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Abstract

The purpose of this article is to analyze the reasons of the failure of the ecosystem to sustain increased economic activities and to illustrate the necessary concept of the sustainable development. That is presented from its emergence until the theories of twentieth century and later its modern form. This is based, in the present study, on human realization of limits to growth, sustainability as the solution to growth problem, and the Brundtland Commission that shed light on growing popularity of sustainability in business ecosystem. Ecological, socioeconomic, political, epistemological, and psychological crisis are the five key aspects of the sustainability crisis, which are also discussed in the context of a theoretical approach of the issue of the present paper.

Keywords: Systemic Crisis, Sustainability, Sustainable Development

1. INTRODUCTION

The advent of the information age along with the quest for economic growth has brought about a plethora of systemic changes in the ecosystem. The issues of environmental sustainability or ecological sustainability, i.e. meeting the needs of human population without affecting the health of the overall ecosystem (Morelli 2011). Sustainability is thus a broad concept in organizational context and is required to be maintained in the purviews of economic, social, and environmental social dimensions (Kleindorfer et al. 2009; Melville 2017). In this paper, the concept of sustainability is analyzed in the context of its five key aspects comprising of ecological, socioeconomic, political, epistemological, and psychological crisis. The section will further highlight the emergence of the concept of sustainable and its development over the period.

2. THE FAILURE OF ECOSYSTEM TO SUSTAIN INCREASED ECONOMIC ACTIVITIES

Economic activities are actions involving production and distribution of goods and services with the aim of consumption. It starts with an evaluation of resources available in an area and proceeds with their utilization in production of goods and services. The produced goods are services are then distributed among the people who have the means to acquire those (Goodwin et al. 2008). According to the Human Development Report published by UNDP (1996), economic activities are the means of human development. The purpose of undertaking an economic activity should be to enrich human life. However, seldom does economic growth go hand in hand with human development, as can be seen in past studies, which are reviewed further in this paper. As it can be seen from Fig.1, economic growth for the years 1000 to 1820 was predominantly extensive.



FIGURE 1 - ECONOMIC GROWTH OVER THE VERY LONG RUN (STATISTICS ON WORLD POPULATION, PER CAPITA GDP, 1-2006 AD (JONES 2016).

Based on the graph of Fig.1, Jones (2016) highlighted economic growth through increase average living standards through the period. However, the consumption element rising from economic activities increased rapidly from 1820 (Kitov and Kitov, 2012). The periods market the Second-World-War and were characterized by abnormal functioning of all involved economies to show particularly high volatility, as it is shown in Fig.2.



FIGURE 2 - THE EVOLUTION OF PER CAPITA REAL GDP IN THIRTEEN DEVELOPED COUNTRIES (KITOV AND KITOV, 2012).

These high consumption rates had an impact on the ecology across the world that began with the depletion of resources and excessive generation of waste. Human rise in consumption and growing precedence of wants over survival initiated the need for sustainability. The concepts of initial sustainable development started in the 1970s and started to gain momentum in the 1980s (Klarin 2018). Although the idea of sustainability has been around for decades, the global acceptance of the scope of the concept is yet to be attained. Broadly, sustainability encompasses the domains of social, economic, and environmental studies (Mori & Christodoulou 2012).

United Nations (2019) defines sustainability as "...meeting the needs of the present without compromising the ability of future generations to meet their own needs". Morelli, (2011) suggested that there are three major components of sustainability. The first is ecological sustainability. This component connects sustainability to human needs. The ecological system requires the economies to meet human needs without affecting the health of ecosystems. Second is economic sustainability that works towards the preservation of environmental assets to prevent a burden on future generations. Third component of social sustainability works towards establishing a positive condition for the communities based on equity of access, generations, and political participation. Apart from the three components identified by Morelli, Gibson, (2006) had also suggestive of the role of political and cultural sustainability as components that influence the ecological system and human needs.

Further, with the concept of sustainability, there is also the aspect of trade-off decisions that require economies to choose between economic growth and sustainability. A trade-off is a decision based on situations, involving expense of one good to attain a gain on other. It is a decision, where one requires choosing from two desirable outcomes. If the two aspects are to go hand in hand than the major objective of net sustainability gain should

be primary decisive factor. It is a critical undertaking that would provide a neutral or positive impact on core sustainability (Sittisak & Ekasingh 2015). By analyzing the tradeoff between economy and environment, Sittisak and Ekasingh (2015) suggest that to improve on the environmental objective, economic objectives will have to be foregone.

In the first half of the 18th century, economies were run on the idea of sustainable revenue keeping in mind ecology-nature relationship and the idea of both social and economic ethics (Vivien 2008). However, with the progress of the civilizations, between the period 1750 and 1900, economic progress reached its peak of importance. The idea of science's supremacy over nature grew during this period. By 1789, during the period of industrial revolution, the first adverse effects of an increase in economic activity began to appear. The growing economies faced sustainability crisis such as diseases, unemployment, and poverty (Pisani 2007; Grober 2007).

The trends of overconsumption extended beyond the industrial era to the twentieth century. Among the resultant effects of growing economic activities on sustainability is the escalating consumption of nonrenewable resources and fossil fuels. The twentieth century witnessed an explosive expansion of these implications, leading to problems such as global pollution (Komiyama & Takeuchi 2006). Additionally, Daly (2005) highlighted that with an increase in economic activities, there is a subsequent increase in environmental disorder. This is a result of nations relying heavily on extracting their low-entropy resources and in return adding high-entropy wastes to the environment. This conflict between preserving the environment and economic expansion is causing unsustainability and imposing irremediable disorder on the sustaining ecosystem and interdependencies of life-supporting ecosystem.

3. THE FIVE KEY ASPECTS OF SUSTAINABILITY CRISIS

Sustainability crisis is the decline of ecosystem services that are critical for its global scale processes. Critical global-scale processes comprise of availability of food, fresh water, genetic resources, and regulation of natural hazard, aesthetic value, and disease control among others. Sustainability crisis occurs when the ecosystem is unable to manage its critical processes on its own and the resources provided by nature reach their threshold (Dedeurwaerdere 2014). Sustainability crisis creates cognitive, practical, and strategic disruptions for economies and disturbs the theoretical frameworks, meta-narratives, policy paradigms (Jessop 2012). Sustainability crisis can be understood based on its five key aspects discussed as follows:

3.1. Ecological Crisis

Ecological trends paint the picture that ecological productivity has for long been limping behind human consumption pattern. By 1984, per capita yield of crop gain and worldwide harvest of fish started to decline (Funk & Brown 2009). Ecological crisis is not confined only to food availability; several studies (Mergen 2011; Meinshausen et al. 2011; Steffen & Rockström 2015) in the past have highlighted that stratospheric ozone level is depleting globally. Greenhouse gases released in atmosphere is altering its chemistry and further adding to climatic ecological crisis. In addition, another parameter pointing to ecological crisis is decreased in genetic diversity in biosphere. The genetic diversity in biosphere acts like information bank to determine the potential of life that would continue, it provides the ecosystem with long-term capacity to persist and adapt to gradual changes. The ecological crisis has led the genetic diversity to reach its critical stage (Mace et al. 2014; Helmus et al. 2007; Steffen & Rockström 2015). The trends indicate there has been a decline in the natural assets in terms of both productivity and quantity with a parallel increase in human economic activity marking the sharp conflict. The ecologic issues highlighted above play a pivotal role in determining economics of many industries, tourism being one of them. The more intensive and rational use of resources, more will be the positive impact on tourism. Further, ecological crisis negatively impacts the expansion of tourism with loss of biodiversity, natural environment, and genetic diversity economies will not be able to sustainable for economies for long (Koncul 2008).

3.2. Socioeconomic crisis

The prevailing state of consumption around the globe is such that it is projected to be capable of supporting around nine billion people by 2050. In addition, the number of people going hungry across the globe has decreased by 200 million since 1990-92 (FAO 2015). However, the report by Roser & Ritchie (2019) highlight that approximately 821 million people in the year 2017 were found to lack enough food for sustaining a healthy active life. Economic disparity leads to unsustainability and is also witnessed by the indicators of poverty along with hunger. It is widely known that developed regions have been able to witness lower poverty rates than developing and underdeveloped economies. This makes developed regions to have higher sustainability than the developing economies (The World Bank Group 2018). Economic hardships of residents accompany other socio-economic crisis affecting sustainability of the region further, such as high mortality rates, illiteracy, diseases, and discrimination. Bausch (2004), further suggest that conventional movement of economies towards development even leads to plight of the poor, leading to concentration of population around the urban areas. This leads to sustainability crisis, as disparity between the regional developments including adverse impact on equality of income distribution, societal well-being, public health, and hence on the overall global economy. The dynamic impact of urbanization also includes ill-effects of smog, waterborne diseases, increase in hazardous wastes, and lead to further impoverishment, further influencing other methods of economic development of the region such as tourism (Turok & McGranahan 2013).

3.3. Political crisis

Globalization has led to rapid economic transformation across the countries in the twentieth century. There are two major forces that are responsible for shaping the political power across the globe, the debt crisis, which has weakened several governments, and the large-scale mobility of capital mobility increasing international tax competition (Passaris 2006). Sharma (2013), highlight that economic activities do not facilitate the automatic movement of economies towards reducing poverty or inequality. Politics link different agencies of the society to ensure consent of states and also address global sustainability problem spilled over the nations' boundaries. With such rapid industrialization, large sections of society feels alienated and disempowered leading to a lack of sustainability. However, fixation of governments solely on economic expansion threatens geopolitical stability (de Sausmarez 2007; Schneider et al. 2010).

3.4. Epistemological crisis

Epistemology narrates the nature of crisis and it provides the detail how sustainability crisis is perceived by the residents. Epistemology crisis also deals with how the issue is addressed. Lack of epistemology leads the ecological crisis to deepen further. Epistemological crisis is a result of active ignorance, where the institutions are aware of the causes of risk but lack the knowledge to act upon the factors causing sustainability crisis. There is also passive ignorance on the impact of unchecked ecological damage that unsustainable growth is leading to (Fricker, 2016). Unsustainability crisis is resultant of long periods of ignoring ecological development while pushing for economic growth. Ecological uncertainties have three major factors; first constitutes risks that are likely to create problems in the future. Second problems are more complex and involve several indeterminacies, which make problems unpredictable. The third sort of problem is more critical and there exists a lack in scientific knowledge of the problems itself. Epistemological crisis relates to any unchartered problems relating to geophysical, ecosystems, or even climate-related disasters. All of these factors determine the development of tourism in a region. Further, with weakness in scientific process and epistemology of challenge of developing sustainable operational processes increases (Romeiro 2012).

3.5. Psychological crisis

Sustainable development focuses on integration between socio-ecological human development and consumerism. A psychological crisis occurs when there is a systemic problem in aligning all parameters of sustainable development including the health of the population (Gorobets 2011). Weber (2004) in a study highlighted that psychology crisis is subjectively conceptualized around the idea of how any event is interpreted and ecological crisis being related to the global economy and needs to be addressed as global psychosis.

However, there can be obstacles in learning the reasons that contribute to ecological crises and the extent to which these obstacles to learning can be addressed. Some of these learnings can also be psychological in nature. Further, a report published by (MEA 2005) suggests that in the period, 1960 – 2000, humanity has adversely altered Earth's ecosystems as a result of pressure of growing exponential demand on natural resources. Finding of the study further highlights, that psychological crisis is more severe in regions where the population is directly dependent on ecosystem. With 60% of the ecosystem being damagingly overused, the trends point in the direction of further degradation.

4. THE MERGENCE OF SUSTAINABLE DEVELOPMENT UNTIL THE TWENTIETH CENTURY

Since the beginning of human evolution, human race has been dependent on the natural resources for their raw material needs and demands. The ancient civilization of Egypt, Mesopotamia, Rome, and Greece prayed to nature and had a cooperative relationship with them. However, they also faced the issues of evolution such as loss of fertile soil due to salinization and deforestation. Also, the particular term 'sustainable development' was not coined; the concepts were discussed as early as 5th Century BC by Plato. The studies by Strabo and Columella and Pliny, the Elder in the 1st century AD also deliberated human activities leading to different types of degradation. These studies reflected ideas human interference with the natural ecosystem comes from growing interactional activities such as logging, farming, and mining (Angelis, Dimakis and Dimaki, 2014).

Further, in the Middle Ages, between the 5th to 14th Centuries AD, religion dominated society. The scriptures were integrated into books of nature and theology dictated explanation to evolution of human activities and their interaction with the environment. It was only after the Renaissance in the 16th century that there were subsequent developments on the paradigm of natural sciences. Prominent areas of sustainability during the period included the study of soil as and its changes with the passage of time, to understand the impact of human evolution (Brevik and Hartemink, 2010). It was only from the 17th century that market economy developed and capitalism was rapidly adopted. Capitalism gave way to private ownership of the different means of production available to the economy including the region's natural resources. The century also marked a high level of commodification of nature and industrialization on a global scale. Soon the philosophers recognized the ideas of rationalized organization as a tool for development.

Although the ancient civilizations dealt with environmental concerns until the 17th century, the term 'sustainability' appeared for the first time in 1713 in a study by Hans Carl von Carlowitz in German forestry in Sylvicultura Oeconomica. The term was suggested for studying sustainable use of resources specifically those provided by the forest. In the 18th century, with the growth of population, the concept of sustainability developed further to focus on the consequences of over-consumption of natural resources (Pisani, 2007). During the same period, sustainabile development was also addressed from the view of economics by theoreticians as Adam Smith. Sustainability during this period was primarily viewed from the purview of development efforts leading to consumerism. The adverse impact of economic growth and the pressure on ecology to provide for the growing population was also viewed from the sustainable development along with the consequences of unsustainability such as pollution, inadequate living space, illness and poverty (Klarin, 2018).

By the 19th century, the primary view of sustainable development increased to encompass more than the ecological perspective. The sustainability aspect also grew to include social and psychological aspects of study. The period had theorists such as Karl Marx, Ricardo, Malthus, and Mill, who reasoned on different elements of sustainable development. The neoclassical economic theory was also developed around the same time emphasizing on the component of water, pure air, and renewable resources for sustainable development. The theories further suggested the need for government interventions among other measures to sustain the development (Willis, 2005). Stressing on the importance of sustainable development further Marsh 1965 developed focus on the non-renewable sources to enhance sustainability, and stated

"Man has long forgotten that the earth was given to him for usufruct alone, not for consumption, still less for profligate waste" (Marsh, 1965, p. 36).

The author highlighted the need for sustainable development to prevent Earth's implied course of becoming unfit for habitation of humans. By the advent of the 20th century, global bodies such as United Nation started to recognize the need for sustainable development and the concept received its major recognition

internationally in 1972 at the UN Conference on the Human Environment held in Stockholm (United Nations, 1972).

5. TWENTIETH-CENTURY IDEAS OF GROWTH AND DEVELOPMENT

The twentieth century had both pessimistic and optimistic outlooks with respect to human development. Pisani, (2007) highlighted that optimism of twentieth-century growth ideas is reflected through the technological and scientific advancements made. Even with the misfortune of the World Wars, the century witnessed unprecedented economic growth that further renewed optimism and prospects of high living standards worldwide. The author also highlights the pessimistic side of the twentieth-century ideas of growth that occurred as a result of large-scale industrialization and un-regulated commercial expansion. Both industrialization and un-regulated commercial growth led to enhancement in human interference with their environment.

Capitalism was popularized in the twentieth century by economies for their growth and development. The idea evolved to render capitalism as an asset to be more productive. Reforms in capitalism were framed with the help of government institutions, where the public sphere of economy was designed to complement the private economy. In this mixed economy, the role of the government was assigned to maintain stability (Rodrik 2004). Furthermore, there are four models of development and growth, these are:

5.1. Theory of Modernization and Growth

The theory of modernization of growth and development focuses on systemic growth of underdeveloped countries to a higher and sophisticated level of development. The theory presents development based on norms as in the case of US and European nations. Modernization theory further, explains the shift in the culture through institutional structure brought for the development of non-industrialized economies. The theory also highlights the difference between the countries and their economic growth is largely the result of variance in the system, values, and ideas with which they pursue their economic goals. More the society recognizes their needs of leisure, security, and welfare of its labor forces, farther they are pushed in age of mass consumption. During the phase, focus is on the economic growth above the concerns of equity between generations, economic growth, and social justice (Berger 2004; Hout 2016; Guilhot 2005).

5.2. Dependency Theory

The second theory highlighting the growth and development in the twentieth century is Dependency Theory. The philosophy presented by the dependency theory highlights the revolution and growth of underdeveloped nations and relationship between developed and underdeveloped nations. However, the theory also highlights the lack of equality in the relationship, specifically between a capitalist and third world or developing economies. The theory highlights that economic growth in developing economies relies heavily on the dominant economies' capitalistic mode of production and transition in the economies are passive and monotonous. Such, that the dominant economies use institutions and politics of the developing economies to maintain control. Excessive capitalism causes upheaval of labor in the developing economies, damaging the domestic economies of underdeveloped countries. This leads to diminished economic growth rate and increase in inequality of income. The theory suggests that dependence theory favors the dominant controlling economy while the developing economies follow neoclassical growth model. That is the economies in the first phase the core country focus on their development internally. In the second phase, growth in economy is driven by monopolistic competition and is largely dependent on the rate of technological progress for the country (Boianovsky & Hoover 2009; Shareia 2015; Hout 2016).

5.3. World Systems theory

The third theory is that of World Systems. This theory, unlike that of modernization and dependence is applied to all economies. The theory argues that international trade is responsible for economic growth and development and is based on specialization of resources in developed and developing economies. In the theory, developed or core countries progresses by controlling developing economies and making them reliant.

The World Systems theory thus, views the global economy to be based on a hierarchy of unequal relations and each country can change its position based. To ascend in the hierarchy, the core countries will have to gain wealth from periphery or semi-periphery economies in their zones. The theory also highlights that there are international trade interactions is the most influential factor contributing to growth and development of the economies (Onyemelukwe 2016; Gowan 2015; Badie et al. 2012).

5.4. Globalization

The fourth theory defining growth and development of economy in the twentieth century is that of globalization. The globalization theory of development relies on the mechanism of integration between economies rather than concentrated growth of the core countries. Globalization theory also has both a positive and negative impact on the economies. Developing economies, for example, may face inequality primarily based on their economic and cultural factors. The market structure of developing economies faces an increase in global competition, which is in some case contributes to their growth. Competition leads to increase productivity, and globalization further enhances trade through interacting relationship on a global state. The interacting interrelationships allow trade benefiting both developing and developed economies. Developed countries benefit utilizing cheap labor of developing economies, and the developing economies benefit from the exchange of technology. The negative impact of globalization includes the factors of environment and health (Stiglitz & E. 2004; Gomory & Baumol 2004; Tanzi 2004).

Based on the theory of globalization, the growth of world economy can be highlighted by studying the parameters GDP; it is a standard measure to take accounts of the final value of final goods and services produced in a country during a particular period (OECD 2010). The GDP for the world has been on a rise for most of the period of 1960- 2000. Similar trends can be observed on the front of merchandised trade, as well as an increase in pollution measured in terms of Carbon dioxide emission (World Bank 2019). With the growth of world economy in accordance with globalization theory, the twentieth century observed loss in self-sustainable ecology. For example, globalization of tourism led to increase in profits for tourist dependent economies, with development in employment opportunities and development of local entrepreneurship. The negative effects however, were also observed, including heavy dependence of regional economy on tourism, pollution, and harmful impact on natural and cultural heritage (Čerović et al. 2015).

6. THE BIRTH OF SUSTAINABLE DEVELOPMENT

The capability of human leads to perplexities in economy, social system, and ecology. Some of the changes, such as unchecked damage of natural resources led to alteration of the climate and environmental degradation. This further led to a social transformation, in terms of consumption pattern of the population with growth. With the development of the society, the struggle of the idea of responsible allocation of resources also grew with one section of the population or the optimists concentrating on need for economic development, and other environmentalists, stating the need for conservation of environment (Saadatian et al., 2012). The stress on the conservation of environment and sustainable development are further deliberated in the present study based on human realization of limits to growth, sustainability as the solution to growth problem, and the Brundtland Commission that shed light on growing popularity of sustainability in business ecosystem.

6.1. Realization of limits to growth

Historically, sustainable development was embedded in religious beliefs of the people. Conservation of nature was a part of life; however, the growth of humankind posed risks such as salinization, loss of forest and soil cover. The theory proposing that there is a limit to growth was first advocated by the economist Thomas Robert Malthus in the 18th century. Malthus was the first to predict that there are constraints to development of economy. The theory highlights that the resource available for economic sector such as tourism depends on environment. Limit to growth further can be explained through the example of tourism that needs sustainability to take into account both current and future growth. With adverse impact on environment, economies will find it difficult to address the needs of visitors, and host communities highlighting the impact of limits to growth theory in terms of ecological biosphere that region has to offer (Saadatian et al., 2012; Saarinen, 2014).

Later, Mathis Wackernagel developed the theory of ecological footprint. The concept measured the "carrying capacity" of Earth to describe the lack of sustainability. The concept defines the limit of growth of a region based on the land's ability to provide for resources to continue. The theorist proposed that Earth was within its limit of sustainability in 1980s. However, ecological footprint has been on increase with the progress of institutions and technology ever since (Nørgård et al. 2010; Meadows et al. 2013; Bardi 2015). The theory of limit to growth based on ecological footprint can be highlighted by the tourism industry. For example, tourism is a dynamic activity that depends on ecological resources and also depends on the regions' capacity to absorb tourism. With product development and management actions, more tourism can be maintained sustainably. Hence, for other industries as well that are resource-based limits can be problematic (Saarinen 2014; McCool et al. 2015).

6.2. Sustainability as the solution to growth problem

Over the twentieth century, the GDP for the world has grown, and this growth is based on the use of natural resources and ecology that has diminished dramatically. Tocan and Chindriş-Văsioiu (2014), in a study highlight, that sustainable development can be a method to address these growth problems. With continuous adaptation of both economy and society, a system of better management of resources can be established in the economy. Sustainability attempts to address the epitomized by individual sovereignty established by capitalist culture. It views ecology, environment of a region must go hand in hand for long-term sustainable growth, and that collective interest of the society at large should always proceed individual interest. Sustainability to fundamentally address the growth problem creates a bridge between growth and Equity (Adetunji et al. 2005).

Sustainability is also a solution to growth problem as it encapsulates multi-dimensional concepts including population growth, urbanization, excessive waste generation, and energy use contributing to global warming among others. Addressing these growth problems requires sustainability to improve the material wellbeing of the overall society at the same time making way for achieving sustainable development. Sustainability minimizes the consumption of natural resource by stressing on the importance of effective utilization of nonrenewable natural resources, including resources such as water, land, and even construction materials (Subramanian 2007; Wang & Xiang 2018).

Sustainability has also been advocated as a solution to growth problem, because it focuses on minimizing emissions of both indoor and outdoor environments (Okoko et al. 2005; Williams 2009). Indoor environment comprises of indoor air quality, whereas outdoor environment includes emission of greenhouse gases, particulates emission, and acid rain. Sustainability is further the method to deal with unsustainable growth and focus on minimizing discharge liquid effluents and solid wastes. Apart from conservation of resources, sustainability also highlights proper utilization of renewable resources to attain net-zero energy consumption (ASHARE (2006). Subramanian (2007) highlights that there have been a number of sustainable solutions of which some have been successfully implemented in several countries. These include the solutions solar energy, geothermal power, wind power, and modern forms of bioenergy among others.

6.3. The Brundtland Commission and growing popularity of sustainability in business ecosystem

The Brundtland Commission was responsible for publishing a report for the World Commission on Environment and Development, called Our Common Future, in 1987 (United Nations 1987). The report introduced various concepts of sustainable development and also prescribed the process of achieving it. The report studied environment degradation with respect to its interconnections with environmental problems, social equity, and economic growth to develop policy solutions. The report was developed employing a human-centered approach to economic growth and stressed on development of poor economies and industrial standards in the business ecosystem. The commission emphasized on need of developing economies to provide for their present population and those of the future generations. The Commission also suggested that economies must attempt to attain sustainable development and defined it as

"Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations 1987).

Barkemeyer et al., (2014), highlighted that the role of businesses with reference to Brundtland Commission has undergone a noticeable shift over the years. The author highlights that earlier the business ecosystem used to emphasize on the role of partnerships for development of the private sector. However, with the adoption of Brundtland Commission suggestion, the firms shifted their focus on corporate sustainability. The firms have adopted environmental concerns as their internal strategy and attempt to address them in their operational activities. The reason for the commission report to get popularity among the theories of building sustainable business ecosystem across the globe was that it suggests a way for the developing economies to reflect on their growth. The second reason was that the report's findings were strengthened by ecological disasters taking place during the time. It was the period when, businesses were reflecting on their practices to considering the idea of conservation of environment and inclusion of social externalities in business operations (Pisani 2007).

7. CONCLUSIONS

Conclusively, the system crisis in this study has been analyzed on the basis of its historical development. Further, the study highlight that ecological crisis needs to be analyzed in a holistic manner to include the dimensions of economic growth, development, and sustainability. In addition, sustainability and ecological crises need to be analyzed from socioeconomically, ecological, political, epistemology, and psychological point of view. The section also highlights that concept of sustainable development started with the earliest civilizations and the concept was shaped through the twentieth century. The theory of modernization, globalization, dependence, and World-System shed light on positivistic approach towards growth and development prevailing through the twentieth century.

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