

## **Press Release**

## Think Tank Presents a Roadmap for a Circular Bioeconomy in the Global South at the World Circular Economy Forum 2024

For Immediate Release

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The Center for Study of Science, Technology and Policy (CSTEP), a research-based think tank, in collaboration with the International Council for Circular Economy (ICCE), published a White Paper titled 'Growing the circular bioeconomy, with a focus on the Global South' and presented the findings at the World Circular Economy Forum 2024, held at Brussels, Belgium.

The White Paper calls for concerted action in the Global South to optimise the use of resources from agriculture, forestry, and other biological sources to store carbon, increase climate resilience, safeguard nature, and grow local economies. By utilising agro-wastes, food wastes, sewage sludge, and high-potential products such as hemp and innovating plant-based proteins, several goals for achieving a circular and regenerative bioeconomy can be accomplished in tandem.

The World Business Council for Sustainable Development (WBCSD) estimates a global economic opportunity of bio-based products for food, food waste products, pharma, textiles, and building materials to the tune of USD 7.7 trillion by 2030. The Centre for International Forestry Research and World Agroforestry (CIFOR-ICRAF) also indicates economic opportunities of approximately USD 3.5 trillion with the potential to generate nearly 87 million jobs.

As per the India Bioeconomy Report (2023), the bioeconomy market in India at present is worth approximately USD 137 billion and may increase in value up to USD 300 billion by 2030. Multiple measures, such as exploring waste-to-energy technologies and biofuels, devising an agro-forestry plan, and harnessing bamboo wealth, have been undertaken by different government departments to promote a circular and regenerative bioeconomy. India played an integral role in establishing the Global Biofuel Alliance, a multi-stakeholder alliance aimed at increasing sustainable biofuel use.

The paper highlights that inter-departmental collaborations, stakeholder forums, financing avenues for start-up projects, and a data repository of inputs and outputs are needed to accomplish the target potential.

The study emphasises that this transformative shift marks a significant transition from dependency on fossil fuels to bio-based materials and resources and can be achieved through the following four building blocks:

- Research and development (including product and material development as well as evidence of impact)
- Skills and social attitudes (affirming the importance of appreciating both advanced skills and indigenous knowledge and artisan skills)



- Partnership and collaboration (spanning across governments, various sectors, and regions)
- Policy support (addressing externalities and supporting consumer purchasing of products)

The White Paper also provides a roadmap with a step-by-step plan for an effective bioeconomy implementation by gathering evidence, strategising and prioritising, acting and embedding, and monitoring and reviewing.

Anjali Taneja, Senior Policy Specialist at CSTEP, states, 'Countries in the Global South struggle with poverty alleviation through income generation while implementing measures to decarbonise various sectors, address air pollution, and ensure climate resilience. In this regard, a circular bioeconomy provides a wide range of opportunities. For example, through the use of rice straw for producing bricks and other purposes, we can achieve multiple wins including decarbonisation and reduction of the terrible levels of air pollution we face each winter in India'.

Shalini Goyal Bhalla, Managing Director, ICCE, mentions that in addition to the advantages in terms of food security, income generation, and employment, a circular bioeconomy provides various economic opportunities and helps foster resilience against environmental challenges.

While presenting the findings during the session '*Unveiling bio-based solutions from the Global South*' at WCEF 2024, Taneja stressed that a circular and sustainable bioeconomy needs to be designed to achieve these goals. She presented the roadmap for achieving this change and explained the main building blocks for facilitating this shift. The White Paper has been published with the intention of stimulating further research and pilots and promoting investment and policy support to enable change.

Dr Jai Asundi, Executive Director, CSTEP, notes that these findings can help in making the transformational shift from the existing linear practices to a more circular bioeconomic future.

WCEF 2024 is the world's leading event on circular economy and brings together experts from various industries and organisations working in the field to drive the implementation of circular economy solutions. For more information on the event, please visit their <u>website</u>.

The report has been published on the CSTEP website. Click <u>here</u> to read more.

For more details and interviews, please write to us at cpe@cstep.in

**About CSTEP:** The Center for Study of Science, Technology and Policy (CSTEP) is one of India's leading think tanks, involved in solving the grand challenges that the country faces. These include Sustainable and Secure Future, India's Green Energy Transition, Clean Air for All, and Digital Transformation.