

ESG AND SUSTAINABLE AGRICULTURE: FOCUS ON 'TRUE COST' OF AGRICULTURAL OPERATIONS

Abstract

In every economy, agriculture is a central activity which has significant impact on environmental, social and economic aspects of the country. This article presents and highlights the 'true cost of agricultural operation', a system of compilation and aggregation of all relevant costs, including externalities, which not only limit itself to the financial metrics but go beyond the broader considerations of ESG factors and sustainability. To arrive at the true cost of agricultural operations, global concerns about ESG and sustainability aspects necessitate a transition from "incremental change" to "transformational change."



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The Perspective

India is a worldwide agricultural powerhouse. In developing countries like India, agriculture is the most important economic activity and it helps to boost capital formation and provide employment to a large segment of population. If agriculture is not robust, the entire economic development process will be derailed. As the country's population grows at an exponential rate, this sector is becoming increasingly important. Due to increasing population pressure, India is facing a significant rise in food demand, driving up demand for

food production.

The agriculture sector is a primary link to all the other sectors/services and is given utmost importance especially in the Indian economy. India has one of the world's largest food management programs. Agriculture employs almost two-thirds of the working population in India. Agriculture witnessed a growth of 4.5 million in employment during fiscal 2021-22, according to CMIE's Consumer Pyramids Household Survey.

The context

Agricultural operations impact

the environment in terms of the following: -

Pollution: Pesticides, fertilizers, and other harmful agriculture related chemicals have the potential to pollute freshwater, marine habitats, air, and soil. In the ecosystem, they might persist for generations. Many pesticides are suspected of affecting human and wildlife hormonal systems.

Water Consumption: Agriculture sector uses over 70 percent of the world's freshwater. The quality of water has a significant impact on agricultural production.

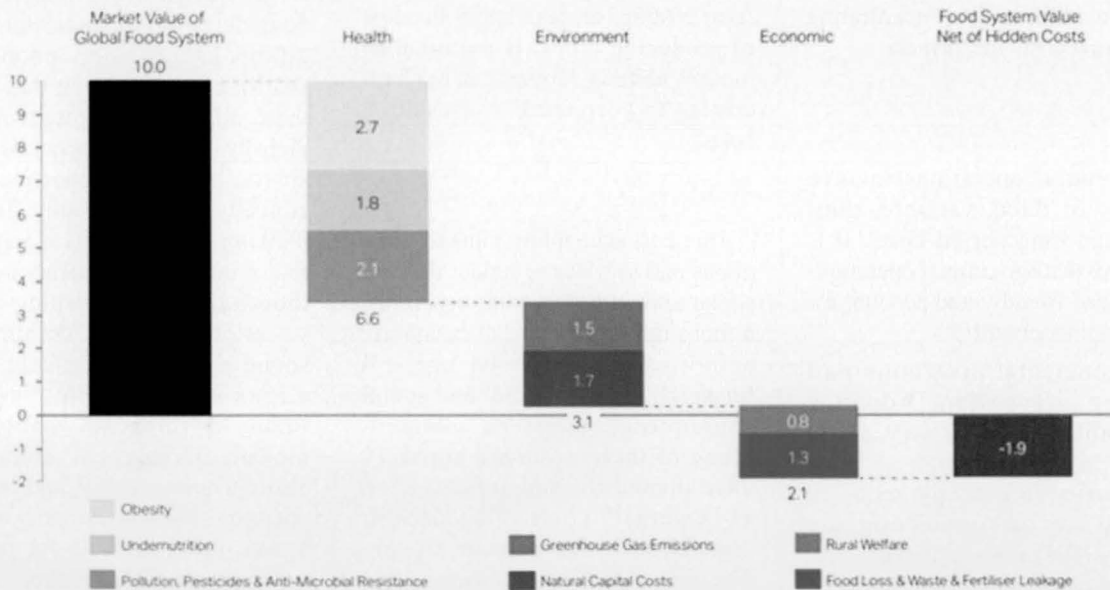
The Concept of ESG

Environmental, social, and governance (ESG) criteria are used to assess investments and encourage responsible behavior of mankind

towards the environment. ESG highlights sustainability not only in certain sectors where value-creation is clearly discernible, but also in those where it is less obvious but there is

a lot of value-creation potential. The food and agriculture industries have changed dramatically in the last 50 years, increasing the output required to feed a growing global population.

Trillions USD, 2018 prices

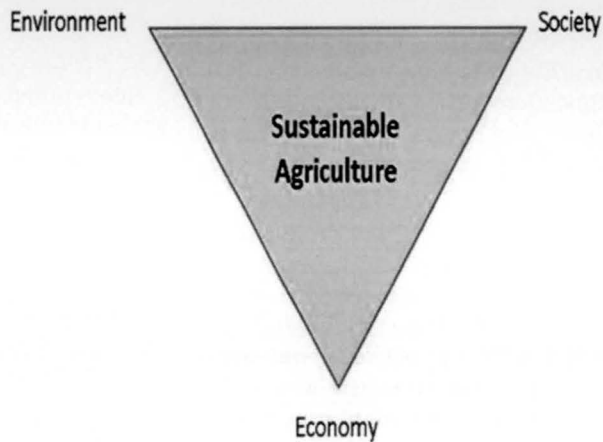


The necessity for long-term sustainable agricultural resource management is becoming more essential as the world’s population expands. Agriculture is one of the most significant instrument for conservation and protection of environment around the world because of its strong connections and correlation with the global economy, human societies, and biodiversity. In agriculture, sustainability is a sign of vitality, not a desire. Food producers, farmers, and land investors all across the world who have recognized the sustainability factor, already begun to focus on the same.

With agriculture accounting for over 70% of freshwater usage and 23 percent of greenhouse gas emissions, there are growing concerns about agriculture’s role in climate change. With the global population predicted to expand by 2 billion by 2050, agri-businesses today face the problem of sustaining life for both the planet and people. This issue is prevalent in Asia, which feeds half of the world’s population while only having a quarter of the world’s agricultural area. Multiple facets of environmental, social and governance (ESG) investing involve agriculture.

Sustainable Agriculture

To different stakeholders, sustainable agriculture means different things. For many people, this involves utilizing environmental friendly methods to meet food demand while reducing negative impacts on land, air, water, and soil, as well as lowering climate change and supporting and fostering ecosystem services and habitats for numerous species.



Sustainable agriculture gives equal weight to environmental, social, and economic concerns in agriculture. © 2011 Nature Education Courtesy of Brodt

Agriculture is a primary activity contributing to the economic development of India. It is one of the most revenue generating activities for both Central and the State Government. The Government has been continuously making efforts to promote sustainability practices in the agricultural sector as well which can be seen through the ESG initiatives taken to promote sustainable agriculture practices and reduce cost to the agri-farmers.

The fusion of technology and agriculture by introducing

block chain to promote inclusivity throughout the supply chain is definitely a big step towards the future of the agricultural sector. It can be rightly said that cost and sustainability go hand in hand. The Indian Government is taking steps to promote sustainable agriculture while simultaneously concentrating on lowering costs for farmers.

Shouldering the Cost of Sustainable Agriculture

Agricultural operations involve interplay of fixed, variable, short period and long period costs. It is imperative that agricultural operations become eco friendly and account for all relevant externalities.

Environmental protection and pollution prevention: Adopting sustainable methods can assist farmers in reducing their reliance on non renewable energy, reducing chemical use, and conserving rare resources. The problem of expanding population and need for food creates a long way of keeping the land healthy and replenished.

Reducing costs and focusing on profits: Everyone involved in the agriculture business will profit from better farming, more efficient food production, transportation activities and processes from farm to fork.

Improvement in food production without wastage: As previously noted, population increase is a matter of concern. From the pure production aspect, there is a potential to improve agricultural architecture now and sustainable agriculture is the most promising path.

Cost management in agricultural sector – Focus on ESG

Cultivators are now increasingly aware of the costs and returns of agriculture in recent years. The cultivator evaluates his cost of production by comparing the price he receives for his output from the market. The Government evaluates the cost of production and a suitable return for farmers when deciding on price strategy and announcing minimum

support prices for select vital crops. Farmers must compete fiercely due to the fast expansion of technology in agriculture, especially when their products are to be exported. Reducing the cost of agricultural operations is imperative to stay competitive as well as to obtain a higher profit margin so farm costing, or calculating the cost of producing crops, is required. In modern farming, farmers can use farm costing to keep track of escalating costs.

True Cost' of Agriculture activities

True cost accounting aims to price goods and services to reflect the true social and environmental costs. For a thorough knowledge of economic activities and resource use, all financial, environmental and social consequences must be assessed. Many of these costs are currently unaccounted for and are classified as “external” costs. That doesn't make them any less genuine, though. The agricultural operations cost management systems must evolve and move towards true costing.

Benefits of true cost accounting

Efforts to improve and refine real cost accounting are already yielding results. Many industries have discovered new techniques to reduce waste, pollution, improve process management, and address internal accounting issues that have previously allowed good products to subsidize bad ones. The top focus should be gathering exact and comprehensive data on the true costs of industrial commodity crop production. This information would be useful to policymakers in order to take steps to reduce pollution caused by commodity crop growers. Achieving a sustainable food system — one that serves present societal requirements while maintaining sufficient resources for future generations—requires a thorough examination of the relevant externalities associated with modern agriculture. Furthermore, it must be noted that when developing agricultural policies, agricultural producers, enterprises and Government

agencies must focus on true cost accounting.

True cost thinking

True-cost thinking addresses the positive and negative effects on the environment and societal welfare with traditional, profit-driven considerations. It incorporates the “three Ps” (planet, people, and profit), acknowledging that treating these difficulties as interwoven and globally interrelated aspects is the only approach to handle economic activity ethically and sustainably. True-cost thinking encourages us to analyze the return on our investments in a more thorough and discerning manner — as individuals, communities, societies, and as a planet. It also allows us to evaluate the kind of future in which we want to invest not only our financial resources, but also our time, energy, and collective attention. There is currently no single agreed-upon formula for precisely determining the actual pricing and long-term repercussions of the wide range of goods and services we use every day. There is also no single way to portray such costs on paper. However, there appears to be growing agreement that it is beneficial to link our economic actions to broader social and environmental challenges, taking into account the indirect, hidden, and long-term consequences (as well as the direct, evident, and short-term consequences) of the decisions that we take

Moving towards ‘True cost’ Accounting

A simple but fundamental paradigm shift is at the core of it all. One crucial part is to recognize the ways we use to create money, may end up risking our ability to continue producing and enjoying in the long run, then such actions are not our long-term common interest. This is the meaning of the phrase “sustainability.” Unfortunately, it isn't engrained in our traditional ways of thinking about economic development and growth, or even about our own well-being.

Conclusion

The question is not whether societies can find a solution to the current and emerging sustainability concerns, but whether they have the will. It is crucial to note that social, economic, and environmental sustainability are all interconnected and important components of an economic system in order to achieve the objective of sustainable agriculture. Poverty-stricken farmers are regularly compelled to exploit natural resources such as soil fertility in order to make end meet, despite the knowledge that environmental degradation may endanger their livelihoods in the long run. Societies may construct more sustainable agriculture systems by adopting regulations that balance social, environmental, and economic concerns. Sustainable agriculture

demands determination of True Cost of agricultural operations by duly incorporating the cost of externalities.

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References

1. Agrawal, G. D. (1999). Diffuse agricultural water pollution in India. *Water science and technology*, 39(3), 33-47.
2. Maurice, D. C., Adamu, Y., & Joseph, M. (2015). Analysis of cost efficiency in food crop production among small-scale farmers in Adamawa state, Nigeria. *Global Journal of Agricultural Sciences*, 14(1), 17-25.
3. Savić, B., Vasiljević, Z., & Đorđević, D. (2014). Strategic cost management as instrument for improving competitiveness of agribusiness complex
4. <https://www.cmie.com/>
5. https://www.in.undp.org/content/india/en/home/blog/SDGS_and_ESGDevising_Inclusive_Business_Models_is_vital_to_foster_Sustainable_Agriculture_and_Livelihoods.html
6. <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/why-esg-is-here-to-stay>
7. <https://indianexpress.com/article/explained/why-agricultural-subsidies-worsen-air-pollution-in-north-india-7061919/>
8. <https://www.niti.gov.in/methanol-economy>
9. <https://www.eitfood.eu/blog/post/agricultural-outlook-how-limiting-air-pollution-will-protect-farms>
10. <https://www.google.com/amp/www.timesnownews.com/business-economy/budget-2022-inclusive-development-to-benefit-farmers-article-89276881/amp>



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