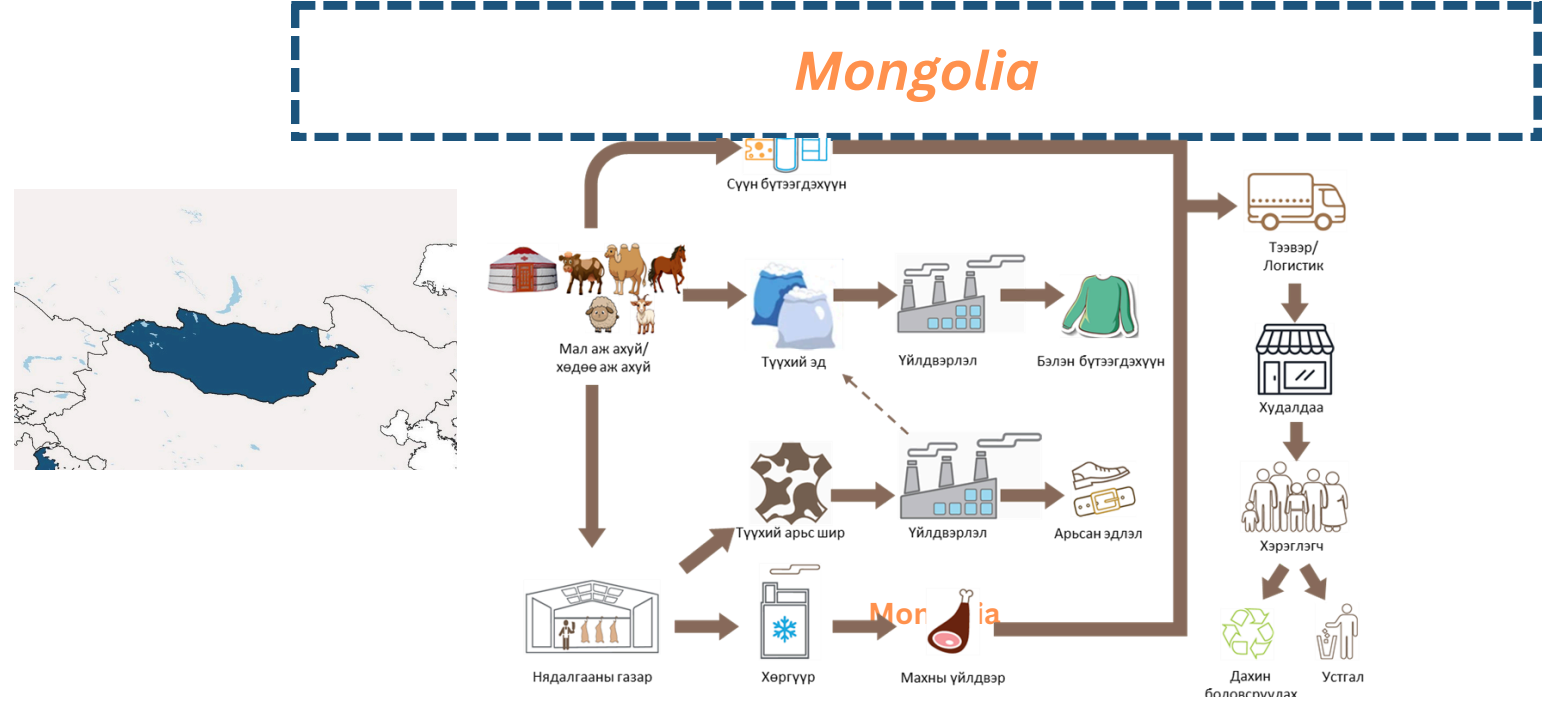
**Governance**

Implementing Agency: UNDP

Executing Agency: Ministry of Agriculture and Light Industry, Ministry of Environment and Tourism

**Focus materials**

- Hazardous chemicals
- Cashmere
- Skins, hides
- Solid waste
- Wastewater, sludge
- Pastureland



**Global Environmental Benefits**

- Mitigate 573,875 MT CO<sub>2</sub>e emission
- Restore 85,800 hectares of land and ecosystems
- Improve the lives of 3.1 thousand people
- Reduce/eliminate 629 tons of chemicals of global concern their waste
- Reduce and/or avoid 2.66 gTeQ emissions of persistent organic pollutants (POPs) into air

## Project components and activities

**Component 1: Regenerative design & circular business models**

- Assessing national environmental policies and regulations (standards and certifications)
- Strengthening a coherent policy and regulatory framework
- Enhancing eco-label standards
- Strengthening capacity building to key market stakeholders
- Designing, implementing, and validating innovative circular business models

**Component 2: Innovative materials**

- Conducting a lifecycle assessment
- Piloting circular business models
- Leveraging financing to support quality-based price premium

**Component 3: Cleaner production**

- Strengthening capacities to search for alternatives to harmful chemicals.
- Implementing pilot innovative technologies and green practices in processing facilities



**Component 4: Sustainable consumption**

- Sharing experiences and knowledge
- Creating strategic alliances with manufacturers
- Promoting procurement of national domestic processing companies from herders' cooperatives with global buyers

**Component 5: Post-use and 9Rs**

- Pilot project for waste management and promotion of circularity
- Carrying out technical workshops
- Designing and implementing a strategy pertaining to gender integration and child labor
- Carrying out an information and communication outreach strategy
- Participating in the Supply Chains Integrated Program coordination global events

**Component 6: Monitoring & Evaluation**

**Co-finance partners**

UNDP | Ministry of Agriculture and Light Industry

**Planned Interventions with Co-finance partners**

- Supporting the implementation of project and the achievement of its objectives
- Supporting SMEs in improving their capacities to process cashmere and raw materials domestically in an environmentally sound manner

**Contact**

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Full Project Title

# GEF 11172: Bananas in Pakistan's Bioeconomy: Transforming Waste into Textile

Project Objective

Accelerating bioeconomy transition in the Pakistan textile sector by transforming banana pseudo stem waste into economically viable and socially beneficial fibre and promoting Sustainable Agriculture Practices (SAP) in banana cultivation.

Budget

3.3 Million  
in GEF grant funding

17.02 Million  
in co-financing

Target sectors

Fashion and textiles

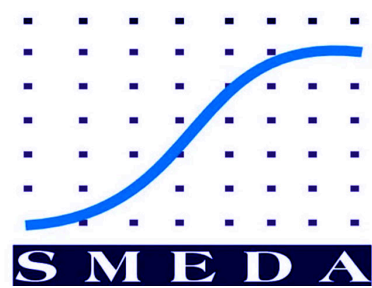
Governance

Implementing Agency



Food and Agriculture Organization of the United Nations

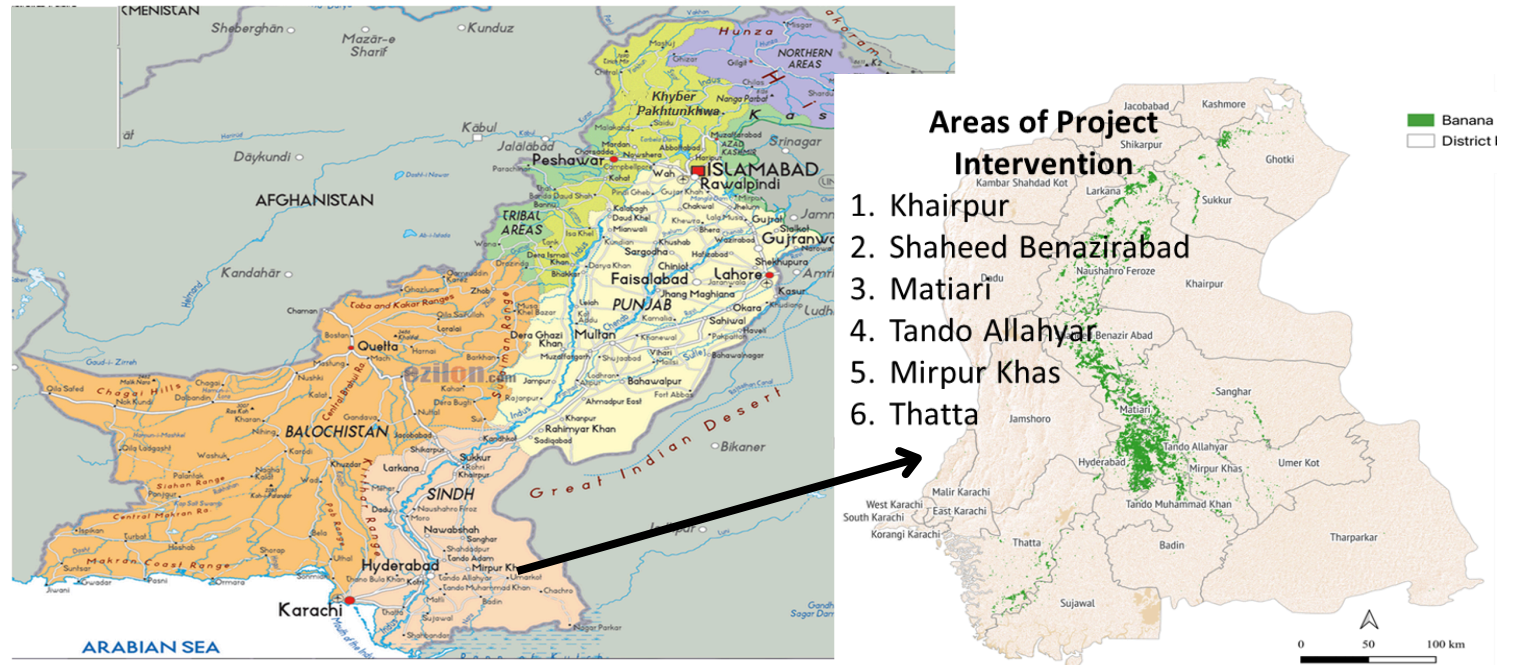
Executing Agency



Focus materials

Wasted banana pseudo stems  
Banana fibre for textile  
Cotton blended products

Pakistan



Global Environmental Benefits



Mitigate **0.84 million tons** of GHG emissions



Restore **20,311 hectares** of land



Support **11,250 households (73,000 men and women)**



Reduce **1,137 tons** of chemicals of global concern and **4,770 tons** of plastic waste



Reduce and/or avoid **34 gTeQ** emissions of persistent organic pollutants (POPs) into air

Project components and activities

Component 1. Circular business model for climate-friendly and nature-positive innovative material

- Mainstreaming banana fibre in the textile value chain
- Empowering all value chain actors, from policy makers to farmers, to implement sustainable and circular bioeconomy principles



Component 3. Supporting less pollution and waste-based manufacturing and production in the banana fibre value chain

- Developing a system for banana pseudo stem-derived fibre traceability, standards, and certification



Component 2. Sustainably sourced, and bio-based products manufacturing that requires no hazardous chemicals and produces less pollution and waste

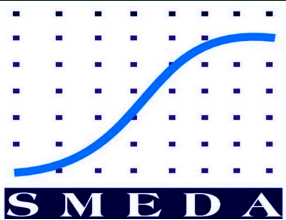
- Promoting reuse and upcycle + less pollution and waste production
- Improving productivity, sustainability and livelihood of smallholders
- Piloting sustainable banana fibre value chain



Planned Interventions with Co-finance partners

- SMEDA:** creating the enabling environment for adopting banana fibre; implementation of circular bioeconomy principles; circular integration of banana fibre in the textile value chain; develop a system for traceability, standards and certification
- FAO/Indus Basin:** strengthening farmers' climate resilience through skills, knowledge and technology enhancement activities
- FAO/GRASP:** training and capacity building of farmers and strengthening small agribusinesses engaged in innovative banana fibre products

Co-finance partners



Small and Medium Enterprises Development Authority (SMEDA)



Government of Sindh



FAO co-funding projects

- 'Transforming the Indus Basin with Climate Resilient Agriculture and Water Management' (GCF funded)
- 'Pakistan Growth for Rural Advancement and Sustainable Progress (GRASP) Programme'

Contact

**National Focal Point:** Younas Zulfiqar, Additional Secretary, Ministry of Climate Change & Environmental Coordination, Pakistan, [zyounas@gmail.com](mailto:zyounas@gmail.com)  
**Implementing Agency:** Marilique Nijmeijer, Alternate Lead Technical Officer, FAO, [marilique.nijmeijer@fao.org](mailto:marilique.nijmeijer@fao.org)  
**Executing Agency:** Sheharyar Tahir, Deputy General Manager, SMEDA, [stahir@smeda.org.pk](mailto:stahir@smeda.org.pk)



Full Project Title

# GEF 11173: Eliminating Hazardous Chemicals from Supply Chains in Peru

Project Objective

Promote transformation change in the cotton, alpaca, and vicuna supply chains by replacing resource-intensive chemical processes and materials with sustainable alternatives and by eliminating/reducing chemical waste in Peru.

**Budget**


4.18 Million  
in GEF grant funding

41.8 Million  
in co-financing

**Target sector**

Fashion

**Governance**

Implementing Agency: 

Executing Agency: 

**Focus materials**

- Cotton
- Alpaca
- Vicuna fiber
- Other fibers and leather

**Project components and activities**

**Component 1: Regenerative design and circular business models**

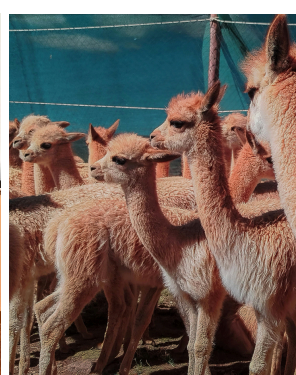
- Assessment of environmental policies and regulations
- Developing tools to promote formalization, environmental best practices, and regulatory compliance
- Promoting eco-design and eco-labeling
- Strengthening technical capacity

**Component 2: Innovative materials**

- Institutional partnerships with the private sector
- Financial mechanisms
- At least 2 pilots for alpaca and vicuna producers for cleaner and more ecological clothing

**Component 3: Cleaner production**

- Strengthening capacities to adopt less polluting approaches
- Pilot interventions for a cleaner production: 3 for reduction of hazardous chemicals, and 3 for water and energy efficiency



**Component 5: Post-use and 9Rs**

- Implementing a training program on textile supply chain waste management
- Implementing 3 pilots for reverse logistics and circular waste management

**Component 4: Sustainable consumption**

- Transferring knowledge and know-how
- Creating and/or strengthening national networks of producers
- Green procurement schemes in public tenders

**Component 6: M&E**

- Monitoring, Evaluation and Learning (MEL) strategy

**Co-finance partners**



**Global Environmental Benefits**

- Mitigate **244,805 MTCO<sub>2</sub>e** of GHG emissions (Direct: 49,805; Indirect: 195,000)
- Restore **50,074 hectares** of land and ecosystems
- Improve the lives of **60,000 people** (36,000 women and 24,000 men).
- Reduce **2,612 tons** of chemicals of global concern and their waste
- Reduce and/or avoid **25.5 gTeQ** emissions of persistent organic pollutants (POPs) into air

**Planned Interventions with Co-finance partners**

- Technical support to project activities
- Pilot interventions
- Use of facilities (laboratories) and services

**Contact**

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 María Cebrián, Monitoring specialist, UNDP Peru - [maria.cebrian@undp.org](mailto:maria.cebrian@undp.org)



Full Project Title

# GEF 11174: Eliminating Hazardous Chemicals from Supply Chains in Costa Rica

Project Objective

To promote a green transformation of the construction supply chain by replacing resource-intensive and hazardous materials with environmentally sound alternatives and promoting circular approaches and regenerative designs across the entire supply chain.








**Budget**

4.19 Million in GEF grant funding | 191.7 Million in co-financing

**Target sectors**

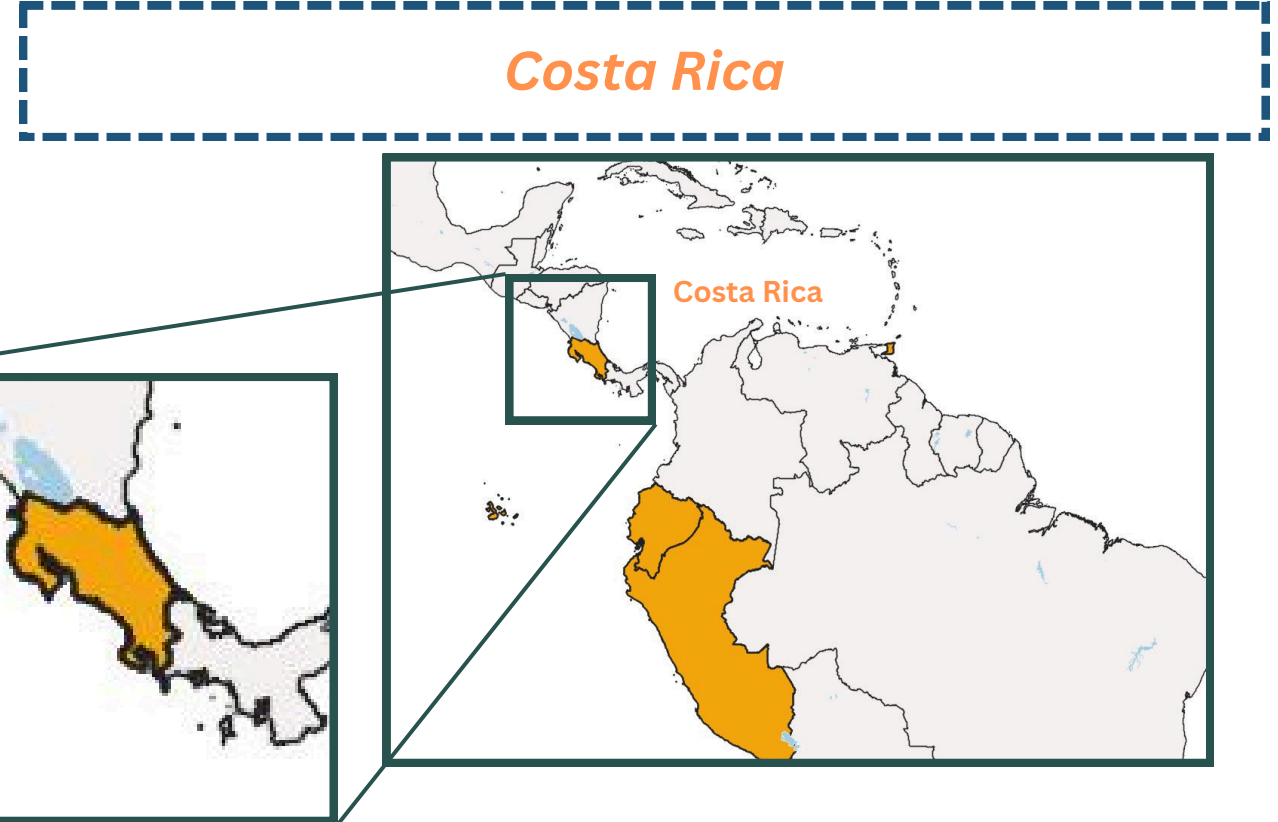
Construction

**Governance**

<b>Implementing Agency</b>	<b>Executing Agency</b>
United Nations Industrial Development Organization (UNIDO)	Ministry of Environment and Energy (MINAE) Green Building Council Costa Rica (GBCCR)
	 
	
	

**Focus materials**

- Sustainably Sourced and Treated Wood
- Hazardous Construction Waste including Paints, Solvents, Insulation Foams, Plastics, Heavy Metals
- Mycelium-Based Boards
- Low-Carbon Cement, Concrete Recycling
- Bio-Based Thermo-Acoustic Veneers



**Global Environmental Benefits**

- Mitigate 356,000 metric tons of CO<sub>2</sub>-equivalent
- Improve the lives of 150 thousand people
- Reduce 720 tons of residual waste
- Reduce 1,890 metric tons of persistent organic pollutants (POPs)
- Reduce 12.3 gTeQ emissions of POPs into air
- Country legislation and policy implemented to control chemicals and waste

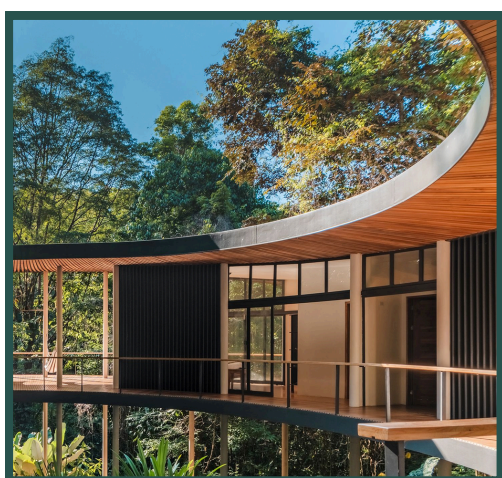
## Project components and activities

**Component 1: Innovative and regenerative design, that contributes to circular business models**

- Architecture/Engineering Academic Curriculums
- LCA, Certification and Circular Economy Training
- Support Green Finance Taxonomy

**Component 2: Innovative materials**

- Develop Technical Norms
- Alternative materials laboratory testing
- Equipment and training for Customs Inspection Lab



**Component 3: Cleaner production**

- Regulation to promote responsibly sourced timber
- Bio-Based clinker substitution in cement production
- Technical assistance and small grants for SMEs entering execution phase

**Component 4: Sustainable consumption**

- Eco-labeling in key materials sectors
- Sustainable Public Procurement through Eco-Labeling

**Component 5: Post use 9Rs**

- EPR project recovers waste to re-use in manufacturing of new products to reduce raw material consumption
- Construction sector waste reduction/separation training

**Component 6: Programme Knowledge Management**

- B2B networking to connect local manufacturers of sustainable materials with designers and builders.



**Co-finance partners**

**Planned Interventions with Co-finance partners**

- Holcim:** Pilot-Implementation of EcoCycle Project (Concrete Recycling), Feasibility of Bio-Char (reduction in energy consumption) in Cement Production
- Gensler:** Specifications in Design to eliminate use of Materials with Hazardous Substances.
- Zero Waste:** Collection and processing plant, construction site training for effective waste management.
- Durman:** Enhancing PVC waste collection, circular production processes, energy efficiency, and reducing polluting compounds.
- Ministry of Environment and Energy, Ministry of Health, Ministry of Internal Revenue, GIZ:** Ecolabeling as a decision-making tool and Sustainable Public Procurement

**Contact**

**National Focal Point:** Shirley Soto (ssoto@minae.go.cr), José Alberto Rodríguez (jalberto@minae.go.cr), Ministry of Environment and Energy

**Implementing Agency:** Vladimir Anastasov (v.anastasov@unido.org), Industrial Development Officer, Kincso Vizi, Project Associate (k.vizi@unido.org), UNIDO

**Executing Agency:** Nicolás Ramírez (nicolas.ramirez@gbccr.org), Executive Director, Green Building Council Costa Rica-GBCCR



Full Project Title

# GEF 11175: Eliminating Hazardous Chemicals from Supply Chains in Ecuador

Project Objective

Promote transformation change in construction (bricks, bamboo, and other construction materials and waste) and fashion (cotton and abaca natural fibers) supply chains by replacing resource-intensive chemical processes and materials with sustainable alternatives and by creating circular and transparent supply chains by eliminating/reducing these negative chemical impacts into the environment in Ecuador.

### Budget

6.23 Million  
in GEF grant funding

42 Million  
in co-financing

### Target sectors

Fashion and Construction

### Governance

Implementing  
Agency

Executing  
Agency



### Ecuador



### Global Environmental Benefits



2,000 tons of chemicals of concern and its waste reduced



785802 ha of land under improved practices



More than 133,000 workers with improved working conditions



2 million MtVO2e of GEI mitigated



32 g EQT emissions reduced/prevented

### Focus materials

- Cotton and abaca natural fibers
- Bricks
- Bamboo
- other construction materials and waste

### Project components and activities

1. Regenerative design and circularity: design of innovative and sustainable products

2. Innovative materials: substitution of non-renewable materials with alternatives economic and technically feasible

3. Pollution reduction: production process with less inputs



4. Behavioral changes: markets for innovative products that favors durability

5. Recollection, post-use and 9Rs: inverse logistics processes and extended producer responsibility

### Co-finance partners

List/ logos



### Planned Interventions with Co-finance partners

- Bamboo construction roofing to eliminate asbestos in Galapagos roofings
- Lead-free shingles and artisanal brick production
- Innovative sustainable building materials
- mixed-color cotton to avoid industrial painting
- innovaabaca fashion and packaging.

### Contact

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Full Project Title

# GEF 11176: Elimination of Hazardous chemicals from Supply Chains Integrated Programme in Trinidad and Tobago

Project Objective

Influence a shift in the Carnival Fashion Design Sector to promote the use of locally sourced, sustainable materials and pollution-free approaches.

### Budget

2.65 Million  
in GEF grant funding

2.6 Million  
in co-financing

### Target sector(s)

Fashion

### Governance

Implementing Agency



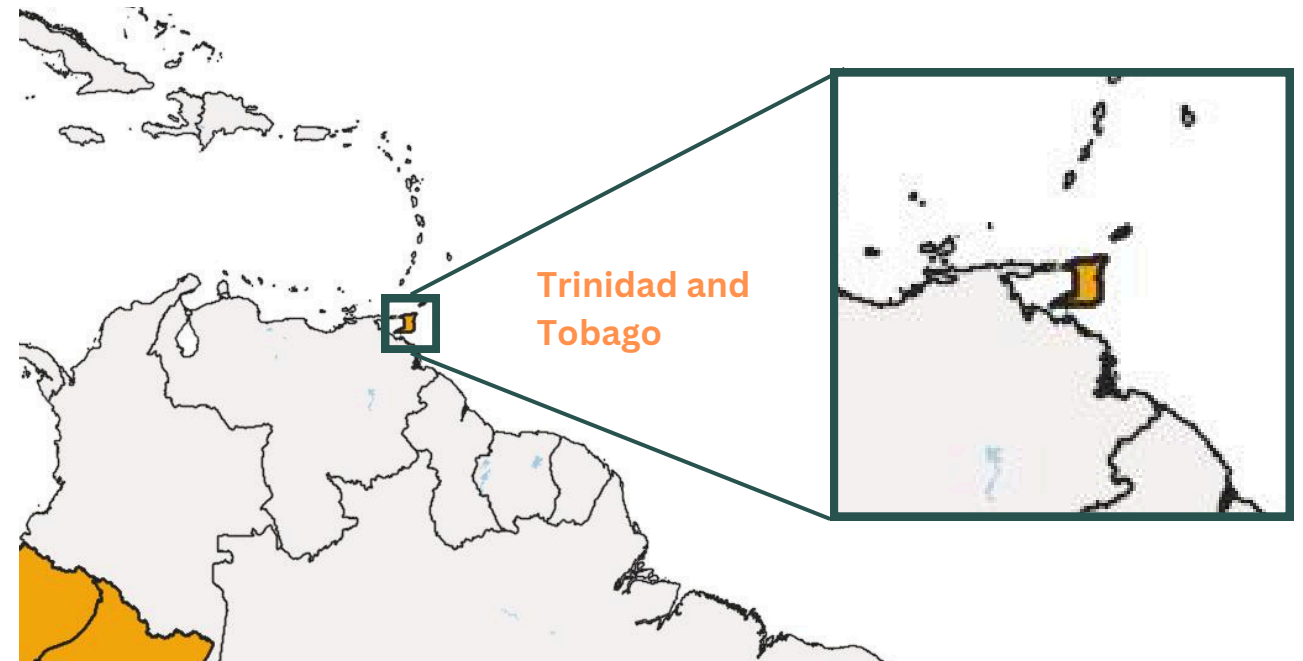
Executing Agency



### Focus materials

- Carnival costumes
- Recycled polyester
- Materials recycled from plastic
- Eco-friendly or sustainable alternative materials

### Trinidad and Tobago



### Global Environmental Benefits



Mitigate **0.13** million tons of GHG emissions



Reduce **261** tons of chemicals of global concern and their waste



Improve the lives of **235,666** people



Reduce and/or avoid **10.78** gTeQ emissions of persistent organic pollutants (POPs) into air

### Project components and activities

#### Comp 1: Design & Business Models

- Network to promote circular business models
- A Reverse Supply Chain Scheme (RSC)
- Sustainability reporting framework

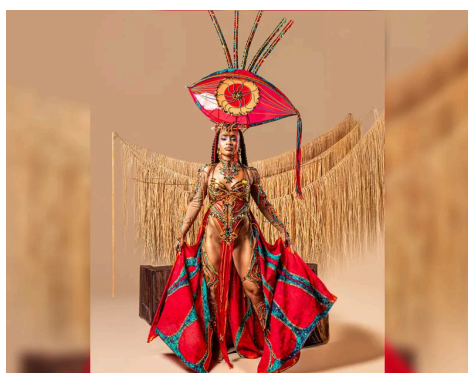


#### Comp 3: Sustainable Consumption

- Use of materials from secondary markets and trade of sustainable materials
- Financing mechanism and incentive for sustainable costumes
- Increase capacity of women entrepreneurs and the Carnival Fashion Sector

#### Comp 2: Materials & Cleaner Production

- Sustainable sourcing Code of Practice
- Training programme delivered on sustainable procurement



#### Comp 4: Knowledge Management

- National public & awareness raising campaign
- Global festival adoption of sustainable sourcing code of practice

#### Comp 5: M&E

### Co-finance partners



### Planned Interventions with Co-finance partners

- Establish network to promote circular business models
- Sustainability marketing/advertisement, procurement training programme for designers
- Reverse supply chain scheme for carnival industry
- Sustainability reporting framework for carnival costumes
- Code of practice for design & use of sustainable materials

### Contact

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Full Project Title

**GEF 11177: Global replication to eliminate hazardous chemicals from supply chains**

Project Objective

To accelerate multi-stakeholder engagement in eliminating hazardous chemicals from fashion and construction value chains and to replicate the successes of in-country child projects regionally and globally

**Budget**

8.7 Million  
in GEF grant funding


26.9 Million  
in co-financing

**Target sectors**

Fashion and Construction

**Governance**

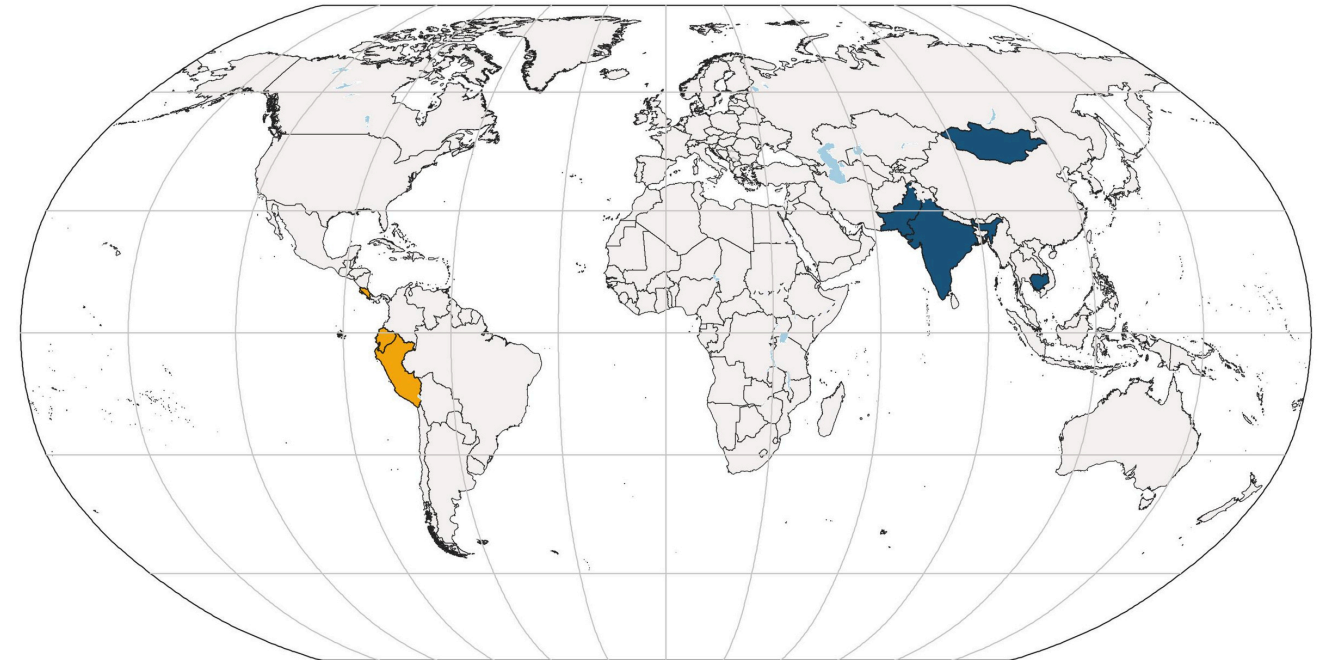
Implementing Agency      Executing Agency



**Focus materials**

- All materials

Global



Global Environmental Benefits

- Mitigate **7.9 million tons** of GHG emissions
- Restore **317,000 hectares** of land and ecosystems
- Improve the lives of **1.5 million people** globally
- Reduce and/or avoid **107 gTeQ** emissions of persistent organic pollutants (POPs) into air
- Reduce **34,589 tons** of chemicals of global concern and their waste

Project components and activities

**Component 1: Knowledge and Learning**

- Conduct a knowledge needs assessments
- Develop a compendium of databases
- Develop a Compendium of sustainable materials
- Synthesis of knowledge materials and educational tools
- Establish an online knowledge management (KM) platform
- Facilitate the exchange of knowledge between child projects



**Component 3: Monitoring & Evaluation**



**Component 2: Communication, capacity and collaboration**

- Implement and update the communications strategy
- Facilitate information / education exchange
- Continuing Stakeholder Engagement
- Organize annual global forum
- Facilitate or participate in events and stakeholder dialogues
- Establish and coordina a Programme Advisory Group

**Co-finance partners**

**Planned Interventions with Co-finance partners**

- Benchmarking of sustainability standards
- Establishing a compendium innovative materials
- Map out the barriers currently in place that prevent investments in the Fashion and construction sectors
- Pilot test of the chemicals aspects of Sustainable Public Procurement tools in a procurement case

**Contact**

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Full Project Title

# GEF 11178: Eliminating hazardous chemicals from apparel fashion supply chain in India

Project Objective

To eliminate hazardous chemicals from the apparel fashion supply chain in India while promoting sustainable practices and reducing environmental impacts, particularly in terms of energy and water use, and greenhouse gas emissions

**Budget (\$)**

7.8 Million in GEF grant funding | 44 Million in co-financing

**Target sector**  
Fashion

**Governance**

Implementing Agency: UNIDO

Executing Agency: वस्त्र मंत्रालय  
MINISTRY OF TEXTILES

वस्त्र समिति  
TEXTILES COMMITTEE

**India**

**Textile Clusters:** Tirupur, Surat, Ahmedabad, Ichalkaranji, Bhiwandi, Panipat, Ludhiana, Kolkata

**Fashion Houses:** Aditya Birla, Arvind Mill, Vardhman, Tata Trent

**Focus materials**

Natural viscose fibres from waste biomass (banana fibres)

**Project components and activities**

**Component 1: Designing innovative, regenerative products and utilizing circular business models**

- Regenerative design in fashion houses
- Green procurement policy
- Ecosystem for circular business models
- Financial (tax) incentives

**Component 2: Innovative Materials-Substituting non-renewable materials in products**

- Guidelines for sourcing innovative materials
- Natural viscose fibres from waste biomass (banana)
- Guidelines for innovative investment criteria
- Pilot demonstrations of innovative materials



**Component 6: KM & Learning**

- India Child Project Portal
- Best practice for textiles packages
- Language inclusive knowledge products
- Collaborate & exchange amongst IP

**Global Environmental Benefits**

- Mitigate **147 000 tons** of GHG emissions directly and **294 000 tonnes** indirectly
- 2 128 000 hectares** of landscapes under improved management to benefit biodiversity by reducing **1277 tons** of pesticide use
- 40 000** (60% women) people directly benefitting from project interventions and **80 000** (60% women) benefitting indirectly.
- Reduce **10 530** (direct) and **21 060** (indirectly) tons of chemicals of global concern and their waste
- 31 590 tons** of solid and liquid POPs removed or disposed



**Component 3: Cleaner Production**

- National capacity building programme,
- RECP -solar (CST & SPV), Internet of Things
- Supplier reporting and self assessment tool
- financial incentive for suppliers + green finance
- Pilot demos for cleaner production



**Component 4: Sustainable Consumption**

- Sustainable procurement template
- Eco-labels and consumer information
- Trade controls on POPs treated materials
- Advocacy and training on sustainable fashion

**Component 5: Post-Use 9Rs**

- Policy on waste management, EPR guidelines
- Reverse logistics for post consumer waste
- Database for value chain actors for waste repurpose
- Women led 9R enterprises

**Co-finance partners**

- Federation of Industrial & Commercial Organization
- Tamil Nadu Textile Entrepreneurs

**Planned Interventions with Co-finance partners**

- Pilot demonstrations for innovative materials, RECP, waste management
- Resource-efficient and cleaner production investments
- Internet of Things (IOT) to enhance cleaner production
- Coherent policies on resource management (chemicals, energy, water) in supply chains
- Green public procurement policies for apparel fashion/textile houses/MSMEs

**Contact**  
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