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Society of Waste
Management,
Air and Water



International
Partnership for
Cleaner Waste
Management
Services of Local
Authorities



CCET
ISES Centre Collaborating with
UNEP on Environmental Technologies

The Circular Economy in South Asia: An Overview of Progress and Regional Trends

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South Asia: Growth, Pressure, and Vulnerability

Region of Dynamic Growth:

- Home to nearly 1/4 of the global population
- Rapid urbanization and industrialization driving economic progress
- Significant poverty reduction achievements
- Expanding domestic markets
- Large and youthful workforce as a major demographic asset



South Asia: Growth, Pressure, and Vulnerability



Photo courtesy of Civildaily (2024)

Population Pressure



Photo courtesy of Habibur Rahman (2020)

Resource Intensity

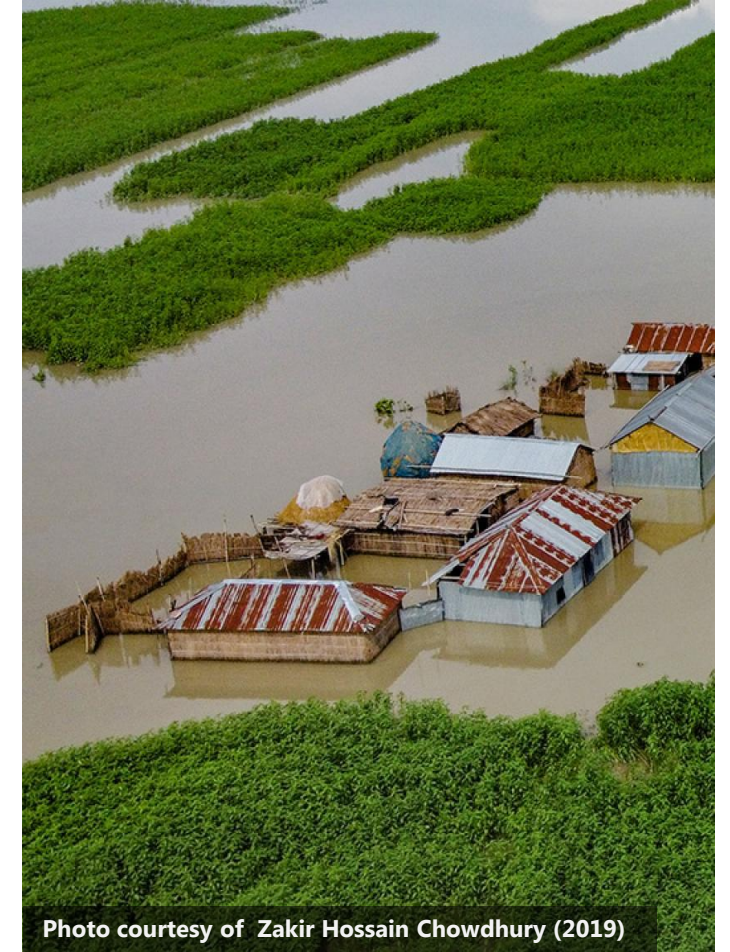
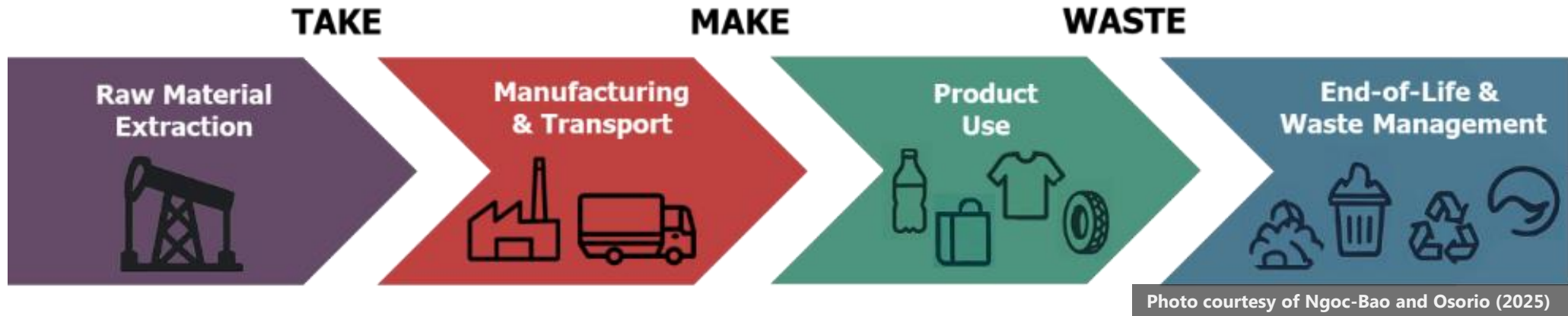


Photo courtesy of Zakir Hossain Chowdhury (2019)

Climate Vulnerability

The Unsustainable Linear Model



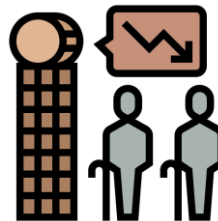
Current Dominant Model



Resource Depletion



Environmental Degradation



Economic Value Lost



Waste Crisis



Exacerbates Climate Change

The Circular Economy Imperative

The **circular economy is a model of production and consumption**, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible. In this way, the life cycle of products is extended.

Why CE is CRITICAL for South Asia?

- 🔄 **Builds Resilience:** Enhances resource security, adapts to climate change.
- 🔄 **Creates Value:** Generates green jobs, fosters innovation, opens new markets.
- 🔄 **Mitigates Pollution:** Reduces environmental burden on land, air, and water.
- 🔄 **Essential for Sustainable Development:** Aligns economic prosperity with environmental health.

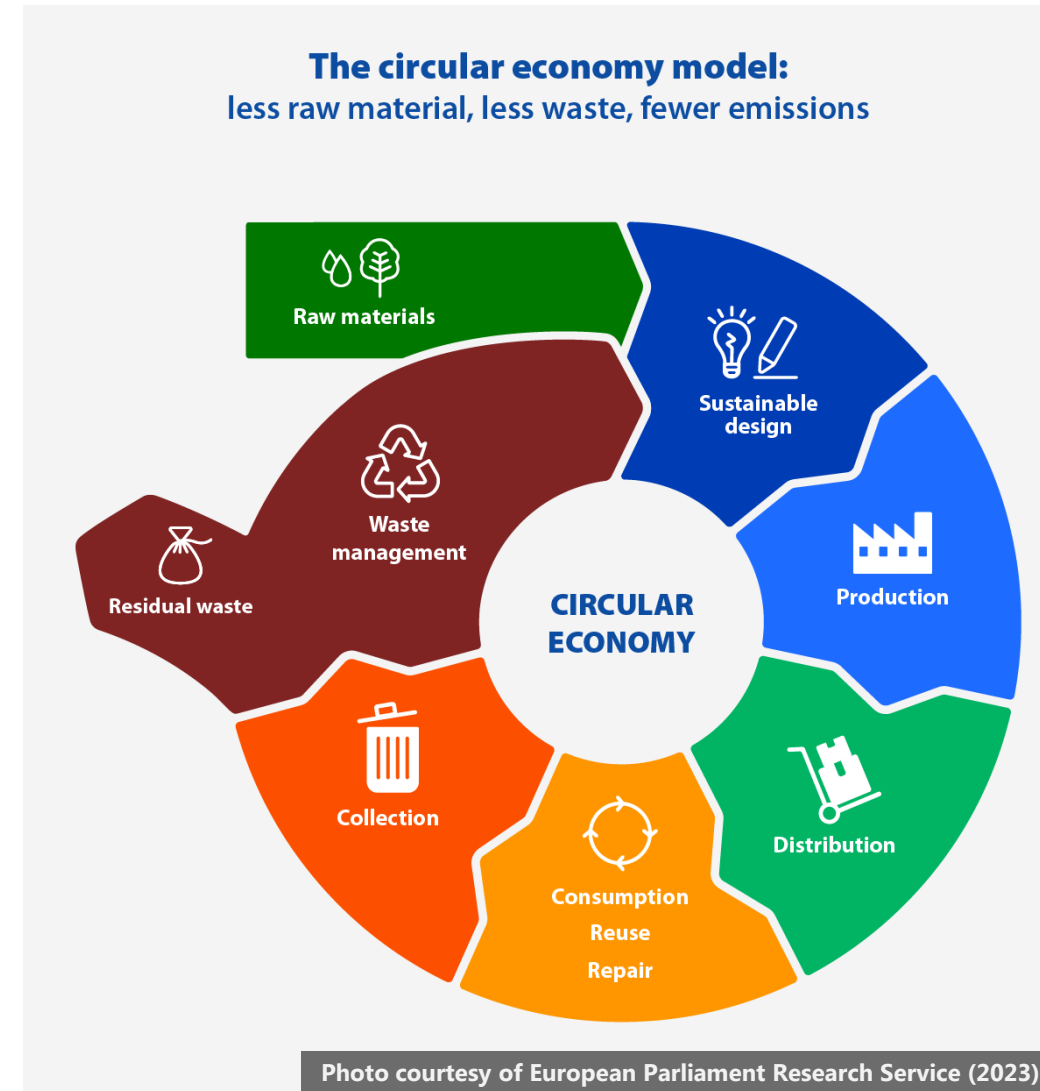


Photo courtesy of European Parliament Research Service (2023)

Six Principles of the Circular Economy



Systems thinking

Take a life cycle perspective and apply a long-term approach when considering their impacts on environmental, social, and economic systems



Value creation

Recover, retain, or add value by providing effective solutions that contribute to socio-economic and environmental value, and use resources in an efficient way



Ecosystem resilience

Develop and implement practices strategies that protect and contribute to the resilience and regeneration of ecosystems and their biodiversity, including preventing harmful losses and releases and taking into account planetary boundaries



Value sharing

Collaborate with interested parties along the value chain or value network in an inclusive and equitable way, for the benefit and well-being of society, by sharing the value created with a provision of a solution



Resource traceability

Collect and maintain data to enable tracking of resources through their value chains and are accountable for sharing relevant information with interested parties



Resource stewardship

Manage stocks and flows in a sustainable way including by closing, slowing, and narrowing resource flows to contribute resource accessibility and continued availability for present and future generations and to reduce risks associated with dependence on virgin resources,

Assessing the Regional CE Landscape



Objectives

- 🎯 To provide a comparative overview of the CE landscape across 8 South Asian countries (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka)
- 🎯 To identify progress, trends, challenges, and opportunities
- 🎯 To develop a potential South Asia Regional Circular Economy Framework and Coordination Mechanism (ongoing work)



Methodology

- ⚙️ **Desk Review:** Analysis of national policies, strategies, academic literature, and reports.
- ⚙️ **Stakeholder Engagement:** Interviews and questionnaire surveys with key regional organizations (e.g., SAARC CCI, SACEP, SDPI, ISMAW) and international bodies and validation through national/regional consultation workshops (ongoing).

South Asia at a Glance: Comparative Statistics

Country	Population	GDP per Capita (USD)	Waste Gen. (kg/person/day)	Recycling Rate (%)†	Key Economic Sectors
Afghanistan	~42.7 M	~\$497	~0.71 (Kabul)	~38 (Kabul)‡	Agriculture, Minerals, Textiles
Bangladesh	~173 M	~\$2,593	~0.28	~25‡	RMG, Agriculture, Shipbreaking
Bhutan	~0.79 M	~\$3,920	~0.53§	~5‡	Hydropower, Tourism, Agriculture
India	~1,438 M	~\$2,480	~0.57	~23-28‡	Services, Industry, Agriculture, Textiles
Maldives	~0.53 M	~\$12,530	~1.44	Low	Tourism, Fishing, Construction
Nepal	~29.7 M	~\$1,470	~0.17	~3-5‡	Agriculture, Remittances, Tourism
Pakistan	~255.2 M	~\$1,365	~0.52	~20-30‡	Textiles, Agriculture, Services
Sri Lanka	~22.0 M	~\$4,469	~0.34	~25‡	Tourism, Tea, Apparel, Services

†Recycling rates often include significant informal sector activity. ‡Estimates vary; based on available data in the report. §Bhutan 2019 survey: 0.23 kg/person/day overall; higher rates in urban areas likely.

South Asia at a Glance: CE Policy Landscape

-  With comprehensive, legally binding national policies; operational implementation (e.g., EPR).
-  Formal national policy announced/drafted; implementation starting.
-  CE integrated into sectoral policies/plans or recognized mainly for waste (3Rs) program-based implementation
-  No national strategy; activities mainly donor-driven pilots or informal sector.



Regional Trends and Priority Sectors



Key Patterns

- 💡 **Varying Policy Maturity:** India leads; Pakistan, Bangladesh, Sri Lanka developing strategies; others more nascent/fragmented.
- 💡 **Focus Remains on Waste:** CE is still largely framed around waste management, especially plastics & MSW.
- 💡 **Donor Support is Key:** International partners (WB, ADB, UNDP, GIZ, EU) play a catalytic role in policy development and pilot projects.
- 💡 **Implementation Gaps Persist:** Weak enforcement, limited coordination, and resource constraints hinder progress across the region ("Policy-Practice Gap").



Priority Sectors



Plastics



Textiles



Construction



Electronics



Agriculture & Food Systems

Key Challenge 1: The "Policy-Practice Gap"



Financing

- Limited & fragmented public funding; often buried in general environmental budgets.
- Private investment infancy: CE perceived as risky; lack of tailored financial products (green bonds, blended finance underutilized).
- Weak policy incentives (e.g., subsidies favor linear models)

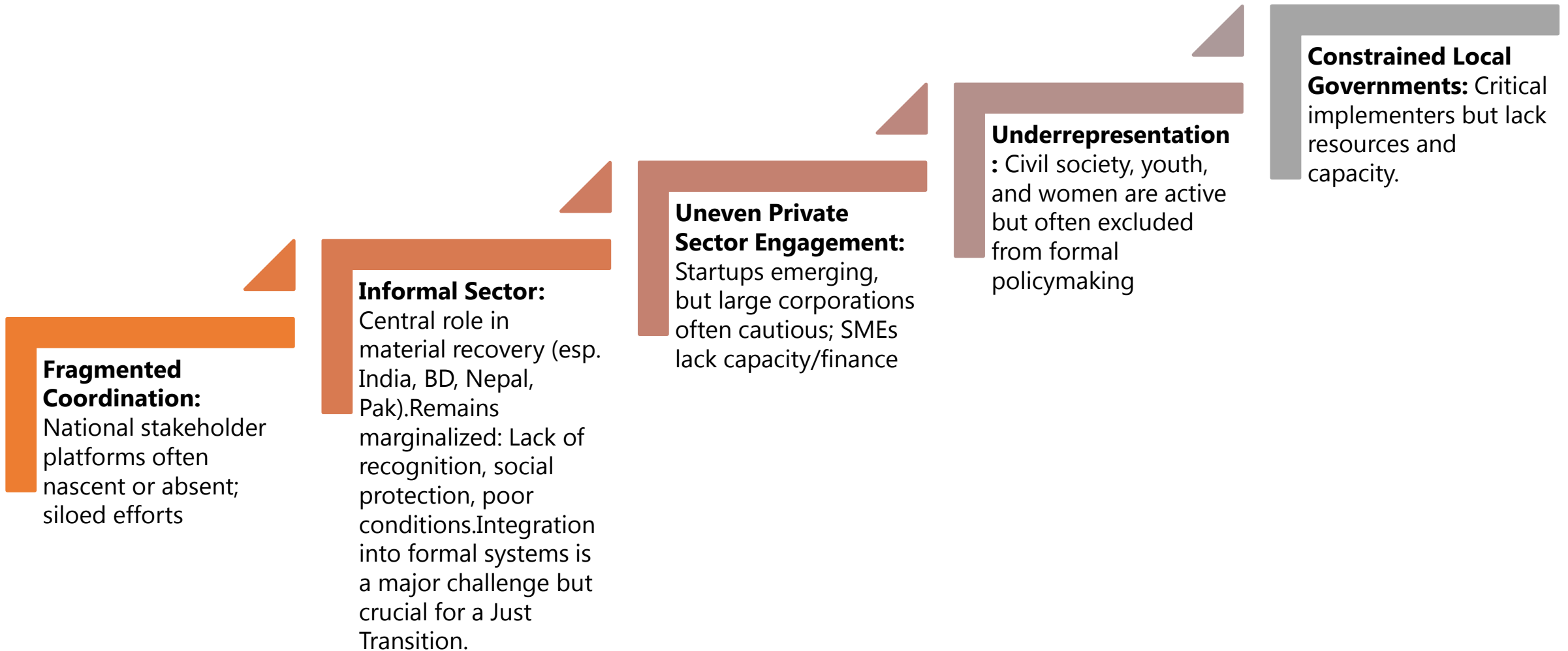
Data & Monitoring

- Lack of standardized, reliable national CE data (material flows, recycling)
- Limited capacity of statistical agencies

Technical Capacity & Infrastructure

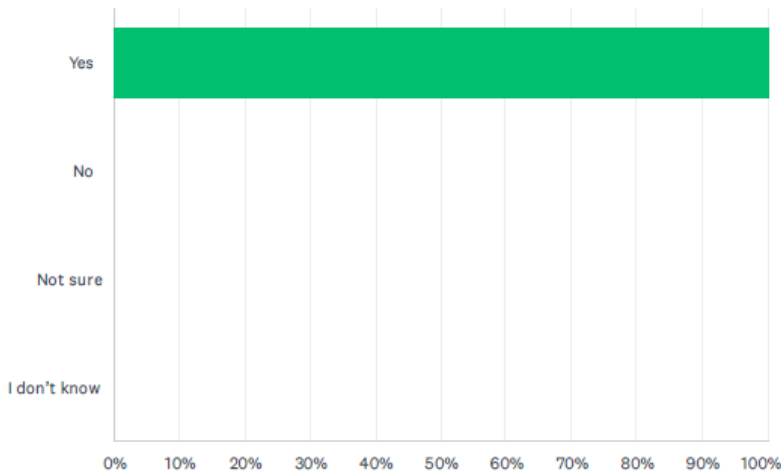
- Insufficient infrastructure (collection, sorting, advanced recycling)
- Technology gaps (circular design, bio-based materials)
- Skills gaps across sectors

Key Challenge 2: Stakeholder Engagement & Social Equity

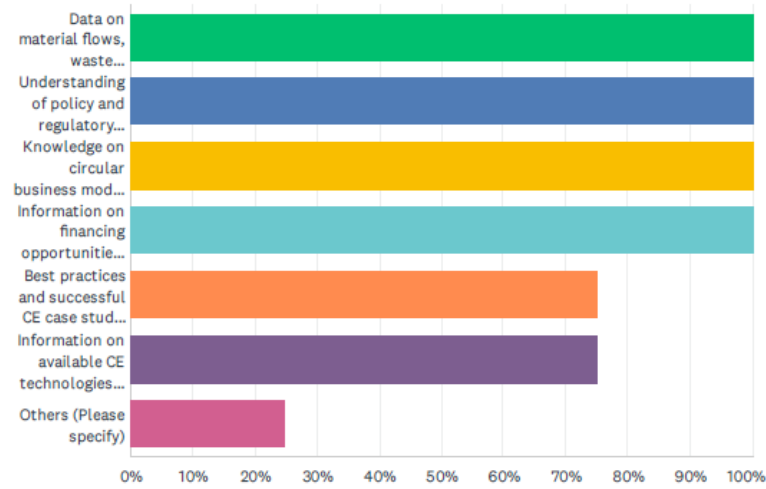


A Unanimous Call for Regional Framework

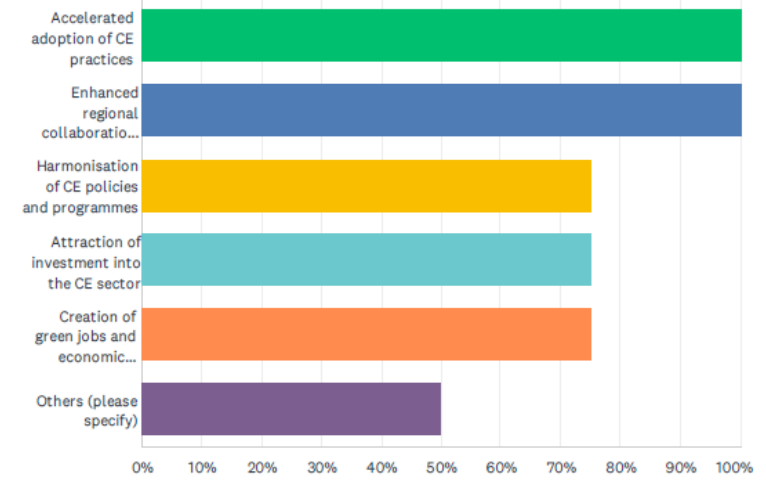
The survey of regional stakeholders reveals a clear consensus:



100% See a need for a Regional CE Framework
(Q10: Need for Regional Framework?)



100% Identify critical knowledge gaps in:
Data, statistics, and material flows
Policy and regulatory landscapes
Viable circular business models
Financing opportunities
(Q11: Knowledge Gaps?)

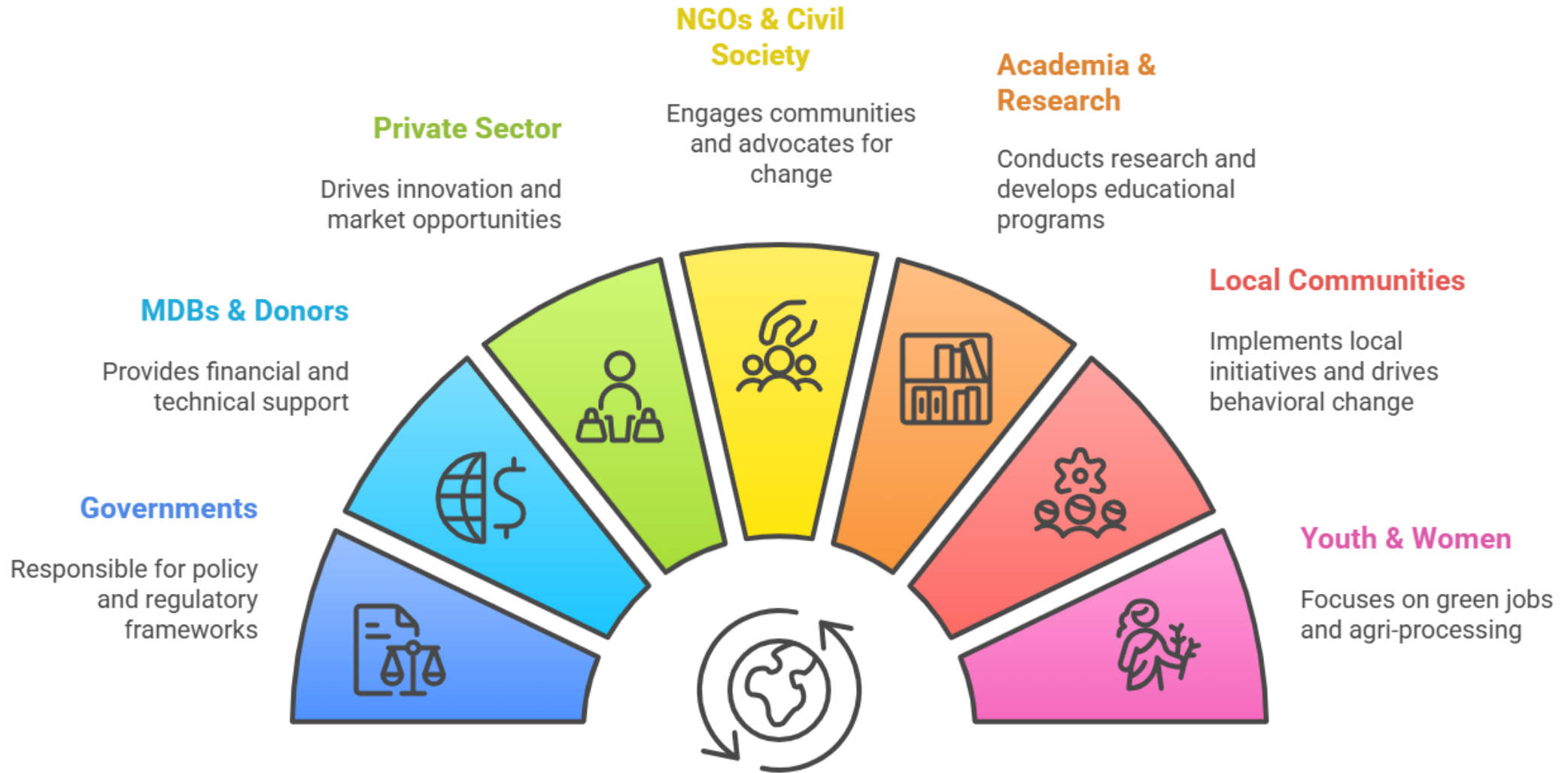


100% Believe a regional framework would accelerate CE adoption and enhance collaboration
(Q13: Benefits to Region?)

Strategic Objectives of the South Asia CE Framework



Key Stakeholders for CE Implementation in South Asia Region



Recommendations: A Path Forward

- ✓ **Strengthen & Harmonize Policy:** Develop national CE strategies; expand & enforce EPR schemes for producer accountability; align regional standards to facilitate circular business & trade.
- ✓ **Mobilize Finance:** Establish dedicated CE funds & incentives targeting businesses (esp. SMEs); encourage PPPs & private capital; leverage international funds.
- ✓ **Improve Data & Monitoring:** Develop standardized CE indicators; build institutional capacity for data collection; support research.
- ✓ **Build Capacity & Raise Awareness:** Implement training for business leaders & entrepreneurs; launch campaigns targeting businesses on CE benefits; strengthen circular design skills.
- ✓ **Promote Innovation & Infrastructure:** Support tech deployment & circular startups; upgrade waste/recycling infrastructure benefitting industry; promote digitalization in supply chains.
- ✓ **Enhance Inclusivity:** Formalize & integrate informal sector with social safeguards; empower women & youth; support community projects.
- ✓ **Strengthen Regional Cooperation:** Leverage SACEP/SAARC for policy dialogue; facilitate regional value chains & business alliances; develop joint financing mechanisms.

Company Information



Self-Assessment of Circular Economy by Industry



Value Network Interaction and Innovative Practices

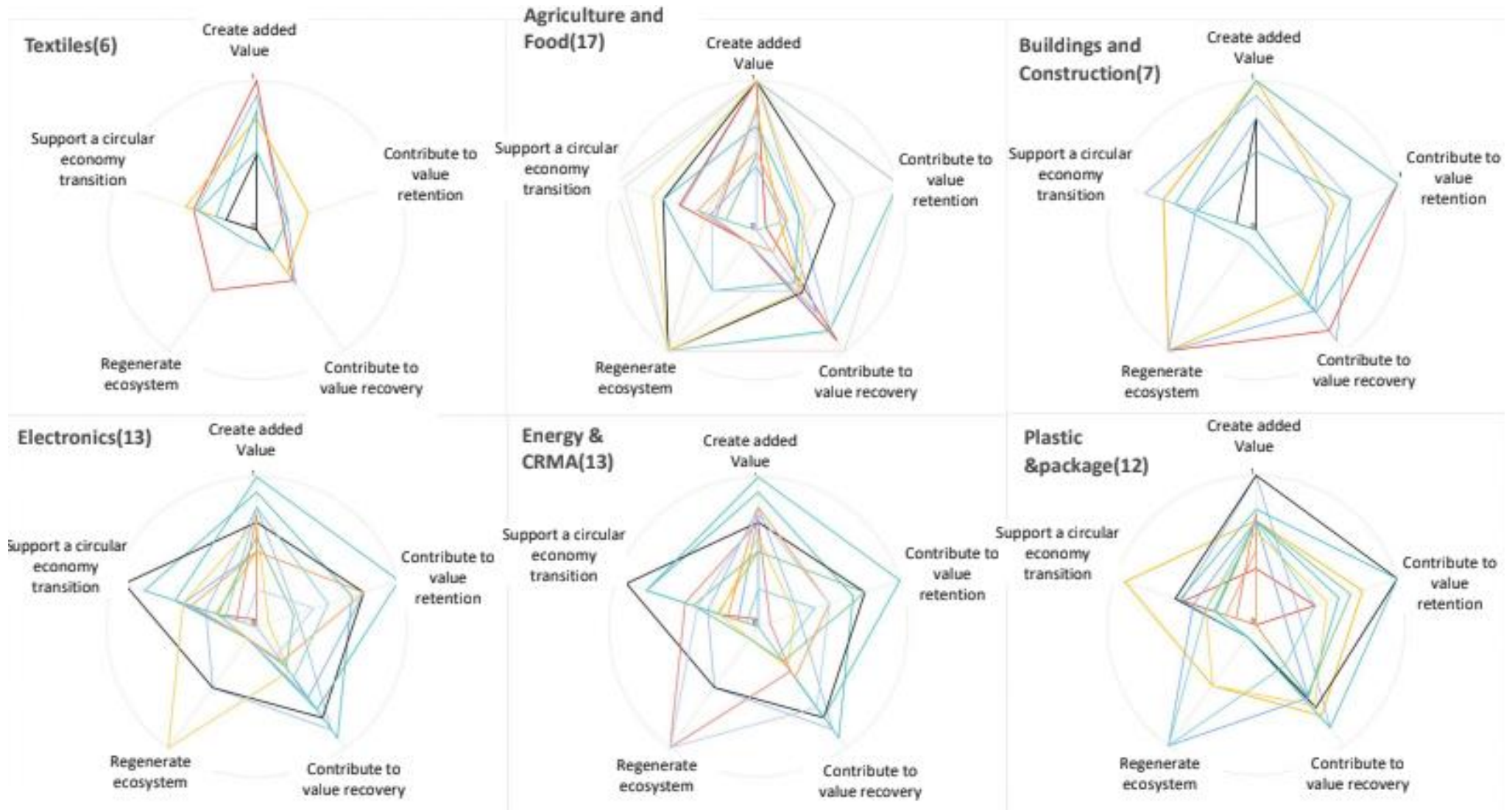


Photo courtesy of E-Titanium (2025)

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