

CORPORATE ENVIRONMENTALISM: A REVIEW ON EVOLUTION OF BUSINESS PERCEPTIONS OVER ECOLOGICAL RESOURCES

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Abstract: Millions of years had been taken in the process of human evolution, to receive the intelligence level for creations, inventions and discoveries. Trade took almost two millennia, to settle itself comfortably, in the human environment, from the beginning of early civilizations. Exceptionally, computing technology hadn't faced such difficulties, which integrated itself as the part of human activities, within 60 years. Business activities evolved during various times, along with ecological changes. The consumption and utilization patterns of citizens, tax collection necessities to the treasury and military aspirations of rulers transformed the perceptions of business community towards the natural ecosystems. This article reviews those trade-centred exploitation mechanisms of ecological resources which were carried out, in the previous centuries, to make a judicial conclusion for adapting sustainable practices in day-to-day human activities of the 21st century.

Keywords: Ecosystems, Trade Activities, Ecological Degradation, Business Perceptions

Introduction

Within the last fifty years, corporate world has seen tremendous changes, among its various stakeholders. Diverse supplier opportunities, innovative technologies from intensive research and development activities, quality-seeking consumers and flexible regulations all over the globe, due to positive orientation towards trade welcomed this millennium, in a special way. In such warm welcome, business community identified the need for 'pro-environmentalist' business activities (Berry & Rondinelli, 1998).

Principle 12 of Rio Declaration on Environment and Development states that, "Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade" (United Nations, 1992). This principle alone explains that environmental policy would come under the ambit of global trade than vice-versa i.e., the more environmental restrictions on trade, the more justifications should be provided by the concerned state, to the global community.

Ecosystems are complex with the non-linear flows, among different species, by themselves. Among various systems, organizations form a minor context of a big picture (Pogutz, Micale, & Winn, 2011). In the European context alone, there are high levels of industrialization, consumptions of resources, especially energy, less landmass for wildlife and concerns from

political parties (Dower, 2011). Nowadays, business decisions are getting major inclination towards environmentalism, by being an 'active' participator in any environmental regulatory process. Because, businesses consume ecological resources for their production, hold their accountability to the natural ecosystems, induce new technologies and push to the society and possess sufficient knowledge for sustainable issues, in their complexities. (Hoffman, 2004).

In absolute terms, there is no universal 'legally binding institution or mechanism' for adjudicating global ecological damages. Environmental offences and their jurisdiction patterns vary for different states. In Canada and Germany, strict liability regimes prevail, for corporations. In Spain, convictions happen only if there is a serious intention or negligence, during the offence. In Australia, the directors and managers can be vindicated, only if they prove their 'all due diligence' (Ong, 2001).

Therefore, this article intends to provide a broad historical framework, by how trade practices reached these legal and legislative mechanisms. The framework divides the timeline and shows how trade activities and ecological resources intertwined to satisfy the needs of peasants or citizens and the ruling community. Each phase of the timeline says different movements of business factors, with respect to their ecosystem but across the political boundaries.

Literature Review

Sustainable development broadly holds three dimensions: Economic Growth, Social Development and Environmental Protection (Salamat, 2016). So, the roots of corporate environmentalism lie under the 'sustainable development', for any corporation. The construct itself, could be defined as:

"Corporate environmentalism is the organization-wide recognition of the legitimacy and importance of the biophysical environment in the formulation of organization strategy, and the integration of environmental issues into the strategic planning process" (Banerjee, 2002).

The construct 'corporate environmentalism' possesses two dimensions: First dimension is *environmental orientation* which describes how firms incline and handle with the environmental issues, what they face. Second is *environmental strategy* by how business firms integrate the ecological issues with the business strategy, itself. The same research work provided broad industrial framework which developed public concern, regulatory forces and competitive advantage hold high impact on the firm's environmental marketing strategy (Banerjee, Iyer, & Kashyap, 2003). While improving the same research, it has been identified through confirmatory factor analysis that corporate environmentalism could be under four different dimensions: *Internal Environmental Orientation, External Environmental*

Orientation, Corporate Environmental Strategy and Marketing Environmental Strategy. Of other variables, Competitive Advantage shows strong positive relationship with the construct 'corporate environmentalism', i.e., to becoming 'green' leader in an industry, firms adopt pro-environmental approach (Saleem, et al., 2020).

Based on the three approaches of (Banerjee, 2002), top management may take six identity responses to the corporate environmentalism: *Pragmatist, Techno-centrist, Traditionalist, Holist, Observer and Ecopreneur* (Cherrier, Russell, & Fielding, 2012). An empirical research outcome shows that firms may be more compliance-oriented in nature, not to avoid penalties and public upheavals, but to permeate the regulatory processes (Decker, 2003). Another empirical research work, which views corporates through 'Natural Resource Management' lenses, show the finding that the firms which actively pursue corporate environmentalism hold superior brand value (Rahman, Rodríguez-Serrano, & Faroque, 2021).

On theorizing Environmental Contestation Approach, there are three propositions which drive a firm's behaviour in an industry: Co-creation of conceptions of control (p.50), Competition on the conceptions of control and Inter-firm conflicts over the conceptions of control, which provide the projections for the long-term corporate environmentalism (Pulver, 2007).

The motivations and mechanisms for Corporate Environmentalism acts in two ways: *Direct* or *Indirect*. Direct Corporate Environmentalism includes public information disclosures and the unilateral initiatives taken by the corporates, to pursue environmental stewardship. Indirect Corporate Environmentalism happens when the appropriate firm is pressurized by resource holders, conditionalities or the environmental standards (Chrun, Dolsak, & Prakash, 2016).

Based on these frameworks, the degree of assessment on environmental inclusion in firm's corporate strategy or in organizational culture (p.631), centralize changes via technology and management systems (Jermier, Forbes, Benn, & Orsato, 2006). The cultural changes vary regionally, which is shown that the US firms are more voluntary towards the 'pro-activist' environmental approach, than the German companies who are conservative, through regulatory forces (Mueller, et al., 2011).

Research Design

The research design is exploratory, in nature. Through the text review of various research articles of the previous archives, this paper presents how do the perspectives of traders or corporates, evolved in course of time, over their activities towards environment. The secondary data were collected from the various online websites' (*Google Scholar, Ebscohost*) documents

and research articles.

Chronological Shifts in Business Perceptions

Phase 1 – Perceptions under Earlier Regional Kingdoms (3500 BC – 500 CE)

In early settlements, trade wasn't necessary in human livelihood, because agriculture itself (p.117), compensated the needs of the community. When river-based civilizations emerged, crop cultivation happened in a large-scale manner, through irrigation techniques. *Uruk*, the first city of the world in Ancient Mesopotamia (p.150), had started to trade with other kingdoms (Wiesner-Hanks, et al., 2018). These trade activities were primitive and traders acted as 'exchangers', in a region.

In Ancient Egypt, geography made worse conditions for the civilization. There was no rainfall because of the downward air movements, in the high-pressure desert region. Even it happens due to local upward air currents, being an agricultural land, Egypt had to face annual floods from the Nile. Wheat and Barley were cultivated, primarily (Rolfe, 1917). There were changes in predator-prey interactions in Nile and diverse animal community had been diminished (Yeakel, et al., 2014). Pharaohs were interested in foreign trade and imported wine, olive oil for royal uses and materials for ship building (Butzer, 2012).

In Ancient Greece, the exports were olive oil, wine, nuts, cloth and metal weapons (p.355) and the coins were used for the transactions (Wiesner-Hanks, et al., 2018) (Post, 2017). Several researchers argue that the main drivers for the degradation of Greek landscape were cultivation, grazing, wood-cutting, shipbuilding and fire. Soil erosion happened, during intensive human settlements which cannot align with the topography of Greece. Farmers and ruling community aspired for 'self-sufficiency' alone, as there was no need for higher productivity (Papanastasis, Arianoutsou, & Papanastasis, 2010).

In Ancient India, religions played a major role on forming the 'norms and duties' (p.233) of the society (Wiesner-Hanks, et al., 2018). The 'nature-worship' (*reciting mantras of animals, mountains, rivers and trees*) centralized the importance of biodiversity in everyone's life (Dr Renu Tanwar, 2016). In Upanishadic philosophy, it was mentioned that all beings are from the source '*Atma*' (*Universal Soul*). Hence, the nature and humans were equivalent, in any perspective (Chatterjee M. , 2016). Jainism had forbidden killing any creature, by any means. While, Buddhism stated killing any creature was forbidden, until it was conditional or necessary (Sharma, Aggarwal, & Kumar, 2014). South India remained as the centre of maritime trade (p.255) and the sold items were topaz, coral, crude glass, copper and tin (Wiesner-Hanks, et al., 2018). In North India, separate officers were appointed for agriculture

growth and promotion during Mauryan period and further stresses were imposed on agricultural productivity during Gupta period (Dr Benudhar Patra, 2016).

In Ancient China, Shang dynasty organized labour and craftsman for the bronze metal-works (p.273). Following Zhou dynasty, iron technology developed (p.280) and traders traded furs, hems, copper, salt and horses (Wiesner-Hanks, et al., 2018). Unlike Western philosophy, Chinese philosophy seeks harmony between nature and mankind (Stahel, 2020). Fisheries such as cowries and spiral shells were acquired by trade, during Western Zhou empire. In Eastern Zhou empire, the riches traded agricultural outputs such as grain, timber, livestock and textiles, metal tools (Lander, 2015).

In Ancient Rome, politics and religion played a major role, on shaping the Mediterranean trade. Emperors fed Rome with free oil and wine from Italy and Southern Gaul, wheat from Egypt and grain from Britain and Belgium (p.406 & 409), for bread (Wiesner-Hanks, et al., 2018). Ecological conditions were poor i.e., in summer, Rome faced gastroenteric ailments and in winter, the surge of malaria. Climatic conditions varied in every corner of the empire such as forest fires, consequent failure of rainfall in the farmlands and at the Nile Delta etc. Deforestation happened and new farms were emerged to feed the empire (Harper, 2016). After the advent of Christianity, the religious and socio-economic structures of Roman empire changed tremendously. So, in this long phase, the perceptions of the above kingdoms were:

- 1) Ecological resources (agricultural outputs or textiles, metals, fisheries, gems) could be used; but couldn't be exploited, except, from the orders of the monarchs.
- 2) Theological principles and trade activities were intertwined, in nature.
- 3) Nature or Ecology itself, were considered as the 'embodiment of Gods/Goddesses'.
- 4) There was less formal knowledge, regarding human interventions, in an ecosystem. Instead, people believed in the 'divine' interventions in an ecosystem. *E.g.*: Famines, Plague and Invasions.

Phase 2 – Perceptions of Medieval Global Merchants (500 CE – 1453 CE)

The fall of Western Roman empire marked the beginning of new era, which faced the ideological tussles between the faiths of Christianity and Islam. The tribal groups such as Huns, Alans, Alemani and Franks destructed the Eastern empire and by the end of 7th century, Arabs shrank the Western empire as a 'regional' power (Marx, Haunschild, & Bornmann, 2018). After the emergence of Islam, the Muslim world started to dominate Arabian Peninsula, West Asia, Spain and the Northern Africa. The Crusades were an attempt to change the geo-political and religious scenarios, however failed (Dussel, 2000).

In its initial days, Christianity spread all over the Roman provinces, wherever the disciples went. The faithful members spread the preaching of Jesus Christ (p.416 & 417), such as inconsistency of wealth, heavenly kingdom and the parables for peaceful livelihood. In Constantinople, the exports were glassware, mosaics, gold coins, silk cloth and carpets and the imports were spices (p.503), and jewellery from Asia and China (Wiesner-Hanks, et al., 2018). The Early Church principle such as '*The Lord was the real owner of everything*' was changed, in course of time. Papacy was considered to be the 'representation' of God (p.35), and acclaimed the importance of 'private' property (Landes, 1998).

Islamic merchants were more 'profit-oriented' than Christian or Jewish counter-parts, along with the religious value systems. Cairo became major entrepot and the Caliphates imported Asian spices, dyes and drugs and Chinese silk and porcelains. Citrus fruits made their way to Muslim Spain from India (p.578 & 579), and Arabs introduced bank cheques, bill of exchanges and the idea of 'stocks' in new ventures (Foster N. H., 2006) (Wiesner-Hanks, et al., 2018). Islamic commercial laws valued contracts, partnerships but without strong legal institutions. The same principles of 'morality' applied to all circumstances (Foster N. H., 2006). Islamic scholars believed that the universe was the creation of God and the nature could be witnessed as the divine action of the God. Also, they emphasized human 'stewardship', towards the ecological systems (Saniotis, 2012).

In various urban areas, the central plot was for mosque, from where knowledge dissipates. Around mosques, there were perfume merchants, candle-sellers and book stores with the relevant religious contents (Abu-Lughod, 1987). Scholars claimed that Iraq as the central part of the world and medieval Muslims perceived temperate climate, as beneficial for psychological and physiological activities (Olsson, 2014).

There were few Indian tribes settled in Arabia, themselves. *E.g.*: Jats, Asawah, Siyabjah and Ahamira. Similarly, Early Muslim settlements in India were located in Malabar, Ceylon and Gujarat (Nizami, 1994). China received the Christian beliefs, in the form of Nestorian missionaries. In 781 CE, *Chang'an* erected a pillar, for commemorating 150th Nestorian missionary year celebrations, by adopting several principles from Buddhism and Taoism. Islamic conquests reached Central Asia by 711 CE and remained there, until under the support of Mongols (Foltz, 2000).

Meanwhile, medieval North India declined themselves from the long-distance trade. There were few religious fears and bans, because of preserving the ideologies of Brahmanas, from the foreign religious thoughts. However, the South Indian merchants carried their religious

thoughts, along with their products, especially to Indonesia and Cambodia. China imported large amounts of spices and medicinal herbs from India. In scriptures, it was mentioned that there were the highest number of Indian monks, under the patronage of Chinese rulers, in the beginning of the 11th century (Chandra, 2007).

In medieval Europe, the farming was at subsistence level (Ritchie & Braby, 2011). The new plough which increased the tilting power changed the attitude of man and ecology. So, the land was distributed, according to the level of productivity, by the concerned peasants (White, 1967). Inventions after inventions such as waterwheels, eyeglasses, clocks, printing machines and gunpowder usage mechanisms gave an economic impetus to the European rulers. The Church demarcated the boundaries of the knowledge in any dimension and could proclaim 'divine' interpretations, if necessary (Landes, 1998).

The global shifts were slowed down, due to two important reasons. They were: *Mongol Invasions* and *The Black Death*. In 13th century, Chinghiz Khan triggered his invasions from Transoxiana and Iran and invaded till Austria (Roberts & Westad, 2007). Along with these invasions, *Yersinia Pestis*, a pathogen created the pandemic due to which England lost around 1.4 million and Florence lost (p.893), around two-thirds of their population (Wiesner-Hanks, et al., 2018). Around these 900 years, the perceptions of merchants were that:

- 1) The outcome of trade was 'profit', that happened for the sake of elites (includes clergy).
- 2) Ecology and its resources were made subordinate to humankind (p.58), (Landes, 1998).
- 3) Canon laws and Commercial laws were separated; the former was interpreted and instructed by clergy and the latter was co-created by the rulers, clergy and merchants.
- 4) God and Nature became two different entities and humans were assumed to be 'custodians' of the nature.
- 5) Inventions, which supported the promotion of religious scriptures, were patronized.
- 6) Ecological disasters were still considered as the 'wrath' of Gods/Goddesses.

Phase 3 – Perceptions of Imperialists (1453 CE – 1945 CE)

Imperialism embarked its journey, from the 15th century, due to the: Fall of Constantinople, into the hands of Ottomans (p.982), Renaissance, that occurred in the Western Europe (p.914) and necessities and incentives, arisen to begin ambitious naval expeditions (p.983), (Wiesner-Hanks, et al., 2018). In one of the website documents, Prof. Joseph McQuade mentioned an imperialist's intention towards the ecological resources as (McQuade, 2019) :

“Colonialists exploited what they considered to be an ‘unending frontier’, at the service of early modern state-making and capitalist development”.

In 16th century, European nations, especially those had borderlines with the Atlantic Ocean had their unique geographical competitive advantage, over other landlocked nations. Meanwhile, the population of European cities increased and by the end of 18th century, Amsterdam had 200,000 residents and between 1500 CE – 1700 CE, Paris had around 500,000 residents and London had 700,000 inhabitants (Roberts & Westad, 2007).

There was ever-growing greed for gold and silver; but resources that were abundant in colonies, also extracted and utilized by the imperialists. *E.g.*: Ivory and Timber. For example, Spanish authorities consumed forests, near to the silver mines, for the extraction purposes (Wood, 2015). Cotton was cultivated in Egypt and rubber was planted and extracted from Congo. So, English troops controlled their territories, for a long time (Dr Meena Bharadvaja). In the context of the US, during their expansion from the West to East, the settlers changed the course of river patterns, for their inland transportation links and other usages. They devastated Great Lakes region, by mining and deforestation (Whyte, 2018). The land expropriation, by the settlers, was justified because of the misconception, namely: *Terra Nullis* i.e., unused land by the indigenous people (Cruz, 2018).

In Africa, one of the reasons, imperialists controlled their territories, was the additional food production and spices, to feed their ever-growing urban population. Imperialists discouraged the production of goods for local population and promoted exports. So, it made many African tribes to give up their food cultivation and led to ‘food shortage’ (Ocheni & Nwankwo, 2012). Kenya was declared as a ‘protectorate’ by the British, in 1894 CE, after the Anglo-German Agreement (1886 CE) and other Inter-European treaties. Indigenous leaders were replaced by the white settlers and the resources were highly extracted (Ndege, 2009) (Heldring & Robinson, 2013). In Madagascar, a French colony, 70% of primary forests were degraded, during 1895-1925. French involved in the development of export crops like coffee and cloves (Randrup, 2010). ‘Hunting’ was considered as an ‘adventure’, in the Southern Africa, by the British. Ivory export quantity (161,234 lb) was peaked at 1876 CE and traded via (p.67), Durban and Delagoa Bay (Beinart & Hughes, 2007).

In India, between 1890 CE – 1920 CE, annual revenue of the forest department was tripled. The forest lands were classified and separate officers were appointed, through the Indian Forest Act, 1927 (Sivaramakrishnan, 2008). By 1885 CE, the total forest officers were 107 (p.117), (Beinart & Hughes, 2007). British destructed forests for the conversion of land into commercial plantations such as tea, timber. They erased the large counts of tigers, cheetahs, leopards and Asiatic lions (Tharoor, 2016). British administrators perceived that the

responsibility of irrigation systems is on the shoulders of peasants. However, the ‘canals’ became a plot for the colony settlements and the tax officials were appointed for the duty or rent collection, for the Crown (p.133 & 135), (Beinart & Hughes, 2007).

Amid these ecological degradations, there were certain attempts to conserve these ecosystems. Edmund Halley and Isaac Pyke identified the need for interventions, for conserving the tropics of the Caribbean and in 1715 CE, they proclaimed the forests of St. Helena and Bermuda, as ‘Reserved Forests’. In Mauritius, Pierre Poivre and Philibert Commerson pioneered, by enacting the forest conservation laws, to prevent rainfall decline (Grove & Damodaran, 2006).

Around these 500 years, the perceptions of merchants were shifted like that:

- 1) Trade became the ‘wealth’ creating component, in the governance structure of a nation.
- 2) Human Inventions made trade ‘flexible and prosperous’ for the imperial nations and created ‘chaos’ in colonies, due to the extremism-oriented principles. In other words, the imperial nations were “*resource-predators*” and the colonies were “*resource-providers*”.
- 3) Ecological resources faced less security, because of the urban population growth.
- 4) Theological interventions weren’t there exclusively, during any geo-political changes.
- 5) The uniqueness of ecological resources wasn’t identified; they were just ‘*revenue-providers*’ to the imperial nation’s exchequer.

Phase 4 – Perceptions under Bipolar Powers (1945 CE – 1990 CE)

During the Cold War, the Capitalist Bloc and the Communist Bloc rivalled, in the form of ideologies, technologies and the resources. Also, there were *inert* ‘non-aligned’ nations, apart from these blocs, who were urged for mutual understanding, stability and peace in the newly formed states and expected to safeguard primarily, their *norms* to preserve human rights, governance and prosperity (Perkins & Neumayer, 2008).

One of the critical issues during this phase, was increasing nuclear armaments, during 1950s. The US expanded its atomic weapons series, after the detonation of nuclear bomb, by the USSR, in 1949 (Reed, Lemak, & Hesser W, 1997). The US considered itself, as ‘redeemer’, of its allied states and arranged security and international treaties. The Soviet Union and its allies were perceived as the threat of new ‘possibilities’, of the war (National Security Agency, 2011). The resources were handled by the powers, through armed conflicts (*resource scarce wars or resource abundance wars*) or by defending mechanisms of resources (*resource dependence*) or providing foreign assistance, for establishing security or assisting in the nation’s economic trade activities (Billon, 2001). China was exceptional, at that moment, when

Mao emphasized its nuclear independence, but *not to fire the first shot, in an international struggle* (Weidi, 2016). In spite of these alarming political conflicts, also, there were raising global concerns, to acknowledge and address the ecological issues.

The United Nations Conference on the Human Environment was held in 1972, at Stockholm, pressurized the global nations, to turn their view, towards the environmental degradation. The focus shifted towards wildlife conservation, coastal zone regulations, transboundary pollution and ozone depletion (Weiss, 2011). In the British Antarctic Survey (1985 CE), there was 40% drop in ozone in Hallen Bay, between 1977 CE - 1985 CE. By 1987 CE, the US and the USSR were accounted for 17% and 12% of global net annual increase in Chloro-Fluoro Carbons, respectively (Sandler, 1992).

There were considerable counts of environmental disasters, occurred during this phase. Apart from naturally induced disasters, there were disasters, due to human negligence and technical failures. For example, the detection of acid rains in Europe and North America (Sandler, 1992), the oil spills of the North Sea, due to the Torrey Canyon accident, in 1967 CE, the cases of Chisso Corporation, for poisoning the Minamata river with organo-mercury, in 1971 CE and for the estimated death toll of 1000 Japanese citizens (Sand, 2015), the Bhopal Gas Tragedy, in 1984 CE and the Exxon Valdez oil spill, in 1989 CE (Bergquist, 2017).

Ideologically, the Capitalist Bloc favoured the democratic, liberal and private-owned regime; On the other hand, the Communist Bloc patronized dictated, collective social governance (Riches, 2015). However, ecological issues were at their doorsteps, especially regionally. There was lot of 'environmental encounters' happened during this phase, in the Arctic. The Soviet settlers changed the lifestyle of indigenous people, along with the ecological degradation (Arzyutov, 2021). There were intentions, to develop water supply and sewage systems in the USSR. Legislations were enacted, but mostly trespassed; the damages were noticed, by the media. Similarly, the detonation of nuclear bombs in Oceania by the US, affected the island sites and the fishing industry of the proximate nations. In 1980s, it was reviewed, that there were 10000 sites, in the US; however, only, 16 of them, were cleaned up (Laakkonen, Pal, & Tucker, 2016). During this phase, the corporate perceptions were:

- 1) This is the *enlightening* phase, of which the relationship between the business activities and ecology, was identified; The corporations diagnosed their former institutional pitfalls and the damages, created by them, towards the biosphere.
- 2) International Programs, Conventions and Protocols were made, in order to conserve the ecological resources.

- 3) The corporations shifted their perspective from the economic profits and emphasized on the stakeholder relationships.
- 4) The corporations viewed ecological issues as an 'externality', to the business processes.
- 5) Nations framed their trade policies, based on their association with the blocs, political stability, the level of population growth, availability of the ecological resources and the currency inflation.

Phase 5 – Perceptions of Millennial Corporates and Community (1990 CE – 2020 CE)

From 1990s, there were lot of changes, in the corporate world and the public interests. There were increased global environmental regulations, ethical concerns towards the bio-diversity, necessity for handling ecological resources, in the *sustainable* manner and reporting of the corporate environmental activities to the stakeholders. If trade increases economic progress, then the production and consumption patterns cause environmental damage (p.214). If the consumption of a particular good happens, within a given jurisdiction, then the producers and the imported goods, have to comply with the environmental regulations (p.233). In contrast, if there is production-generated pollution, then the domestic firm would be accountable for the damages; however, imports wouldn't come under the regulations (p.234), (Copeland, 2010). So, environmental regulations and standards, dealt the resource inputs and the final consumer goods, under the ambit of international trade. In Western nations, materials production alone, contributed to 30% of Green-House Gas emissions. In developing countries, the demand for iron and steel was still increasing. Hence, sustainable outcomes should be aided by financial and economic instruments like pricing, taxing, subsidies and investment policies (Langeweg, Hilderink, & Maas, 2000).

Due to the lack of education and information infrastructure, most of the globe depended on few elites, who could turn the fortunes, in the form of financial flows. Similarly, most of the urban migration happened, due to the vulnerability created in the form of traditional agricultural and irrigation patterns, which were not enough to feed the population, climate change, alterations in the soil chemical composition (p.119), (Utting, 2015). Also, there are three demand ecological footprints, based on country's size: Population, Per-Capita Consumption and Resources and Waste Intensity. The ecological limits had already been transgressed, and the countries, those maintain or expand, their biocapacity can be resilient (Global Footprint Network, 2010). These complex ecological interactions created a *survival hexagon*, which comprises of three resource challenges (air, land, water) and three social challenges (human population, urban systems, rural systems) (Brauch H. G., 2005).

Considering these complexities, ecological securities concern the interactions between human population and other organisms or among the human population, themselves (Kostova & Sidova, 2020). Communities perceive the actions of the corporates, with respect to these ecological challenges, by their business alignment, in the form of, *rejection, non-responsiveness, compliance, openness, integration and collaboration* (Bullis & Ie, 2007). Incorporating corporate environmentalism into the business strategy, affects that particular corporate's brand value. However, emission reduction doesn't contribute to that extent, to the brand value (Rahman, Rodríguez-Serrano, & Faroque, 2021). In 1992, there was a business model created namely, *Enviropreneurial Marketing (EM)*, that viewed environmental challenges as the market opportunities and EM would be under societal marketing concept (Menon & Menon, 1997). In other perspective, the corporates manage their environmental responsibilities in a stringent regime, because of the pressurized legislations, expanding scope of corporate liabilities and the prescribed 'rules and norms' for CSR activities. However, the most relevant environmental consideration was the *integration* of the environmental policies, into strategic decision making and its implementation (Ong, 2001).

In an empirical research carried among Spanish industries, textile and food companies inclined highly, towards the corporate environmentalism, by embedding it, into their corporate strategy and culture; Comparatively, jewellery, chemical and transportation companies were committed towards eco-friendly approach, because of top managerial pressures; Others, only, displayed *reactive* attitudes, towards the environmental issues (Buil-Carrasco, Fraj-Andrés, & Matute-Vallejo, 2008). In Korea, between 1991 CE – 2000 CE, the environmental concerns were raised due to the phenol leakage, by polluting drinking water and controversial dam construction plans. The Environmental Management Systems (EMS), life-cycle management, international quality standards and certifications and eco-friendly product development ideas emerged, during this phase (Lee & Rhee, 2005). In Nigeria, there had been decline in wildlife and marine resources, due to the dust fumes from the cement industries and the continuous oil spills, in the Niger Delta. Though there were environmental legislations enacted, they weren't applied pragmatically, hence, the development in the local communities got stagnated (Okafor, Hassan, & Doyin-Hassan, 2008). In this millennium, the corporates perceive that:

- 1) *Sustainable Development* became a major concern, for the global community, due to the climate change, global warming, loss of biodiversity, increased consumerism and the dwindling non-renewable resources.

- 2) There was highly alarmed, sense of urgency, to conserve any endangered species.

- 3) Most of the corporates started to align *environmentalism*, in their corporate strategy.
- 4) Most of the international conventions were ratified and stringent environmental regulations were enacted, by the developing nations.
- 5) Being primary witness and the absorber of ecological damages, the local community drove 'volunteered' activities of the corporations, beyond the legal compliance.

Conclusion

In this historical framework, it could be noticed that each phase has their own timeline, beginning and ending, with the certain important global events. For example, the end of Phase I marks the fall of Western Roman empire, and the beginning of Phase II extends from the rise of Islam. Likewise, the breakthrough points weren't neglected, instead they were saved as historical triggers, for the elites and the community, to perceive and accommodate, these changes, into their cultural lifestyle. Hence, the archaeological evidences of each phase of this article, reveal for example, certain social patterns, that were followed by the ancestors (Saniotis, 2012) or geographical changes happened, during that phase (Morales, et al., 2009) . Though Arabic world was pioneered in astronomy and navigation, during Phase II, Western inventions and technology development accelerated the changes in geo-political scenarios, during Phase III and Phase IV. Corporations held accountable for protecting the resources, trade secrets or intellectual property rights, for the concerned national interests. In the traditional world, it was *mercantilism* and in the modern world, it got its name as *protectionism* (Grove & Damodaran, 2006).

Phase V changes are rapid and the global community faces a double-edged sword, whether to resolve the past errors conducted, by the imperialist nations or the bipolar powers or to face ecological challenges due to the daily human interventions, in the ecosystems. International institutions direct guidelines for the sustainable measures (Global Footprint Network, 2010) (Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services (IPBES), 2019) (International Organization for Migration, 2009), national tribunals and courts encounter legal trespasses (Environmental Law Alliance Worldwide, 2014) but the businesses should adjust and go ahead with all of these changes, in the pursuit of their strategies, by following *ecological citizenship* (Crane, Matten, & Moon, 2008).

Limitations

Being under exploratory research design, the article could face the individual bias, because of the research process involved. The flow of research is based on chronology, that has been assumed, based on the notion, that the trade could alter its patterns, in course of time. Future

researches could disprove the research conclusion and the disintegrate the research flow. Being a review article, the secondary data processed would have faced an uneven and asynchronous perception of the research articles. Further researches could overcome the issue, by segregating the domains into sub-domains, within each phase of the chronological shifts.

In this exploratory work, the focus was given to more 'global', than the 'regional' perspective. There is no primary data collection, involved in the research process. Therefore, the research article cannot hold strongly against the research works, which happens at the archaeological sites and the documented evidences. With the available secondary data, the research article gets a constraint, between the data collected and the data processed; some of the data neglected, due to the irrelevance to this research work. Without any interview with the experts of the field, also, being a review article, it fails to bring the new ideologies into the research conclusion. Future researches could overcome, while doing this kind of review research processes.

References

- Abu-Lughod, J. L. (1987, May). The Islamic City - Historic Myth, Islamic Essence and Contemporary Relevance. *International Journal of Middle East Studies*, 19(2), 155-176.
- Arzyutov, D. V. (2021). *Reassembling the Environmental Archives of the Cold War : Perspectives from the Russian North*. Stockholm: KTH Royal Institute of Technology.
- Banerjee, S. B. (2002). Corporate Environmentalism : The Construct and its Measurement. *Journal of Business Research*, 55, 177-191.
- Banerjee, S. B., Iyer, E. S., & Kashyap, R. K. (2003, April). Corporate Environmentalism : Antecedents and Influence of Industry Type. *Journal of Marketing*, 67, 106-122.
- Beinart, W., & Hughes, L. (2007). *The Oxford History of the British Empire Companion Series : Environment and Empire*. (R. Louis Wm., Ed.) New york: Oxford University Press.
- Bergquist, A.-K. (2017). *Business and Sustainability : New Business History Perspectives*. Boston: Harvard Business School.
- Berry, M. A., & Rondinelli, D. A. (1998, May). Proactive Corporate Environmental Management: A New Industrial Revolution. *Academy of Management Executive*, 12(3), 38-50.
- Billon, P. L. (2001). The Political Ecology of War : Natural Resources and Armed Conflicts. *Political Geography*, 20, 561-584.
- Brauch, H. G. (2005). *Environment and Human Security : Towards Freedom from Hazard Impacts*. United Nations University - Institute for Environment and Human Security: Bonn.

- Buil-Carrasco, I., Fraj-Andrés, E., & Matute-Vallejo, J. (2008). Corporate Environmentalism Strategy in the Spanish Consumer Product Sector : A Typology of Firms. *Business Strategy and the Environment*, 17, 350-368.
- Bullis, C., & Ie, F. (2007). Corporate Environmentalism. In S. May, G. Cheney, & J. Roper, *The Debate Over Corporate Social Responsibility* (pp. 321-335). New York: Oxford University Press.
- Butzer, K. W. (2012, March). Collapse, Environment and Society. *Proceedings of the National Academy of Sciences of the United States of America*, 109(10), 3632-3639. Retrieved from www.pnas.org/cgi/doi/10.1073/pnas.1114845109
- Chandra, S. (2007). *History of Medieval India*. Hyderabad: Orient Blackswan Private Limited.
- Chatterjee, M. (2016). A Critical Inquiry into Ecological Visions of Ancient India Versus Modern West. *Tattva- Journal of Philosophy*, 8(2), 19-13. Retrieved from <https://doi.org/10.12726>
- Cherrier, H., Russell, S. V., & Fielding, K. (2012). Corporate Environmentalism and Top Management Identity Negotiation. *Journal of Organizational Change Management*, 25(4), 518-534.
- Chrun, E., Dolsak, N., & Prakash, A. (2016). Corporate Environmentalism : Motivations and Mechanisms. *Annual Review of Environment and Resources*, 130-135.
- Copeland, B. R. (2010). How Does Trade Affect the Environment ? In G. Heal, *Is Economic Growth Sustainable ?* (pp. 206-247). Basingstoke: Palgrave Macmillan.
- Crane, A., Matten, D., & Moon, J. (2008). Ecological Citizenship and the Corporation : Politicizing the New Corporate Environmentalism. *Organization and Environment*, 20(10).
- Cruz, N. (2018). *Co-Colonizing : The Ecological Impacts of Settler Colonialism in the American Supercontinent*. Seattle: Seattle University.
- Decker, C. S. (2003, April). Corporate Environmentalism and Environmental Statutory Permitting. *Journal of Law and Economics*, 46, 103-129.
- Dower, N. (2011). *The Ethics of Sustainability*. University of Aberdeen, Department of Philosophy. Aberdeen: Encyclopedia of Life Support Systems (EOLSS).
- Dr Benudhar Patra. (2016). Environment in Early India : A Historical Perspective. *Environment : Traditional & Scientific Research*, 1(1), 39-56.
- Dr Meena Bharadvaja. (n.d.). *Theories and Mechanisms of Imperialism and Expansion of European Empires*. Ram Lal Anand College. Delhi: University of Delhi.
- Dr Renu Tanwar. (2016, September). Environment Conservation In Ancient India. *IOSR Journal Of Humanities And Social Science*, 21(9), 1-4.
- Dussel, E. (2000). Europe, Modernity and Eurocentrism : The Semantic Slippage of the Concept of “Europe”. *Nepantla : Views from South*, 465-478.
- Environmental Law Alliance Worldwide. (2014). *Holding Corporations Accountable for Damaging the Climate*. Environmental Law Alliance Worldwide.

- Foltz, R. (2000). *Religion and Overland Trade in Asia : 1000 BC to AD 1400*. Encyclopedia.
- Foster, N. H. (2006). *Islamic Commercial Law : An Overview (I)*. Barcelona: InDret.
- Global Footprint Network. (2010). *The Ecological Wealth of Nations : Earth's Biocapacity as a New Framework for International Cooperation*. California: Global Footprint Network.
- Grove, R., & Damodaran, V. (2006, October 14). Imperialism, Intellectual Networks and Environmental Change - Origins and Evolution of Global Environmental History, 1676-2000 : Part I. *Economic and Political Weekly*, pp. 4345-4354.
- Harper, K. (2016). The Environmental Fall of the Roman Empire. *Dædalus, the Journal of the American Academy of Arts & Sciences*, 145(2), 101-111. Retrieved from http://direct.mit.edu/daed/article-pdf/145/2/101/1830912/daed_a_00380.pdf by guest on 21 July 2021
- Heldring, L., & Robinson, J. (2013, January 10). *Colonialism and Development in Africa*. Retrieved from VOX EU - CEPR: <https://voxeu.org/article/colonialism-and-development-africa#:~:text=Most%20of%20Africa%20spent%20two,economic%20development%20across%20the%20continent>
- Hoffman, A. J. (2004). *Business Decisions and the Environment : Significance, Challenges, and Momentum of an Emerging Research Field*. University of Michigan, Stephen M. Ross School of Business. Michigan: University of Michigan.
- Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services (IPBES). (2019). *The Global Assessment Report on Biodiversity and Ecosystem Services : Summary for Policy Makers*. Bonn: Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services (IPBES).
- International Organization for Migration. (2009). *Migration, Environment and Climate Change : Assessing the Evidence*. Geneva: International Organization for Migration.
- Jermier, J. M., Forbes, L. C., Benn, S., & Orsato, R. J. (2006). The New Corporate Environmentalism and Green Politics. In S. Clegg, C. Hardy, T. Lawrence, & W. R. Nord, *The Sage Handbook of Organization Studies* (pp. 618-650). London: Sage Publications.
- Kostova, P., & Sidova, D. (2020). Ecological Security and Environmental Security - Similarities and Differences. *International Scientific Journal "Security and Future"*, 4(3), 91-94.
- Laakkonen, S., Pal, V., & Tucker, R. (2016). The Cold War and Environmental History : Complementary Fields. *Cold War History*, 1-18. Retrieved from <http://dx.doi.org/10.1080/14682745.2016.1248544>
- Lander, B. G. (2015). *Environmental Change and the Rise of the Qin Empire : A Political Ecology of Ancient North China*. New York: Columbia University.
- Landes, D. S. (1998). *The Wealth and Poverty of Nations : Why Some are So rich and Some So Poor*. New York: W.W.Norton & Company Inc.

- Langeweg, F., Hilderink, H., & Maas, R. (2000). *Urbanization, Industrialization and Sustainable Development*. Bilthoven: National Institute of Public Health and the Environment - Netherlands.
- Lee, S.-Y., & Rhee, S.-K. (2005). From End-of-Pipe Technology towards Pollution Preventive Approach : The Evolution of Corporate Environmentalism in Korea. *Journal of Cleaner Production*, 13, 387-395.
- Marx, W., Haunschild, R., & Bornmann, L. (2018). Climate and the Decline and Fall of the Western Roman Empire : A Bibliometric View on an Interdisciplinary Approach to Answer a Most Classic Historical Question. *Climate*, 6(90), 1-34. Retrieved from <https://dx.doi.org/10.3390/cli6040090>
- McQuade, J. (2019, April 19). *Earth Day : Colonialism's Role in the Overexploitation of Natural Resources*. Retrieved from The Conversation: <https://theconversation.com/au>
- Menon, A., & Menon, A. (1997). Enviropreneurial Marketing Strategy : The Emergence of Corporate Environmentalism as Market Strategy. *Journal of Marketing*, 61(1), 51-67.
- Morales, M., Barberena, R., Belardi, J. B., Borrero, L., Cortegoso, V., Duran, V., . . . Zarate, M. (2009). Reviewing Human - Environment Interactions in Arid regions of southern South America during the past 3000 years. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 281, 283-295.
- Mueller, J., Abfalter, D., Hautz, J., Hutter, K., Matzler, K., & Raich, M. (2011). Differences in Corporate Environmentalism - A Comparative Analysis of Leading US and German Companies. *European Journal of International Management*, 5(2), 122-148.
- National Security Agency. (2011, January 12). Facing the Post-Cold War Era. *Cryptologic Quarterly*, 61-69.
- Ndege, P. O. (2009). *Colonialism and its Legacies in Kenya*. Eldoret: Moi University.
- Nizami, K. A. (1994). Early Arab Contact with South Asia. *Journal of Islamic Studies*, 5(1), 52-69.
- Ocheni, S., & Nwankwo, B. C. (2012). Analysis of Colonialism and its Impact in Africa. *Cross-Cultural Communication*, 8(3), 46-54.
- Okafor, E. E., Hassan, A. R., & Doyin-Hassan, A. (2008). Environmental Issues and Corporate Social Responsibility : The Nigeria Experience. *Journal of Human Ecology*, 23(2), 101-107.
- Olsson, J. T. (2014, October). The World in Arab Eyes: A Reassessment of the Climes in Medieval Islamic Scholarship. *Bulletin of the School of Oriental and African Studies*, 77(3), 487-508. Retrieved from http://journals.cambridge.org/abstract_S0041977X14000512
- Ong, D. M. (2001). The Impact of Environmental Law on Corporate Governance : International and Comparative Perspectives. *European Journal of International Law*, 4, 685-726.

- Papanastasis, V. P., Arianoutsou, M., & Papanastasis, K. (2010). Environmental Conservation in Classical Greece. *Journal of Biological Research - Thessaloniki*, 14, 123-135.
- Perkins, R., & Neumayer, E. (2008). Extra-Territorial Interventions in Conflict Spaces : Explaining the Geographies of Post -Cold War Peacekeeping. *Political Geography*, 27(8), 895-914. Retrieved from <http://eprints.lse.ac.uk/30735/>
- Pogutz, S., Micale, V., & Winn, M. (2011). Corporate Environmental Sustainability Beyond Organizational Boundaries : Market Growth, Ecosystems Complexity and Supply Chain Structure as Co-Determinants of Environmental Impact. *Journal of Environmental Sustainability*, 1(1), 1-22.
- Post, R. (2017). The Environmental History of Classical and Hellenistic Greece : The Contribution of Environmental Archaeology. *History Compass*, 15:e12392, 1-12. Retrieved from <https://doi.org/10.1111/hic3.12392>
- Pulver, S. (2007, March). Making Sense of Corporate Environmentalism : An Environmental Contestation Approach to Analysing the Causes and Consequences of the Climate Change Policy Split in the Oil Industry. *Organization and Environment*, 20(1), 44-83.
- Rahman, M., Rodríguez-Serrano, M., & Faroque, A. R. (2021, March 11). Corporate Environmentalism and Brand Value : A Natural Resource - Based Perspective. *Journal of Marketing Theory and Practice*, 1-17.
- Randrup, C. (2010). *Evaluating the Effects of Colonialism on Deforestation in Madagascar : A Social and Environmental History*. Ohio: Oberlin College.
- Reed, R., Lemak, D. J., & Hesser W, A. (1997). Cleaning Up After the Cold War : Management and Social issues. *Academy of Management Review*, 22(3), 614-642.
- Riches, D. (2015). Teaching the Cold War in the 21st Century. *Journal of the Center for General Education*, 8, 1-26.
- Ritchie, A., & Braby, A. (2011). *Farming Since Medieval Times*. Edinburgh: Historic Scotland.
- Roberts, J. M., & Westad, O. A. (2007). *The Penguin History of the World*. London: Penguin Books Ltd.
- Rolfe, D. (1917, April). Environmental Influences in the Agriculture of Ancient Egypt. *The American Journal of Semitic Languages and Literatures*, 33(3), 157-168.
- Salamat, M. R. (2016). Ethics of Sustainable Development: The Moral Imperative for the Effective Implementation of the 2030 Agenda for Sustainable Development. *Natural Resources Forum*, 40, 3-5.
- Saleem, F., Gopinath, C., Khattak, A., Qureshi, S. S., Allui, A., & Adeel, A. (2020, August). Corporate Environmentalism : An Emerging Economy Perspective. *Sustainability*, 12, 1-17.
- Sand, P. H. (2015). Introduction. In P. H. Sand, *The History and Origin of International Environmental Law* (pp. xiii - xix). Cheltenham, Massachusetts: Edward Elgar Publishing Limited.

- Sandler, T. (1992). After Cold War : Secure the Global Commons. *Challenge*, 16-23.
- Saniotis, A. (2012). Muslims and Ecology : Fostering Islamic Environmental Ethics. *Contemporary Islam*, 6, 155-171.
- Sharma, R., Aggarwal, N., & Kumar, S. (2014, January). Ecological Sustainability in India through the Ages. *International Research Journal of Environment Sciences*, 3(1), 70-73.
- Sivaramakrishnan, K. (2008, February). Science, Environment and Empire History : Comparative Perspectives from Forests in Colonial India. *Environment and History*, 14(1), 41-65.
- Stahel, R. (2020). China's Approach to the Environmental Civilization. *Human Affairs*, 30, 164-173.
- Tharoor, S. (2016). *Inglorious Empire*. Victoria (Australia): Scribe Publications.
- United Nations. (1992). *Report of the United Nations Conference on Environment and Development*. Rio de Janeiro: United Nations Department of Economic and Social Affairs.
- Utting, P. (2015). *Revisiting Sustainable Development*. Geneva: United Research Institute for Social Development.
- Weidi, X. (2016). China's Security Environment and the Role of Nuclear Weapons. In L. Bin, & T. Zhao, *Understanding Chinese Nuclear Thinking* (pp. 19-50). Washington DC: Carnegie Endowment for International Peace.
- Weiss, E. B. (2011). The Evolution of International Environmental Law. *Japanese Yearbook of International Law*, 54, 1-27.
- White, L. (1967). The Historical Roots of Our Ecological Crisis. *Science*, 155, 1203-1207.
- Whyte, K. (2018). Settler Colonialism, Ecology and Environmental Injustice. *Environment and Society : Advances in Research*, 9, 125-144.
- Wiesner-Hanks, M. E., Ebrey, P. B., Beck, R. B., Davila, J., Crowston, C. H., & McKay, J. P. (2018). *A History of World Societies*. Boston: Bedford/St. Martin's.
- Wood, L. (2015). *The Environmental Impacts of Colonialism*. Massachusetts: Bridgewater State University. Retrieved from http://vc.bridgew.edu/honors_proj/119
- Yeakel, J. D., Pires, M. M., Rudolf, L., Dominy, N. J., Koch, P. L., Guimaraes, Jr, P. R., & Gross, T. (2014, October). Collapse of an Ecological Network in Ancient Egypt. *Proceedings of the National Academy of Sciences of the United States of America*, 111(40), 14472-14477. Retrieved from www.pnas.org/cgi/doi/10.1073/pnas.1408471111