Sustainable Agriculture

Agricultural sustainability is intrinsically linked to food security, and therefore critical to India's progress and socio-economic development.

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What are the challenges?

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- One of the biggest challenges facing Indian agriculture today is to make it economically remunerative for the farmer, while ensuring that operations are socially sustainable as well as climate-resilient.
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What can be done?

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- In this regard, the onus lies on private food and agribusiness players to promote sustainability across the food value chain and to augment public sector efforts in this arena.
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- The agribusiness sector needs to seek new economic models that support and build on sustainable agricultural production and food processing.
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- A key approach buzzing in the corporate responsibility ecosphere to measure the socio-ecological impact of a company's operations is the 'Triple Bottom Line' or TBL approach to sustainability.
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Triple Bottom Line approach

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- The TBL sustainability approach is extremely relevant for the agribusiness

industry and must span across the agricultural value chain from farm to firm level to have any meaningful impact.
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- Adding the people and planet aspects to agribusiness helps achieve goals linked to profitability. Focusing on social and environmental sustainability leads long-term financial sustainability.
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- Adopting a green supply chain will reduce costs, while introducing new eco-friendly products will open up new markets and build consumer confidence – thereby enhancing corporate reputation and generating investor interest.
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- In addition to profit, the TBL approach adds two new dimensions to a corporate's responsibility: people and planet.
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What is People factor?

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- Agribusinesses need to respect not just value creation for their shareholders but also socio-economic benefits of stakeholders across the value chain in which they operate.
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- The people or social dimension could include employment generation, ethical hiring of labour, propagating education and sanitation in the communities that they operate in and promoting social cohesiveness through social organisations, such as farmer producer organisations and self- help groups at the farm level.
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- For instance, in Gujarat, Amul provides interest-free loans to set up toilets in its milk-producing clusters, particularly aimed at female milk producers.
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- Promoting awareness and community cohesion amongst farmers from whom companies procure raw material will not just help increase the scale of operation for farmers, but also help implement good agricultural practices (GAP), thereby increasing efficient use of resources, increasing productivity and farm income.
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- PepsiCo's work in collaborative potato farming in Punjab is noteworthy, as

is Mondelez' global Cocoa life program.
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What is Planet aspect?

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- Businesses need to respect the sanctity of the environment in which they operate. Managing the Food-Energy-Water nexus plays a critical role in this regard.
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- Agribusinesses need to facilitate farmers to maximise food production, while minimising their ecological footprint through reduced consumption of scarce and non-renewable resources.
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- Farmers need to be made aware of the impact of untamed use of power and water – not just in cultivation of water guzzling crops such as rice and sugarcane, but also in water-intensive dairy or poultry production.
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- Water, for example, is a major concern area for F&B and agribusinesses. Agriculture accounts for 80-90 per cent of India's water consumption, followed by industry and domestic usage.
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- A commodity's water footprint is the sum of freshwater used throughout its production across the supply chain.
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- A recent YES Bank study shows majority of sugar's water footprint constitutes of water utilised in the field for irrigating sugarcane crop (2,930 litres/kg) and a comparatively minuscule quantity in processing sugar (0.17 litres).
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- The industry needs to proactively promote water use efficiency in sugarcane cultivation. Illustrious examples such as sugar major EID Parry's commendable work with small-holding sugarcane farmers in water-scarce Pugalur in Tamil Nadu which could be replicated in other sugar mill catchments across the country.
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- Similarly, subsidised farm electricity and inefficiencies in power usage is another major concern.
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- Agriculture itself accounts for 18 per cent of India's electricity

consumption, and yet provides less than 10 per cent of the total revenue. Food processors ought to explore innovative models to save power and perhaps consider supplying efficient solar pump sets to farmers.
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- Many rice and sugar mills have already set up captive biomass power generation units, utilising processing by-products and other agri waste such as husk and bagasse.
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What are the other initiatives?

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- Other noteworthy initiatives include Olam’s Integrated Pest Management efforts that help farmers in southern India produce pesticide-free chilli, thus improving yields while reducing the environmental impact of chilli production.
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Way ahead

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- To conclude, food and agribusiness companies will continue to be under greater public scrutiny in the near future – making TBL, CSR and stakeholder communication crucial to their business strategies. Agribusinesses, with operating models dependent on scarce resources will be difficult to scale and sustain.
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- It is equally vital to build comprehensive models for socio-economic impact assessment.
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- Sustainable farming, along with sustainable processing and trade practices, will facilitate them to broaden their socio-environmental benefits, thus warding off the negative impact of their operations on people and planet.
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- This is all the more pertinent in the Indian context, given the Centre’s focus on sustainable agriculture, as also in the enlightened self interest of corporates to build sustainable and responsible agro value chains.

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