





SUSTAINABILITY HORIZON

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A little more than a year ago, on 11th March 2020, World Health Organisation declared the Covid'19 outbreak a pandemic. With more than 2.8 mn deaths, more than 130 mn additional people being added to 'the poor' category and the global economy expected to have shrunk by 4.3% during this entire year the virus has paralyzed our societies and economies like never before. However, now as countries are at various stages of immunizing their populations with newly developed vaccines, recovery seems to be on the horizon and it is time for us to look at ways in which we can ensure that this recovery is sustainable at various levels. In this dark grey cloud of Covid'19 pandemic, the silver lining is that we have an opportunity to reboot and rectify some mistakes that we humans have made, especially the ones effecting our environment.

With this backdrop in mind, it gives me great pleasure and pride to present to you the second edition of the quarterly newsletter 'Sustainability Horizon' of the Centre for Sustainable Development at Goa Institute of Management. This "Sustainability Horizon" brings forth a few challenges that we have faced and at the same time attempts to look at possible environmentally sustainable solutions for the same. Some pertinent points about innovative sustainable finance products and impact investing have been raised in the published articles. It also discusses the benefits of carbon-tax along the supply-chain and how companies and regulators must explore the role of technology in monetizing carbon along the supply chain. The practitioner's article by Stella Saris Chow, Head of Sustainable Finance — International ANZ predicts that the year 2021 is expected to be another record year for sustainable bond and loan markets with issuers and borrowers mobilising capital to manage climate risk. We have also included a summary of interview with Ms. Almitra Patel, an 84-year-old Garbologist who has played an important role in the framing of solid waste management rules in India. The highlight of the issue is our students' article which talk about a variety of aspects like Environmental Trading Systems (ETS), Responsible Consumption and Production, Sustainable Finance and Solar Power in the times of Covid'19.

We hope that through this newsletter, we are able to contribute to the transition to a new normal which is environmentally sustainable.

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¹ <u>https://www.worldometers.info/coronavirus/coronavirus-death-toll/</u> accessed on 7th April 2021

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³ PTI. (2021, January 05). *Mint.* Retrieved from livemint.com: <u>https://www.livemint.com/news/india/global-economy-expected-to-expand-by-4-in-2021-world-bank-11609864070365.html</u>



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PRINCIPLES OF RESPONSIBLE INVESTMENT (PRI)

United Nations has formulated six principles of responsible investment with an objective to incorporate Environmental Social and Governance (ESG) goals into investment practices globally. These six principles aimed towards responsible investing are:

"Principle 1: We will incorporate ESG issues into investment analysis and decision-making processes. Principle 2: We will be active owners and incorporate ESG issues into our ownership policies and practices. Principle 3: We will seek appropriate disclosure on ESG issues by the entities in which we invest. Principle 4: We will promote acceptance and implementation of the Principles within the investment industry. Principle 5: We will work together to enhance our effectiveness in implementing the Principles. Principle 6: We will each report on our activities and progress towards implementing the Principles." (https://www.unpri.org/pri/about-the-pri)

The PRI organization (PRIO) was formed in 2006 and is a leader in advocating responsible investments. It has been set up to achieve the following goals:

- Analysis of the impact of investment decisions on ESG factors;
- Support to global investors in making ESG factors as a part of their investment strategy.

PRIO has obtained commitment from global investors towards responsible investing. Large investors, who are signatories to the PRI principles, commit that firms with ESG impacting issues, would not form part of their investment portfolios. The objective in the long term is to ensure that these investment houses develop a global sustainable financial system. Several funds have now been established with PRIs forming the criteria while selecting firms for the portfolio. These funds (equity or bonds), consist only of those companies which are committed to environmental, social, and governance betterment and are termed as ESG funds. ESG funds select companies that have high sustainability scores and exclude those which had a poor history of managing pollution, governance, or labour issues. Similarly, bonds issued by a government with poor performance in ESG factors is excluded from these funds.

Including ESG as a selection criterion, ensures that those companies which are able to manage their ESG risks efficiently are part of the fund. Companies that are focused on reducing their carbon footprint are at a lower risk of regulatory action and hence record lower fluctuations in their stock prices. These funds ultimately perform better in the long run as compared to those without ESG as a selection criterion.

Globally, individual investors are also becoming aware of the advantages of investing in ESG funds. The have realised that they can influence companies, through their investments, to prevent harmful effects on the environment and the society. Several asset management companies have recently launched specific ESG funds in India. Some of the ESG mutual funds available to the investor in India are Aditya Birla Sun Life ESG Fund, Axis ESG Fund, ICICI Prudential ESG Fund, Kotak ESG Opportunities Fund, Mirae Asset ESG Sector Leaders ETF, Quantum India ESG Equity Fund, etc. A study by Morgan Stanley Institute for Sustainable Investing (MSIS), found that ESG funds were able to perform better than traditional funds during the pandemic period in 2020, when the investment risks were high. According to MSIS, those funds which had environmental, social, and governance (ESG) criteria in selecting their portfolio companies, were able to manage the risk and perform better in 2020, as compared to non-ESG portfolios. A review of more than 3,000 U.S. mutual funds and exchange-traded funds (ETFs) in 2020 by MSIS, showed that the performance of sustainable equity funds was better than traditional peer funds by a median total return of 4.3 percentage points in the year. Similarly, sustainable taxable bond funds were better than their non-ESG counterparts by a median total return of 0.9 percentage points.



Today there are several firms, which provide insights to their stakeholders to make informed investment decisions which would lead to a just and sustainable global economy. Several companies (e.g Sustainalytics) have now been established to provide ESG Risk ratings to companies to investment houses, before they include them in their portfolios.

With the risk of ESG issues increasing globally, it is important that investors ensure, their wealth is not propagating these issues further. Their investment objective should be to focus on promoting sustainability globally and keep ESG as the prime criteria for their decisions.



NEWS FLASH

State-of-the-art solar facility commissioned at GIM

Goa Institute of Management has taken a conscious step towards a sustainable future by setting up a state-of-theart solar facility on the campus. With a power generating capacity of 675 kW, the facility shall be the largest one in the state of Goa. The solar cells installed are of the monocrystalline variety that ensure a better solar energy conversion and utilise a lesser roof area. Director Prof. Ajit Parulekar pointed out "The institute has always been conscious about the impact of its decisions on the ecosystem and has continuously strived to reduce its carbon footprint. The solar project is one such initiative which is aligned to our efforts in adopting sustainable practices on campus."



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SUPPLY CHAIN MANAGEMENT AND COVID-19: IMPLICATIONS OF CARBON TAX

The concept of carbon pricing has gained momentum in the past decade as policy makers attempt to send economic signals to emitters. One of the instruments to implement such economic signals is Carbon Tax. Carbon tax guarantees carbon price in an economy where environmental consequences are uncertain due to complex interactions between different actors in the entire value chain. A supply chain under carbon tax would impact pricing and logistics decisions, reverse logistics decisions, production planning decisions, facility layout decisions, the impact of competitions among others (Meng et al., 2018).

The dynamics of carbon pricing may have changed during COVID-19. Many consumers are sensitive to price fluctuations during global pandemic which may be attributed to uncertain supply shocks and the lack of clarity on how institutions will respond during recovery phase. This puts a relatively greater burden on producers compared to consumers in the presence of a carbon tax than under normal conditions (Mintz-Woo et al., 2020). Further, with more conscious spending patterns on goods and services, government may be burdened with lower tax receipts and there may be a need to generate alternate streams of revenue to support social safety nets in the economy.

Hence, one may argue a stronger case for introducing carbon tax in the COVID-19 context (applicable to similar contexts in future) with the intention of consolidating green objectives & in that process generate revenues that can be used for social good, especially for those who are severely impacted economically due to the pandemic.

The bottom-line is to monetize carbon. Discussions and debates should focus more on how supply chains could measure it accurately (O'Marah, 2015). Therefore, supply chain leaders need to come with a comprehensive strategy to implement technology (IoT) that aids in measuring carbon within its entire value chain. Currently, this vision is lacking as organizations and institutions are not clear how well one should use technology. Priorities need to converge as institutions move towards the triple bottom line approach. A supply chain under carbon tax regime may be incentivized to collaborate (tax sharing contracts) (Zhou et al., 2020) to reduce tax cost burden which may motivate actors to move towards green production and green logistics. Intelligent contract mechanisms could promote overall supply chain coordination leading to more efficient supply chains.

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(Source: https://climatesight.org/tag/carbon-tax/)

TRENDS IN SUSTAINABILITY RESEARCH

As the aspect of sustainable development is turning out to be more and more complex in the recent years, researchers are trying to find out dimensions of sustainable development by means of indexation. Recent trend of research has seen the emergence of several new Indices for measuring the sustainable development in any given context. In a recent study, Hickel [1] have introduced the concept of Sustainable Development Index for measuring the ecological efficiency of human development. This particular index has taken a step forward from the traditional measure of HDI, while addressing problem of the income index, a primary component of HDI. While talking about the inefficiency of HDI, the concept of modified HDI needs a special mention. Though it was introduced 1998 by Noorbaksh [2], it recently gained prominence after the study by Tiba and Belaid [3] designated it as a driver to reduce carbon emissions, in presence of strong institutional quality. Although substantial amount of research has not been carried out, analysing the impact of S&P 500 ESG Index can actually show a way to finance the sustainability practices at the firm level [4]. In the research forum of sustainable development, it can be expected that the use of diverse sustainable development indices is going to get more prominence with the rise in the economic complexity around the globe.



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Stella Saris Chow Head of Sustainable Finance International, ANZ

SUSTAINABLE FINANCE POISED FOR RECORD YEAR IN 2021

The year 2021 is expected to be another record one for sustainable bond and loan markets with issuers and borrowers mobilising capital to manage climate risk writes Stella Saris Chow, Head of Sustainable Finance — International, ANZ

The year 2021 is expected to be another milestone one for sustainable finance markets globally as momentum continues apace among investors and issuers mobilising capital to manage climate risk. Similarly, companies and governments in Asia are also in the midst of the shift to a low carbon economy. A record 2020 saw issuance for the global Sustainable Finance market jump 30 per cent to \$U\$730 billion compared to the \$U\$564 billion the previous year accordina to Bloomberg New Energy Finance data. The total global sustainable debt market now exceeds \$US2.3 trillion, and experts in the market expect that to continue.

The effect of COVID of last year will continue to accelerate these markets. There is increased focus from regulators and investors on the impact of climate change, impacts on biodiversity loss and social issues such as diversity and concerns about ineauality in education and health care. Momentum in 2021 to date is strong with ESG bond volume topping \$US100 billion, a 54 per cent leap compared to the corresponding period last year according to data from Refinitiv.

In transition

Transition will continue to be a very strong focus with the proliferation of net zero targets or aspirations by governments, semi governments, large corporations and investors. While green bonds have been the mainstay of the capital markets, sustainability-linked bonds are expected to be a growth segment for the Asia Pacific market. A sustainability-linked bond commits an issuer to key environmental, social and governance target(s) and attaches a premium payment mechanism payable to investors if the target(s) are not met. This structure is attractive for companies who don't have eligible green assets or have an asset light business model, a sustainability-linked bond gives them access to the growing pool of investors with an ESG focus.

ANZ has led two out of the three sustainability-linked bonds in Asia to date including the region's first ever with agriculture and commodity firm Olam's JPY7 billion private offering last December and Singapore-headquartered urban, infrastructure and services consultant Surbana Jurong's \$\$250 million 10-year bond, the first public sustainability-linked bond in South-east Asia.

Certainly, more innovative product offerings are in the works to meet borrower financing requirements. These include green and sustainability—linked derivative products such as interest rate swaps, green deposits as well as sustainable supply chain cost structures across a myriad of industries such as the food, beverage and agriculture, manufacturing, telecommunications and technology.

The global shift to a net zero carbon economy driven by the development of renewable and storage technologies and aided by the capital markets is unmistakable. This momentum has driven the exponential growth in sustainable finance markets — from what was little more than a niche product to the mainstream in less than a decade.

When the market first got going, the question within many companies was why would I bother? And now they're thinking, well, why wouldn't I do this?



[a] Shri Rajendra	[i] Navdanya	[1] One Man Enviro-legal Brigade; Single-handedly won numerous landmark judgments from India's Supreme	
Singh		Court since 1984, including introducing lead-free gasoline to India, reducing the industrial pollution fouling the	
		Ganges and eroding the Taj Mahal, making industries accountable, etc.	
[b] Shri M.C. Mehta	[ii] Tarun Bharat Sangh	[2] Physicist, ecologist, activist, editor, author of numerous books. Founded a national movement to protect the	
		diversity & integrity of living resources, especially native seeds.	
[c] Smt. Vandana	[iii] M.C.M. Environmental	[3] Waterman of India; extensive work in water conservation in Rajasthan by mobilizing communities. Believes	
Shiva	Foundation	that society should appreciate the need to conserve water and should take ownership of water resources.	
alution. [a] [ii] [3] [b] [iii] [1] [c] [ii]			

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Almitra Patel Garbologist, Member of Solid Waste Management Committee, Supreme Court of India

VALUE IN THE WASTE SUPPLY CHAIN







THE MOUNTING PROBLEM OF NON-RECYCLABLE WASTE



Where does multi-layered packaging usually land up? (Image sources: Google and Saahas)

Landfill sites Garbage dumps Waterbodies

THE LADY ON A MISSION TO CLEAN-UP INDIA

The CESD team had the privilege to interview Mrs. Almitra Patel, an 84 year "young" Indian environmental policy advocate and anti-pollution activist. Owing to her relentless efforts over a span of 30 years (post a glorious corporate career) the country got its first Solid Waste Management Rules. She has held several key positions including being a member of the Solid Waste Management Committee set up by the Supreme Court of India.

INTRODUCTION

CESD Team: Waste management is often looked upon as an issue rather than a value creating activity. We need robust forward linkages to ensure that the products created from the waste really get their due value to make waste management an attractive proposition. Our core question is: How do we create an ecosystem where waste is looked upon as a value creating resource rather than an issue to be tackled?

Following are excerpts from Almitra Madam's answer to the above question:

There is value in waste today and unfortunately, that is the problem which is working against sustainability.

Value for waste transporters is because they are paid on per ton basis for the waste transported and hence they are not interested in minimizing waste to landfill or ensuring segregation at source. Cities need to design foolproof payment basis and not the conventional pay-by-weight basis.

From the Citizen's point of view, the conversation should be "Waste to Health" and not "Waste to Wealth". If the waste is not picked up promptly and managed hygienically, it will cause several diseases. So, we need to talk about the avoided cost of disease and healthcare, morbidity, absence from work, absence from school and shortened life.

Waste dealers or kabadiwallas include the small-scale backyard gatta- dana wallas (who make plastic granules from the waste plastic using basic processes like melting and extrusion) and the larger players like ITC who are more streamlined. When it comes to the business, it is usually that the larger fish eat up the smaller ones.

Rag-pickers are constantly foraging the waste and picking up only those items which fetch them more value (like PET bottles) leaving behind the others (like carry bags). This effort is basically for supporting subsistence livelihood. Non-recyclable waste mainly including the multi-layer packaging has been a huge problem since the past few years.

"I have visited 214 landfills to date and they are all full of sachets and snack food packaging!"

Probable solutions:

[1] **Plastic-to-Roads:** Simplest and most affordable method is to shred it finely and sprinkle it onto hot stones in a hot mix plant. At the end of the heating, the bond between bitumen to the polymer coating is very much stronger than bitumen to a stone, offering superior water-resistant properties. This is such a beautiful technology developed by Professor Vasudevan at Thiagarajar College of Engineering in Madurai. It has been endorsed by the CPCB and the Central Road Research Institute.

[2] Plastic-to-boards: The plastic to roads technology has limitations, since it cannot be deployed during monsoon when roads are not constructed. An alternate solution has been developed by a company called <u>Trashcon</u>, where such waste is shredded to make a kind of plastic board. The company offers buy-back of the boards so that they can be made into furniture.

"The National Highway Authority has issued a <u>guideline</u> in 2015 which says that for 50 km radius around every city with more than five lakh population, all National Highway construction and maintenance has to be done using the plastic-to-roads technology. But this is just not happening."

SITUATION OF WASTE DURING THE COVID-19 PANDEMIC

All the effort of 'say no to single use plastics' has completely gone for a six, with all the disposable Personal Protection Equipment. It's all virgin good material and has good recycling value. Maybe after the vaccine is deployed sufficiently widely, backyard recyclers may not be afraid of handling this material and cities may not insist on calling it biomedical waste and may allow it to be collected as plastic waste. Also, packaging waste has increased horrendously. Hotels are also sending everything in plastic and thermocol, which is totally recyclable but transportation becomes infeasible as thermocol is incredibly light. I think it's worth having an interview with the Amazon, Flipkart and all those takeaway people: What are you doing to minimize your waste?

MOTIVATION

What qualities does one need to take up waste management in a mission mode, like you did?

It's only self-motivation! It is not just the money, although there are a few enterprises like the one who has come up with the plastic boards; it's a for-profit opportunity and a niche. But basically, unless there is the self-motivation to work in waste, the rest doesn't follow.

(Read more about Almitra Patel's work here Read the Solid Waste Management Rules 2016 here)



IMPACT OF COVID 19 ON GLOBAL CAP AND TRADE SYSTEMS

The global challenge of curbing industrial pollution is a particularly hard one to solve, primarily because the parties that are most responsible for it, i.e. industrial manufacturing units, are unlikely to factor in the costs of environmental damage in their financial decisions. A feasible solution to overcome this problem is the "**cap-and-trade**" system, most prominent in the **EU ETS** (European Union Emissions Trading System). Before diving into its effects on climate change and the Covid-19 impacts, it is imperative that we first have a basic understanding of the working of this system.

The primary aim of a Cap-and-Trade mechanism is to reduce greenhouse gas emissions at a minimum viable cost. A **'cap'** is first set by the Government on certain industrial plants, permitting them to emit only a specified level of greenhouse gases. Permits are then granted to all firms who utilise these pollution-inducing devices during the course of their production process. Firms are now allowed to **'trade'** these permits in the free market. Those who are able to cheaply reduce their pollution below the cap sell the permits to the firms for whom pollution control is expensive. The USP of this system is that the Government need not know which firms can reduce their emissions cheaply, the free market automatically identifies them. By reducing Government supply of permits over time, the prices of these permits increase, which incentivises firms to invest in cleaner technology.



The arrival of the Covid-19 pandemic saw widespread industrial shutdowns (mostly temporary) as many countries forced themselves into a lockdown. Like every other market, the market for Carbon permits went through a significant exogenous shock in 2020 due to the pandemic.

According to <u>ICAP</u> data, permit prices in the European Union fell steeply by about 40% during the pandemic. Reduced demand for carbon permits and the subsequent oversupply in the market were major factors contributing to this phenomenon. Environmentally, this is not a major cause of concern in the short run as there is reduced output (hence, reduced GHG emissions) from most manufacturing plants as they are still reeling from the impacts of Covid-19.

However, once the situation normalises and production capacity is back to its former levels, the reduced carbon permit prices may have a disastrous impact on the environment. Firms will be able to buy these permits at cheap prices and hence, their incentive to release lower levels of emission subsequently reduces.

It is important that the Governments realise this and take steps to stabilise the prices of carbon permits lest this leads to increased industrial pollution levels in the post-Covid future.

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Mukul Gupta PGDM-BIFS, 2020-22

COVID-19: IMPACTS ON CONSUMPTION & PRODUCTION

Consumption & production are the driving forces of an economy which encourages "doing more & better with less". Responsible consumption implies using resources sustainably. Covid-19 has impacted both, demand and consumption; negatively as well as positively. The huge struggle that the manufacturing and supply chain markets had to face was to keep the market from shrinking as there was no demand for consumption. While some sectors were flushed with increased demand, there were constraints in the supply since the interconnected industries were distressed. Production of essential items increased as people were stocking up items such as food, groceries and pharmaceutical products in their houses during lockdown. On the other hand, there was also a positive impact on the environmental front owing to shutting of industries that had no demand like automobiles, textiles, tourism, aviation, etc.

One of the major industries that experienced boom was the electronic gadgets and technological sector as people were forced to work from homes. Many needed bare minimum infrastructure to carry out their work which led to increase in electronic consumption by 38%. As there was limited demand in the textile & apparel industry, it would impact the employment in the manufacturing of these. The production is expected to decline by 10-12% in April- June quarter. Interconnected Industries have a domino effect when it comes to generating profits or incurring losses. For the first time in history we saw the U.S. benchmark for oil go below 0, similarly the global consumption of coal also dropped by 8%. In a nutshell, the impacts of Covid-19 on consumption and production are as follows:

- The demand for products like automobile, public transport and textiles weakened, while that for companies producing thermal scanners, ventilators, face masks, PPE and other essential items skyrocketed
- Logistics slowed down due to unavailability of workforce and increased mismatch in demand and supply
- The demand for production of non-essential items is expected to reduce owing to reduced consumption
- Impact on MSMEs will be high as they are the ones who provide employment to more than 114 million people and contribute around 30-35% to the GDP. MSMEs in Production, hotel, tourism, logistics have been witnessing a steep drop owing to liquidity constraints which came in with Covid-19.

Just as the coronavirus does not stop at borders, neither do the economic and environmental challenges. This pandemic has provided us with the opportunity to revisit the priorities and channel necessary actions in a way that least affects the environment.

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PGDM-BDA, 2020-22

A GLIMMER OF HOPE

In light of the Covid-19 pandemic, people and societies at large are becoming more individualistic. The World Health Organisation predicted goods trade to drop by 13-32% [4]. The nature of "Globalisation" is changing. Cities want to be able to sustain themselves by using clean and affordable energy, without being dependent on their neighbours for fossil fuels. India has set its renewable energy target of 175 GW for 2022, out of which 100 GW will be achieved by solar [3].



(Source: Press Information Bureau of India)

Solar energy is the most abundant source of clean energy. I remember going to my uncle's house in Bangalore in 2008. He would use a parabolic solar cooker to cook pizza for us. It was the first time I was confronted with the Sun's thermal energy being converted into something tangible. The solar photovoltaic sector offers several promising opportunities as well. The ongoing pandemic has affected the solar sector in the following ways:

- There are disruptions in the solar supply chain. "China would largely import panels to other countries, but it lost its goodwill during the Covid-19 pandemic" [1]. China was responsible for producing over 80% of the solar cells. Sourcing nations such as Taiwan hiked prices of their supply by 15 to 20%. Imports to India decreased by 70% as compared to January 2019 [9]
- Solar workers have been laid off. "It is stated that the workers of the solar energy sector have been dismissed or suffered due to the Covid-19 outbreak." [2] Around 600,00 clean energy workers lost their jobs in the United States. 85% of laborers in Solar Parks in India were migrants who returned to their villages [7].
- There has been an overall drop in demand and funds are being diverted to the medical industry. Setting up of extra beds in hospitals, research on the virus, and help centres have resulted in the drainage of funds for the government
- Investment in the energy sector is also shaky because of the unpredictable nature of the pandemic. A decrease in export and imports has affected investment [4].

The need for electricity and high-speed internet was heightened during the lockdown. With the rise in consumption, people (households as well as commercial/industrial segments) are willing to switch to solar panels, especially for rooftop systems. This increased demand shall be a positive force contributing to us becoming self-sufficient in manufacturing solar panels. The Government of India has on-going research projects in the area of solar thermal applications and solar photovoltaic systems. The government has also planned to set up "Ultra Mega RE Parks" in Gujrat and Rajasthan, to promote solar and wind projects. The government also classified solar as an essential service. These are steps towards a sustainable future [6,5,7]. Countries need to push clean energy incentives more heavily than ever before. Covid-19 has forced all to rethink and reimagine a new world.

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investments, early evidence suggests that sustainable investment strategy will outperform in this crisis.

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SUSTAINABLE FINANCE AND COVID-19

This pandemic has created a big fallout economic volatility and hence it has become very essential for the business to manage the factors like governance, environmental and social issues appropriately. The risk associated from these factors has come to the forefront and sustainable finance will play a huge role in getting the solution from instantaneous relief efforts to long-term recovery strategies. According to the forecasts by IMF (international monetary fund) have set that the global GDP will fall by more than 3% this year, and it will have a negative effect on developing nations, but it has given an opportunity to reassess on beneficial and long-term sustainable

As already mentioned in the article by Prof. Mahtani, Morningstar found that in the first quarter of 2020, twenty-four out of twenty-six ESG (environmental, social, and corporate governance) index funds gave higher returns than their non-ESG indexes. One of the studies by HSBC has also shown that since the beginning of the pandemic those companies that have prioritized climate issues and ESG have outperformed those that have not by up to 7% comparatively.

Pooja Deshwali PGDM-BIFS, 2020-22



The world's financial system has been reshaped by this pandemic and therefore, investors should embed Covid-19 in their reinforcement activities and should focus on their portfolio. The effects of this crisis are being navigated by the companies to continue to keep focusing on generating long term value for their benefits. Other than this, the investment made by companies in the climate-based strategies has the potential to boost growth, and it will encourage them to prioritize sustainability in their investment and business plans. This is likely to create a positive value for the environment and will be good for the people as well as for profitability of the company.

Innovative finance products and services provided by financial institutions such as banks can become a major player in maintaining sustainability, social values, and solving governance issues. These innovative products could use technology to generate more information about the ESG parameters to manage the risk effectively, handle information asymmetry and at the same time provide good returns.

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ABOUT THE CENTRE

GIM has always been conscious about the impact of its decisions on the ecosystem around it and has continuously strived to reduce its carbon footprint. Along with measures like rain water harvesting, solar-powered street lamps, treatment of water for reuse, tree plantation drives and many more, the institute has expressed its commitment to this philosophy also through its mission statement which talks about sustainable business and an inclusive society for India and the world. In line with this commitment, the Centre for Excellence in Sustainable Development was officially formed in July 2018 to contribute to GIM's quest for sustainability. The centre started working with three core objectives in mind:

1. KNOWLEDGE CREATION

- To develop a model institute for green campus in India and transform GIM community into a more sustainable community. At the same time, use these processes for action research in the field of sustainable development.
- To help develop knowledge through research in the aforesaid field.

2. KNOWLEDGE DISSEMINATION

 To increase awareness about green living and sustainable development in the community around us and carry out activities to try to reduce the carbon footprint of the state of Goa and India as a whole.

3. KNOWLEDGE APPLICATION

- To develop a resource centre for sustainable development at GIM for imparting training, providing consultancy and participating in policy making.
- To contribute to the development of start-ups and ventures for sustainable development at the grassroots level.

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A GOOD READ

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as one of the most influential economists in history and this book is his masterpiece.

"Small is beautiful — A Study of Economics as if People Mattered"

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Over the next few years, centre plans to contribute towards the following five sustainable development goals adopted by United Nations member states in 2015: CESD believes that every graduate of GIM should be a sustainability ambassador and every employee should be a part of GIM's journey towards environmental sustainability. **Current Projects:**

- Creation of a Campus Biodiversity Register
- Creation of a registry of the Eco-businesses in Goa
- Understanding the sustainability initiatives of MSMEs in Goa
- A study of the sustainable campus development initiatives of national level institutions in India
- Preparation of a Sustainability Report for GIM

CESD focuses on the following five Sustainable Development Goals:





This legendary book champions small, appropriate technologies as against the mainstream "bigger is better" industrialism and puts forth a very different perspective of economics "as if people mattered". The author emphasizes the need for small-scale enterprises and local self-sufficiency. He very succinctly explains how it is essential for a labour capitalintensive country like India to ensure that its workforce is engaged in meaningful occupations that involve the use of both the mind as well as hands. The book is divided into four sections: "The Modern World," "Resources," "The Third World," and "Organization and Ownership." While the world was speaking about "economies of scale", it is amazing that the author

could foresee the importance of small businesses for economies like India, as early as in the 1970s. Schumacher is regarded