

To See or Forsee: Environment Regulation or Economic Interest

Hashneet Kaur¹

Abstract

We are living in an Anthropocene era where there is a rising conflict between nature and humankind. With the advent of globalization, the world has become one trading platform where manufacturing deployment trade-off is adopted at the expense of the environment with an objective of profit maximization. However, this conflict can be traced back to the 18th century popularly known as the industrial era. In the Initial stage (1900-1950), there were not many conventions or declarations dealing with environment protection, except for few, one such is a treaty signed between US and Great Britain in 1911 to curb ecological crisis in North Pacific Fur Seal population. Later at the formative stage (1951-1972) many authors highlighted the plight of environment in their books like “Silent Spring”. Further, the Stockholm Declaration of 1972 introduced the right to healthy environment, precautionary principle, and principle of no harm. This revolutionary step drew the attention of the world leaders towards the development of environmental jurisprudence resulting in futuristic developments like Kyoto Protocol, Rio+20 and Paris Agreement with the aim to mitigate and adapt to the changing climate. However, there is no specific convention or declaration dealing with the international trade and environment law, which draws our attention to identify the foremost issue of how trade and environment are correlated, what are the key mechanisms dealing with the said conflict and lastly how sustainable entrepreneurship can be one of the contributory factors to resolve the issue of climate change with the help of trade.

Keywords: Environment, Globalization, Stockholm Declaration, Kyoto Protocol, Paris Agreement

Introduction

Interlink Between International Trade And Environment

The correlation between trade and environment can be traced from the era of feudalism where production exhausted the soil to capitalism which globalized the ecological crisis prevailing in European feudalism². The freed trade regime i.e., neoliberalism trend in Latin America led to reduction in governmental intervention which resulted in less environment regulations³. Further the Corfu channel case⁴ in which the legal issue was different but there was an interface of trade and environment, a case pertaining to the civil liability of the Albania, which planted mines in its sovereign waters, causing damage to the two Royal Navy Destroyers from the United Kingdom.

¹ Law Student of Law Centre-II, University of Delhi.

² Moore, Jason W, “The Crisis of Feudalism: An Environmental History” 15 Organization & Environment 301–22 (2002).

³ Diana M. Liverman and Silvina Vilas, “Neoliberalism and the Environment in Latin America” 31Ann. Rev. of Env. and Res. 327-363(2006), <https://www.annualreviews.org/doi/10.1146/annurev.energy.29.102403.140729>.

⁴ (1949) ICJ Rep 244.

Facilitation of International Trade is done through cross border transportation. Even before liberalization, the world was connected through sea routes, where freight accidents were common. Later Air ways developed which required energy fuels leading to excessive trading of resource-based minerals. It is pertinent to note that the life span of a ship is 15 years when the shipowners start considering their dismantle and by 20 years, the ship is disposed. However, to save up the cost the countries sometimes opt to use those aging tankers to make money, which causes a great risk of environment damage like that of oil spills⁵.

This is the one side of the coin, just like trade, changing environment also impacts the international trading system resulting in billions of losses. One such instance is a rising sea level which is a major threat to the coastal States of India. Indian Sea Ports are the gateways of cross broader trade. However, the increasing climate change might affect the trading pattern of these sea ports. The rising sea level⁶ can affect the land use pattern leading to food insufficiency⁷, maritime transportation and sea port infrastructure leading to a very expensing transnational trading environment. According to the Gross Domestic Climate Risk report 9 States of India affects the physical climate risk to the built environment, amongst which Punjab an agricultural State is at the 84th rank based on average damage ratio⁸.

Further rise in temperature does not only affects the production activities but leads to high productivity cost especially in primary sector⁹. India, a leading agrarian economy had banned export of wheat on the ground of food shortage which was resultant due to heatwave¹⁰. Workers in India are suffering from heat stress more frequently, which lowers plant output values and drives up labor expenses¹¹, ultimately resulting in poor margins affecting the overall trading economy. However, it is presumed that reduced Arctic Sea ice cap will result in opening of new sea routes

⁵ Asad Zulfiqar, “Russia may have found buyers for its oil but aging tankers pose a new risk”(Mar. 26, 2023, 11:22 AM),<https://economictimes.indiatimes.com/industry/energy/oil-gas/russia-may-have-found-buyers-for-its-oil-but-aging-tankers-pose-a-new-risk/articleshow/99007088.cms>.

⁶ Akshit Sangomla , “Coastal crisis: It’s a race against time, and tide, for those living in Odisha’s coastal villages; here’s why” (Mar.19,2023),<https://www.downtoearth.org.in/news/climate-change/coastal-crisis-it-s-a-race-against-time-and-tide-for-those-living-in-odisha-s-coastal-villages-here-s-why-88054>.

⁷ Nair K. Shadananan , “Climate change impact on the coastal zones of India: Challenges in adaptation “, Nair K. Shadananan,https://www.commocean.org/sites/commocean.org/files/public/docs/abstracts/poster_shadananan_nair.pdf.

⁸ “Gross Domestic climate risk ranking of 2,600+ territories” released by Cross Dependency Initiative (XDI), <https://xdi.systems/gross-domestic-risk-dataset/?submissionGuid=71d15356-a4b0-482f-a5d8-a65e625025b8>.

⁹ “Climate change threatening tea sector globally: ITA”, (MAR 25, 2023, 17:19), <https://www.businessinsider.in/business/news/climate-change-threatening-tea-sector-globally-ita/articleshow/98995369.cms>.

¹⁰ “Heatwave takes toll on India's wheat crop, posing challenge to govt stockpiling”,(March 03,2023) , <https://www.livemint.com/news/heatwave-takes-toll-on-india-wheat-crop-posing-challenge-to-govt-stockpiling-11677834218517.html>.

¹¹ E. Somanathan, Rohini Somanathan, Anant Sudarshan, and Meenu Tewari, “The Impact of Temperature on Productivity and Labor Supply: Evidence from Indian Manufacturing” 129:6 Journal of Political Economy1797-1827(2021).

across Arctic Ocean by 2040 resulting in lower sailing distance and reducing the sailing cost¹². It is predicted that the effect of climate change on many sectors could lead to reduction by a tenth in everyone's income¹³. According to the World Bank Report, the overall loss in India's GDP in actual terms under the carbon-intensive scenario could be USD 1,178 billion by 2050¹⁴.

International Conventions to Mitigate The Environmental Hazards

To mitigate the environmental hazards in the Arctic waters, The International Maritime Organisation (IMO) adapted the Polar Code promoting a balance between the protection of ships and the environment. Adaptation of International Trading policies can be used to mitigate the environmental crisis. As per the forecast of International Energy Agency, it is predicted that 20% of global power generation will be from Wind and Solar PV, with due reduction of coal, natural gas, and oil because of varied factors one of which is Russia's invasion in Ukraine¹⁵.

The Convention on Biological Diversity, the 1982 United Nations Convention on the Law of the Sea, provides sovereign rights to exhaust one's own living or non-living resources. Convention on the Conservation of Migratory Species of Wild Animals, all these conventions establish the fact that "exhaustible natural resource" includes living as well as non-living organisms. The said concept is an evolutionary one¹⁶. Similarly, according to Article II of Convention on International Trade in Endangered Species of Wild Fauna and Flora ("CITES"), provides restrictions upon the parties to trade in the species as mentioned in Appendix I, II and III. The United Nations Framework Convention on Climate Change (UNFCCC) adopted in 1992.

Similarly in the year 1989 the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was adopted. However, none of these conventions or framework specifically relates to trade and environment regulation, though indirectly regulated by WTO provisions.

Role of World Trade Organization

Countries through their bilateral or multilateral agreements incorporates the provision related to environment protection which can be unfavorable to the non-signatory parties, raising to the conflict that can be resolved through the WTO machinery. The first of all was the adaptation of

¹² Dellink, R. et al., "International trade consequences of climate change", OECD Trade and Environment Working Papers, 2017/01, <http://dx.doi.org/10.1787/9f446180-en>.

¹³ Irwin, N., "Climate Change's Giant Impact on the Economy: 4 Key Issues. The New York Times" <https://www.nytimes.com/2019/01/17/upshot/how-to-think-about-the-costs-of-climate-change.html>.

¹⁴ Mani, M. et al, "South Asia's Hotspots: The Impact of Temperature and Precipitation Changes on Living Standards" South Asia Development Matters; Washington, DC: World Bank (2019).

¹⁵ International Energy Agency, "Renewables 2022 Analysis and forecast to 2027", <https://iea.blob.core.windows.net/assets/ada7af90-e280-46c4-a577-df2e4fb44254/Renewables2022.pdf>.

¹⁶ Aegean Sea Continental Shelf Case, (1978) I.C.J. Rep., p. 3.

The International Phylloxera Agreement of 1878, regulating the trade in grapevine¹⁷. NAFTA with the objective of promotion of sustainable development with the help of the trading partners i.e., USA, Canada and Mexico¹⁸, now the United States-Mexico-Canada (USMCA) Agreement, which has replaced NAFTA as of July 1, 2020. Studies have shown a direct correlation between signing FTAs and lower CO2 emissions, but only for FTAs that address environmental issues¹⁹.

WTO on the face of it does not deal with climate change, however, it promotes liberalization in Trade which is a result of multilateral cooperation. Due to Stockholm Declaration and the obligation under the Rio de Janeiro, the States have now become conscious regarding their trade policies affecting climate change. The WTO mechanism comes into the picture under two circumstances; *firstly*, when the trade barriers are reduced to mobilize technology, skill and human resource leading to climate protection and *secondly*, when the States use protectionist measures under the guise of environmental protection, which may be violative of non-discrimination obligation or the prohibition of quantitative restrictions. The said institution is an architecture for multilateral negotiations somehow providing the opportunity to States for protection of their Climate through trade restriction and one of such provision is Article XX.

Article XX contains a Chapeau clause which provides that the Contracting States should not be allowed to use the said measures as provided under Article XX (a) to (j) in an unjustifiable manner or under a disguised trade restriction. Any domestic policy may be deemed justifiable reason exempting the measure from the WTO provisions. In order to avail the protection under Article XX, the contracting parties have to establish the two-tier test i.e., firstly the measure must fall under one of the exceptions and secondly it must satisfy the requirement laid down under the chapeau²⁰.

Protection of Animal, Plant Life or Health

In order to obtain protection under Article XX(a), the Contracting Parties must prove the three-fold conditions:

Firstly: the policy objective behind such measure

Secondly: the necessity behind the implementation of such restrictive measures and

¹⁷ Castonguay, Stéphane. "Creating an Agricultural World Order: Regional Plant Protection Problems and International Phytopathology, 1878-1939." 84:1Agricultural History, 246-73(2010), <http://www.jstor.org/stable/40607622>.

¹⁸ "Supporting Free Trade and Environmental Protection", <https://2009-2017.state.gov/e/oes/eqt/trade/index.htm>.

¹⁹ Leila Baghdadi; Inmaculada Martínez-Zarzoso and Habib Zitouna, "Are RTA Agreements with Environmental Provisions Reducing Emissions?", 90Journal of International Economics378-390(2013).

²⁰ Brazil — Measures Affecting Imports of Retreaded Tyres, WT/DS332/19/Add.6.

Lastly, fulfilling the requirements of Chapeau under Article XX.

In European Communities – Measures Affecting Asbestos and Asbestos-Containing products²¹ the Appellate Body observed that Article XX(b) permits a member to "adopt and enforce" a measure which is required to save human life or health, even if that measure conflicts with another GATT 1994 provision. Drawing a distinction between Article III:4 AND XX(b), it was observed in regards to former that the restriction imposed based on the given measure will be necessary to assess the "competitive relationship in the marketplace", while in the latter it will be taken into consideration as to determine whether there was a sufficient basis for "adopting or enforcing" such measures²². Whether a measure is 'necessary' will depend upon the legal issue of whether there was no other alternative which was consistent with the provisions of GATT²³ and now WTO.

In the United States — Import prohibition of certain shrimp and shrimp products²⁴, as per the US Endangered Species Act of 1973 and Section 609 of US Public Law 101–102, enacted in 1989, in order to export the shrimps to the USA, the countries had to impose certain restrictions upon their fishermen to use "turtle excluder devices" in their fishing net. On the face of it, this seemed like a protectionist measure by the USA in order to safeguard the plant life however the Appellate body held it to be unjustifiable because the USA had provided technical assistance to countries in Western Hemisphere which the other four Asian countries were lacking. This draws an implication that environment protection alone cannot be a ground of trade restriction upon the members countries of WTO until and unless such environment protectionist measure is in consonance with Most favored nation treatment or National treatment., which protects WTO from losing its essence. Though the other general provisions of WTO take into consideration the causation effect on the restriction in the market place which draws our need to adopt the 'empirical effects test' in context with Article XX²⁵.

Conservation of exhaustible natural resources

Article XX(g) raises three important legal measures to determine the existence of disguised unjustifiable protectionism:

- (1) Whether the measure adopted pertains to exhaustible natural resources?
- (2) Whether there is a means and ends relation?

²¹ WT/DS135/AB/R.

²² Ibid para 115.

²³ Thailand – Restrictions on Importation of and Internal Taxes on Cigarettes, BISD 37S/200, para. 75.

²⁴ WT/DS58/AB/R.

²⁵ China – Measures Related to the Exportation of Rare Earths, Tungsten and Molybdenum, WT/DS431/17.

(3) Whether such measures are in conjunction to that of domestic production or consumption?

Further to observe protectionism under Article XX(g), it is important to establish a relationship between the State Policy and the legitimacy of the conservation of exhaustible natural resources. In the case of the United States – Gasoline²⁶, the Appellate Body observed that there was a relation between the baseline establishment rules and the conservation of clean air in the United States. The interpretation and review adopted by the Appellate body under Article XX(b) and (g) is more of a stricter and narrower one, in order to eschew the same, environmental protection can be availed on the ground of public morals as provided under Article XX(a), which is much wider as compared to its counterparts. The protection of animals was regarded as a moral concern in the EC – Seal Products²⁷. The contracting parties have the liberty to determine the level of protection which must be in consonance with the moral concern²⁸. In the case of China-Raw Material²⁹, it was observed that quotas on minerals were not a total restriction on export but it still had a strong restrictive effect, though China failed to establish that the said quotas will lead to a reduction in pollution in the short and long term to protect the health of its people.

Article XX(j)

In the case of India – Certain Measures Relating to Solar Cells and Solar Modules³⁰ the panel report observed that when a member's supply of a product is insufficient to meet demand, it is possible for that member to impose temporary restrictions on the sale of that product as a necessary step for the distribution of those products within its borders. Such restrictions "could be enforced and given effect through prohibitions on both the exportation and the import of the concerned product by private traders. Article XX(j) considers "short supply" conditions that may persist over time but aren't anticipated to last eternally³¹. In other words, a State can impose the trade restriction only when there is a short supply of its natural resources.

Apart from this provision, the WTO has taken steps to regulate the trade and environment, one such is the 2001 Doha Ministerial Declaration where members were directed to negotiate the reduction or elimination of tariff and non-tariff barriers to environmental goods and services in order to achieve sustainable development by establishing a win-win situation for trade, the environment, and development. Further on 11th Ministerial Conference in December 2017, a Ministerial Statement was issued recognizing the need “rationalization and phase out of inefficient fossil fuel subsidies that encourage wasteful consumption” which was later revised in the year

²⁶ WT/DS2/AB/R, p. 19.

²⁷ WT/DS401/17/Add.7.

²⁸ United States — Measures Affecting the Cross-Border Supply of Gambling and Betting Services, WT/DS285/26.

²⁹ WT/DS394/20.

³⁰ WT/DS456/20, Panel Report, fn 566 to para. 7.230.

³¹ Ibid.

2022³² including UN Sustainable Development Goal 12 of the 2030 Agenda, the G20, the G7, Asia-Pacific Economic Cooperation, the Agreement on Climate Change, Trade and Sustainability, the V20 Group of Finance Ministers from climate-vulnerable economies and the Paris Agreement on Climate Change.

Illegal Trade Respect Of Hazardous And Environment Sensitive Goods

According to the United Nations Office on Drugs and Crime (UNODC) there has been an increase in number of transnational environment crime against the endangered and protected species³³. Illegal wildlife trading is used as a means to fulfill the ever-growing demand amongst consumers like that of skin of donkeys popularly known as ejiao in China which is used to enhance fertility as a result donkey theft is very much prevalent because biologically their mass breeding is impossible³⁴.

However illegal trade does not limit itself to wildlife or timber but extends to chemical substances which are hazardous for our climate. Illegal fishing, illegal trade in controlled chemicals, and illegal disposal of hazardous waste have a combined global value of about USD 30-70 billion per year, which is equivalent to about 10-20% of the value of illegal narcotics trade or 15-30% of the value of counterfeit goods trade³⁵.

As per the Montreal Protocol on Ozone Depleting substances, developing countries are permitted to consume or produce CFCs and are given a phase out period of 10 years in order to meet their domestic needs³⁶. However, there are has been a wide scale consumption of ODS amongst non-Article 5 parties as compared to Article 5 parties³⁷. Due to this there are countries where production of ODS is more which is used in an illegal trade to fulfill the demand of the scarce ODS countries where consumption is high. In order to overcome that in 1997 import and export licensing

³² December 2021 - WT/MIN (21)/9/Rev.1, June 2022- WT/MIN (21)/9/Rev.2

³³Jacob Phelps (lead author) Steven Broad, Jennifer Mailley , “ILLEGAL WILDLIFE TRADE AND CLIMATE CHANGE Joining the dots”, https://www.unodc.org/documents/data-and-analysis/wildlife/llegal_wildlife_trade_and_climate_change_2022.pdf.

³⁴ Byrachel Nuwer, “How the global donkey skin trade risks spreading deadly diseases”,(Nov. 14, 2022), <https://www.nationalgeographic.com/animals/article/how-the-global-donkey-skin-trade-risks-spreading-deadly-diseases?loggedin=true&rnd=1679943630262>.

³⁵ OECD (2012), Illegal Trade in Environmentally Sensitive Goods, OECD Trade Policy Studies, OECD Publishing.

³⁶“The Montreal Protocol on Substances that Deplete the Ozone Layer”, Art. 5, UNEP, <https://ozone.unep.org/treaties/montreal-protocol/articles/article-5-special-situation-developing-countries>.

³⁷“UNEP 1998 Assessment Report of the technology and economic assessment panel” chrome-extension://efaidnbmninnibpcjpcglclefindmkaj/<https://ozone.unep.org/sites/default/files/2019-05/TEAPAS98.pdf>.

framework was adapted³⁸. Despite such measures there has been inconsistencies in the Montreal Protocol one such is lack of reporting of the imports of ODS by the countries³⁹.

Further waste dumping and trading is very common. According to INTERPOL much of the e-waste is dumped in developing countries in false pretense and diverted to the black market in order to prevent the developed nations from the recycling cost⁴⁰. Such an illegal trade will be affecting the land utilization pattern of the developing nations, effecting soil degradation, burning of waste landfills causing air pollution, contamination of water and most importantly causing health hazards to the poorer section of the society.

In order to mitigate this practice countries like India have undertaken construction and demolition waste management strategies, whose market size is presumed to grow by a value of USD 158.44 billion by 2029⁴¹. However, the economic and political conditions prevailing world wide have made it difficult to develop an infrastructure for the same. Further with the liberalization of the mineral extraction policy there has been an increase in the foreign direct investment. The Transnational Corporations invest in “pollution heaven” because the environment norms in the host nations are laxer. And even if the norms are stringent, the developing nations are forced to lower their environmental norms so as to attract FDI which is essential for the economic development and further long-term developmental projects. Apart from this there are also the instances of illicit trading of precious metals as well. Regarding resource-based industries according to Global Financial Integrity, approximately 99 million to 227 million barrels of oil are stolen from pipelines or offshore platforms which results into loss of revenues⁴². Further illegal mining of precious metal is very much prevalent in the world, as it holds a million-dollar value globally. In order to curb the aforesaid activities, it is important for the States to develop political, economic and institutional reforms with the aim of promoting sustainable economic equity.

Future Implications Of New Commercial Ventures, Economic Policies And Investments

³⁸ Klaus Töpfer, United Nations Under Secretary General and Executive Director, UNEP “Illegal trade in ozone depleting substances: is there a hole in Montreal protocol?”, <https://www.greencustoms.org/sites/default/files/public/files/3617-e-oansupplement6IllegalTrade.pdf>.

³⁹ EIA briefing to the 38th meeting of the open-ended working group of the parties to the Montreal Protocol”, (July 18, 2016), Vienna, Austria, chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/<https://eia-international.org/wp-content/uploads/EIA-Update-on-the-Illegal-Trade-in-Ozone-Depleting-Substances-FINAL.pdf>.

⁴⁰ John Vidal, “Toxic E-Waste Dumped in Poor Nations, Says United Nations”, <https://ourworld.unu.edu/en/toxic-e-waste-dumped-in-poor-nations-says-united-nations>.

⁴¹ Construction & Demolition Waste Market Expands to Cross USD 158 billion With the CAGR of 3.74% by 2029 | BlueWeave Consulting, <https://www.globenewswire.com/en/news-release/2023/03/06/2621386/0/en/Construction-Demolition-Waste-Market-Expands-to-Cross-USD-158-billion-With-the-CAGR-of-3-74-by-2029-BlueWeave-Consulting.html>.

⁴² Illicit Trade in Petroleum, Transnational Alliance to combat illicit trade, <https://www.tracit.org/petroleum.html>.

Natural resources are the wealth of the nation. Kirk Hamilton in his book *A 2006 World Bank publication*, where is the Wealth of Nations? Measuring Capital for the 21st Century explains the importance of natural resources in three ways⁴³:

1. In the form of subsistence mostly prevalent in poor countries,
2. commercial natural resources to generate wealth, and
3. as a source of environmental service.

It is pertinent to note that natural resources are used directly as a form of input for production activity which is used for domestic consumption need and the surplus is used for the purpose of export. This correlation implies regulatory policies which will lead to better productivity and increase cross border trade. For instance, the State of Tamil Nadu in compliance to WHO's 'One Health' initiative has formulated the organic farming policy in order to improve soil health⁴⁴. This will not only lead to environmental safeguard but will also increase India's export share in organic crops.

The availability of natural resources is not ubiquitous and are unevenly distributed. The countries with rich minerals are generally poor as compared to the developed nations which deals with advanced production activity. This creates a gap between the rich and poor countries which draws our attention towards the need for regulatory framework or effective economic policies, which will only be implemented through institutions. However, the strength and sustainability of these policies will depend only when the political institutions are strong⁴⁵.

These economic policies and Institutional framework must interlink sustainable development with that to financial development in order to aid in the reduction and elimination of all associated costs to promote trade, allocate savings and resources to the most appropriate investment projects, and diversify risk⁴⁶. Strong Institutions require regular checks and balances which can be done by an effective legislation, Constitutional framework or Judicial Activism.

Many resources based developing nations lacks strong institutional governance and offer flexible tax regimes in order to attract technologies through foreign MNCs which in turn exploit their resources that promotes the economic development of their home countries rather than the host

⁴³ Kirk Hamilton, "Where is the Wealth of Nations?", United Nations University (2006). <https://www.wider.unu.edu/publication/where-wealth-nations>.

⁴⁴ PTI, Chennai, "Tamil Nadu unveils organic farming policy with focus on promoting chemical-free agriculture", (March 15, 2023 09:50 Am), <https://indianexpress.com/article/cities/chennai/tamil-nadu-unveils-organic-farming-policy-promoting-chemical-free-agriculture-8497760/>.

⁴⁵ Abdollah Khoshnoodi, Majid Dashtban Farouji, Jakob de Haan, "The effect of natural resources rents on institutional and policy reform: New evidence", 78Resources Policy (2022), <https://doi.org/10.1016/j.resourpol.2022.102856>.

⁴⁶ Muzzammil Hussain, Zhiwei Ye, Adnan Bashir, Naveed Iqbal Chaudhry, Yingjun Zhao, "A nexus of natural resource rents, institutional quality, human capital, and financial development in resource-rich high-income economies", 74Resources Policy (2021), <https://doi.org/10.1016/j.resourpol.2021.102259>.

countries. This demands the resourced based countries to rather than adapting a rent to riches strategy as it will be impossible to achieve the debts in a short-term investment project, to rather opt for financing in their own innovative projects that could lead to greater productivity. With this setback their week strategic policies and institutional framework as well as lack of financial capacity, their end goal will be economic development rather than sustainable economic development. This will require investments from the production-based economies or market economies to promote climate policies in developing or least developing nations.

However, Foreign investments can lead to both positive and negative impact upon the trade and environment of any country. Investment in secondary sector can lead to promotion of the sound environmental technology whereas an investment in primary sector specially oil extraction can lead to environmental degradation. Though the stakes are high, one must adopt the stricter trade and investment policies so as to prevent the earth from and further destruction. Over investment can also be harmful for the global economy. In order to safeguard against it and achieve sustainability the real value of environmental depletion must not be greater than the real value of net man-made capital investment⁴⁷.

The other negative implication is to switch from fossil fuels to clean energy resource requires heavy investments which could not be afforded by the developing or least developed economies. It will be important for the countries to reduce coal subsidies and promote Net Zero transformation, because off-budget(consumer) subsidies are frequently concealed, whereas on-budget(producer) subsidies are easier to spot⁴⁸.

So, to transition the gap between the two, according to Steve Varley, EY Global Vice Chair, in order to maintain the Net Zero pathway, \$2.1 trillion will be needed yearly between 2022 and 2025, and twice that amount by 2030, which was taken as one of the agenda for G20 Summit⁴⁹. However due to current inflation and rise in gas prices it will be difficult for countries like India to achieve the said objective where the domestic market is very much reliant on coal consumption. This uncertainty will be a hurdle to achieve the objective of Paris Agreement⁵⁰ because of the increase in the risk for the investors to invest in the long-term projects.

In order to protect the investors specially in the uncertain market of energy resources, Bilateral and Multilateral Investment Treaties comes into picture, like the North American Free Trade

⁴⁷ Joa Nicolaisen, Andrew Dean and Peter Hoeller, "Economics and the Environment: A Survey of Issues and Policy Options", OECD Economic Studies No. 16. Spring (1991).

⁴⁸ "Analysing Energy Subsidies in the Countries of Eastern Europe, Caucasus and Central Asia", OECD, https://www.oecd.org/env/outreach/energy_subsidies.pdf.

⁴⁹ "COP27- five key takeaways from the UN climate talks", Economist Impact, (Nov. 18, 2022) , <https://impact.economist.com/sustainability/five-key-takeaways-cop27>; see also, <https://unfccc.int/cop27>.

⁵⁰ <https://unfccc.int/process-and-meetings/the-paris-agreement>.

Agreement (NAFTA) and Energy Charter Treaty, containing a separate chapter on protection of Investors against expropriation, the fair and equitable treatment standard of the Most Favored Nation Treatment. Taking all of this in consideration it is noteworthy to accept the hard reality which the world is facing after Ukraine crisis, where the energy and food prices have soared which slowed down the economical process of the developing countries who now are suffering from fiscal deficit to recover from the debt crisis let alone will be unable to invest in the long-term sustainable projects⁵¹.

Sustainable Entrepreneurship

The modern concept of sustainability can be achieved through trading enterprises with a vision to promote environment protection on one hand and profit maximization on the other. There is no universal definition of what constitutes entrepreneurship. However, some scholars have tried to define the same based on the “Trait” and “Behavioral” approach of an organization⁵² while others took into consideration the creative domain of an entrepreneurship which includes identification and creation of opportunities that leads to the emergence and growth of an organisation, as well as industry, wealth creation, and organizational transformation⁵³. The other definition which can be correlated with environment is that entrepreneurship is means on creating new resources or combining various resources which impacts the market⁵⁴.

Now coming to the other aspect, according to the Brundtland Report (1987) “Sustainable development seeks to meet the needs and aspirations of the present without compromising the ability to meet those of the future”⁵⁵. Sustainable development is a framework for integrating environmental policies and development strategies. The whole concept revolves around equitable utilization and distribution of resources. With the advent of modernization, the concept has evolved a lot. The Sustainability is now interlinked with the social, political, and economic development⁵⁶.

⁵¹ “Trade and Development Report 2022”, UNCTAD, <https://unctad.org/tdr2022>

⁵² Gartner W.B., “Who is the entrepreneur? Is the wrong question?” 12:4 American Journal of Small Business, 11-31(1988).

⁵³ Brush C.G., Duhaime I.M., Gartner W.B., Stewart A., Katz J.A., Hitt M.A., Alvarez S.A., Meyer G.D. and Venkataraman S., “Doctoral Education in the field of entrepreneurship,” 29(3) Journal of Management, 309-331(2003).

⁵⁴ Gupta, R., “Entrepreneurship, National Culture & Firm Growth,” 8 Theoretical Economics Letters, 1401-1411(2018).

⁵⁵ Report of the World Commission on “Environment and Development: Our Common Future”, <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>.

⁵⁶ Fleurbaey M., S. Kartha, S. Bolwig, Y. L. Chee, Y. Chen, E. Corbera, F. Lecocq, W. Lutz, M. S. Muylaert, R. B. Norgaard, C. Okereke, and A. D. Sagar, Sustainable Development and Equity, “In: Climate Change 2014: Mitigation of Climate Change”, Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (2014).

John Elkington coined the term Triple-Bottom-Line (TBL or 3BL) in 1994 later 3ps in 2004, i.e., people, planet and profit that is the focal point of every corporation. The said concept promotes the Corporate Social Responsibility towards the environment, society and economy⁵⁷.

According to Abrahamsson (2007)⁵⁸ the Concept of “Sustainopreneurship” involves three core elements:

1. Seeking, discovering, and/or developing innovations to address sustainability-related issues,
2. Through innovative organizing, solutions can be brought to market.
3. Increasing the sustainability value of life support systems

Interlinking the concept of sustainable entrepreneurs would now lead to a conclusion i.e.,

Firstly, creation of an entity, corporation of any kind

Secondly, utilization of factors of production mainly human capital and natural resources

Thirdly, responsibility towards the society i.e., innovation of technology which would preserve the resources for future generation,

Fourthly, responsibility towards the environment i.e., equitable distribution of resources limiting resource wastage and preventing environmental hazards, and

Lastly, promoting profit maximization leading to the economic development.

Few sustainable startups like Athur Energy have evolved automobile sector by introducing AI and IOT to reduce air pollution. Similarly, the startup Just Organik aims to create sustainable wealth for the farmers.

The sustainable entrepreneurship specially for startups can be possible only through governmental intervention. One such instance is the Startup India initiative launched on 16th January 2016 by the Ministry of State for Commerce and Industry which has made incorporation of startups quite an easy process. Various incentives like the tax exemption, the Single Use Plastic Grand Challenge, Biotechnology Industry Partnership Program to develop futuristic technologies, Sustainable Finance Scheme and many more have relieved startups from the initial stage burden to encourage them to take a step towards the sustainable environmental development.

Conclusion

The global trade regime has resulted in overlapping of various multilateral environment agreements (MEA) and regional trade agreements (RTA) leading to trade discrimination. The WTO which deals with the economic standards fails to take into consideration the environmental damage. The instance where WTO rules that the USA Clean Act must be applied equally to the

⁵⁷ Majid, Izaidin & Koe, Wei-Loon, “Sustainable Entrepreneurship (SE): A Revised Model Based on Triple Bottom Line (TBL)”, International Journal of Academic Research in Business and Social Sciences (2012).

⁵⁸ Abrahamsson, Anders, “Sustainopreneurship - Business with a Cause: Conceptualizing Entrepreneurship for Sustainability” (2007).

foreign and domestic nationals dealing in like products, raises a concern so as to the difficulty in adapting trade policies which can be implemented universally as climate is an evolving phenomenon. Though the WTO Preamble strikes a balance between trade and sustainable development in order to achieve a dual goal: on the one hand, to raise the standard of living by ensuring full employment and real income growth, and on the other, to protect the environment, but it lacks stringency in environment policies which are the driving policies of trade and environment. The lack of international institutional set up and nomenclature on trade and environment imposes upon the States a “moral” obligation to take up step towards the progress in policy coherence promoting economic interest with the shovel of environment regulation. The agreement reached at COP27 to establish a loss and damage fund for the most vulnerable countries as well as to curb carbon emissions demonstrates that progress is possible with sufficient political will. India is a prime example which has undertaken to adopt regulations and framework to promote the economic, social, environmental and national interest, one such instance is the G20 presidency, through which India encapsulates the idea of *Vasudhaiva Kutumbakam* or ‘One Earth-One Family-One Future’, conveying its sustainable holistic approach around the world.