

Capitalism, Consciousness and Development*

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Capitalism today is in a crisis in terms of three tendencies located in the very structure of the system. First, markets which are central to the functioning of Capitalism have failed to maintain economic stability. The world economy is in the grip of the deepest and most protracted recession since the Great Depression of the 1930s. Second, the tendency of the individual production unit to seek a continuous expansion of production and profits as an imperative of its survival has resulted in a global environmental crisis that threatens life itself. Third, the process of capital accumulation has engendered a form of consciousness in which the individual is driven by an insatiable desire for the aggressive acquisition of commodities without concern for others, much less for nature. This reinforces the second systemic tendency by producing not only goods but also the needs which these goods satisfy. Consequently it becomes more difficult to reorient the production system to serve humans rather than the needs of capital accumulation. In this chapter I will attempt to first briefly examine each of these features of the contemporary historical juncture to show that the crisis of capitalism today is essentially a crisis of human civilisation as it has been shaped by the process of capital accumulation over the last three centuries. Then the threat to the life support systems of the planet will be examined. Finally the potential of an alternative consciousness for sustainable development with special reference to the South Asian tradition will be outlined.

The World Economic Crisis

The financial crisis that erupted in the U.S. in 2008 generated a wave of turmoil that first engulfed the global financial system and then the real economy to generate the protracted recession that continues till today. In this section we will examine the origins and nature of this crisis in terms of the dynamics of the world economy since the Second World War.

Structural Changes and Economic Fragility

Two key structural changes have occurred in the post war period:

- (i) The Multinational Corporation emerged as the dominant institutional form of the production unit in an increasingly globalized economy in the period after the Second World War. The internationalization of production achieved within this framework enabled the MNCs to manufacture different components of a good or elements of a service, in facilities located in different countries to take advantage of country specific resource endowments. This laid the basis of an unprecedented increase in productivity and profits (Baran and Sweezy 1966: 14-51). Given the problem of investing these profits within the sphere of production, due to demand constraints, profits from the sphere of production began to flow into the financial sphere¹.
- (ii) Within two decades in the second half of the 20th century (1963 to 1985) the relative weight of the financial sphere in the world economy changed dramatically: It became larger than the sphere of production, in contrast to the preceding two centuries when the sphere of production had far outweighed the financial sphere. The dynamics of this process lay in the inter linkage of financial markets along with the 'I.T.

* Chapter 3 in Ananya Ghosh Dastidar, Rajeev Malhotra and Vivik Suneja (eds.), *Economic Theory and Policy amidst Global Discontent (Essays in Honour of Deepak Nayyar)*, Routledge India, 2018.

revolution' which enabled individuals and organisations to conduct stock transactions across national boundaries within minutes. At the same time the crafting of new financial products such as derivatives, laid the basis of explosive growth in what had by the late 20th century become a globalized financial system (Hussain 2010). Thus as Table 1 shows, in 1964 international banking was only USD 20 billion compared to the value of international trade in goods and services which stood at USD 1,605 billion. During the next two decades the financial sphere grew about twelve times faster than the sphere of production so that by 1985, international banking had become relatively greater (at USD 2,598 billion) than the value of international trade in manufactured goods and services (USD 2,190).

In the next 25 years the financial sphere continued to grow very rapidly so that international banking measured in terms of bank assets had reached USD 126,774 billion by 2013 compared to the value of international trade in goods and services in the real economy which was only one-fifth as much at USD 23,287 billion in the same year (at current prices and exchange rates). The emergence of finance as the dominant sphere and the weakening of its links with the real economy imparted to the global economy a new vulnerability and an accentuated tendency for crisis.

TABLE 3.1

**International Banking, Economic Activity,
and International Trade**

	Amount (Billions of Dollars at Current Prices And Exchange Rates)							
	1964	1972	1980	1983	1985	2002	2008	2013
Gross Domestic Product (World)	1,605	3,336	10,172	10,140	12,825	32,197	61,218	75,470
International Trade in Goods and Services (World)	188	463	2,150	1,986	2,190	8,056	19,655	23,287
International Banking	20	208	1,559	2,253	2,598	40,063	104,712	126,744

Sources: For the period 1964 to 1985 the data is obtained from Bryant (1987:22). For the remaining years, the data on Gross Domestic Product and International Banking is obtained from various editions of IMF Global Financial Stability Reports and the data on international trade is obtained from World Bank World Development Indicators database.

Ill Advised Deregulation: Why Markets do not necessarily Produce Efficient Outcomes

At the same time the market regulation institutions for mitigating this fragility had over the years been displaced under the influence of the belief that markets deliver efficient outcomes and indeed are self regulating. The deregulation policies by governments were undertaken in spite of the important research work by Joseph Stiglitz² who had rigorously established that both financial and real economies, in a situation of asymmetric and imperfect information which is inherent to actual world markets, even the most developed markets “on their own are neither efficient nor stable” (Stiglitz 2011: 231).

Markets in the real economies of Third world countries produce even more inefficient outcomes for society as a whole because of the institutional structure of society and economy in which they are located. Deepak Nayyar in his incisive reflections on the nature of markets especially in the developing countries suggests that they produce adverse outcomes for the excluded sections of society. He argues that this occurs in the case of people who do not have skills or physical or financial assets. Citizens deprived in this sense, are excluded from the “goods and services sold in the market”. The geographic location of the poor can also deprive them of “non-market allocations such as the public provision of goods and services if they live in clusters such as urban slums, or rural settlements where drinking water, sanitation facilities, roads, electricity, or even street lights are not provided.” (Nayyar 2014: 572).

In my own work I have argued that in developing countries such as Pakistan, markets cannot be seen as freely functioning, autonomous mechanisms of efficient resource allocation, production and distribution. Markets here are configured by state institutions and power structures such that the poor are systematically discriminated against in terms of access to productive assets, financial resources and governance decisions. My research for the UNDP showed that markets in the rural areas were mediated by local power structures making them asymmetric with respect to the large and small farmers. The poor peasants where they were operating farms had to pay a higher price for their inputs and got a lower price on their outputs compared to large farmers. Consequently poor farmers in the sample data lost 20 percent of their potential income from crop production. Furthermore, pressure from the local administration obliged poor farmers to give to local officials, free of charge, a significant proportion of their output of milk and ghee. Our survey data showed that market asymmetries and extortion by the local police and revenue officials together deprived poor farmers of as much one third of their income (Hussain et. al. 2003: 65-67).

Our Survey data for the UNDP Report also showed that the poorest peasants were locked in a structure of dependence on the landlord. The extra economic power of the landlord resulted in 50.8 percent of the poorest peasants in the sample data, having to work on the landlord’s farm without wages. Another 14 percent worked at a wage of Rs 28 per day which was substantially below the market wage (See table 14, in Hussain et. al. 2003: 63). These and earlier contributions to the literature suggest that markets on their own do not necessarily always produce efficient outcomes in the developed, much less in the underdeveloped countries.

Three key deregulation decisions were taken in the U.S. which was to impact both the developed and developing world. As Skidelsky (2010: 7) has argued, these market deregulation decisions set the stage for the subsequent eruption of the crisis. First, the Glass-Steagall Act of 1933 which forbade retail banks to engage in imprudent investment activities such as underwriting and selling securities was repealed in 1999. Consequently banks could package individual mortgages into tranches of

varying risk (which included sub-prime mortgages) and sell these to investors. Such securitisation became the basis of the housing boom and when the bust occurred, it triggered the collapse of financial markets. Second, the ballooning markets for derivatives were pumped up further by the decision of the Clinton administration not to regulate credit-default swaps. Third the decision by the US Securities and Exchange Commission to allow banks to increase their leverage ratios³ from 10:1 to 30:1 (Skidelsky 2010: 7). This enabled banks to massively increase their lending.

Risk, Market Failure and Crisis

The Nature of Systemic Risk and the Problem of Measurement. There is an important dimension to the tendency for crisis in a finance dominated global economy: the weak institutional framework combined with the nature of risk measurement in economic science. The dynamics of the financial sphere produced escalating systemic risk, and yet it was inherently difficult to measure it, let alone the fact of the absence of an efficient market feedback mechanism for self correction. While the institutional framework and the state of economic science allowed measurement of individual risk it did not enable measurement of systemic risk. As Michael Spence has pointed out, in a situation where individual risks were positively correlated, systemic risk was virtually impossible to estimate (Spence 2009). This is because in the existing state of knowledge in mathematical modelling, estimation of risk at the aggregate level of the system is based on a particular distribution of individual risk. If, as happened in the case of the current crisis, the distribution of individual risk is changing then, it becomes extremely difficult to accurately model systemic risk (ibid.).

Financial Fragility and Economic Instability. The basis of fragility in the global financial system lay in two fundamental features of the new financial edifice:

- (i) The new financial products were priced by financial experts on the basis of risk estimates drawn from mathematical probability which were not transparent to the buyers. This asymmetry of information between producers and buyers of financial products created a tendency for individuals and organizations to undertake overly risky investments without being aware of it. This further accentuated the fragility of the global financial edifice.
- (ii) What made the fragility acute was the fact that many of these financial products such as sub-prime mortgage, debt bonds and risk insurance while appearing individually distinct products, were actually interlinked and hence created escalating risk at the systemic level – a kind of risk which as discussed above was inherently difficult to measure.

It is these two features of imperfect information at both the micro and the macro levels that gave to the global financial system the potential for market failure within an inadequate regulatory framework. Spiralling production and sale of derivatives, with multiplying systemic risks that were unknown to the individual investors, created a time bomb that could threaten the global financial system and thereby the real economy. The evidence shows that every major financial entity was highly levered and at the same time held potentially toxic assets. This fact exposed all the major financial organizations in the world to extreme financial distress. When the time bomb exploded some of the most important banks and finance companies suffered simultaneous and major damage which brought the financial and economic system of the world into the most serious crisis in a century (Hussain 2010).

The current crisis is not historically unique since the world economy is subject to recurrent crises though of varying magnitudes. As John Eatwell observes in an important paper, crises occur on average after every seven to ten years. He argues that risky financial investments by individuals impose “costly risks” on society since these externalities are not part of the cost estimates of the individual (Eatwell 2008: 80). In the absence of public policy to prevent the build up of such externalities, the market system would be subject to an inherent instability.

Mitigating this tendency of instability will require establishing new institutional structures which restrict high risk investment in financial products, reduce imperfect information in markets⁴ and constrain greed that has historically been celebrated by Neo-classical economists as the driving force of market based growth. If the institutional structure for providing a semblance of stability to the world economy is to be sustained, then the formal rules have to be rooted in what North calls informal norms.⁵ Such a normative structure could be based on a consciousness wherein the pursuit of self interest is informed by empathy and a sense of responsibility towards the vulnerable sections of society who suffer most during periods of economic turmoil. This feature of culture and individual sensibility as elements in the normative structure underpinning sustainable development is elaborated in Section 3 of this paper.

The Global Environmental Crisis

Global Warming, Climate Change and the Threat to Life on Earth

Over the last three centuries following the industrial revolution the rapid build-up of greenhouse gas emissions and the resultant temperature increase, could reach a critical level by the end of this century. This global warming is due to the emission of gases such as carbon dioxide, methane and nitrous oxide when using fossil fuels in the process of production, consumption and waste disposal. The Inter-governmental Panel for Climatic Change (IPCC) has provided evidence that there has been a huge buildup of these greenhouse gases; that this is the consequence of human intervention into the ecosystem; and that Global Warming has occurred as a result. For example the IPCC observes that: “The atmospheric concentrations of carbon dioxide, methane, and nitrous oxide have increased to levels unprecedented in at least the last 800,000 years.” (IPCC 2013: 9). Greenhouse gases “...have increased markedly as a result of human activity since 1750 ...” and “Warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia ... the atmosphere and oceans have warmed ...” (IPCC 2007: 2).

Climate change associated with global warming has caused an increase in the intensity and frequency of extreme climatic events such as droughts, floods, hurricanes and extreme cold in some places and extreme heat in others. These phenomena have caused large scale destruction resulting in loss of life and livelihood.

The current consensus amongst scientists is that if the increase in average global temperatures goes beyond 2 degrees Centigrade we will enter uncharted territory and the consequences for the life support systems of the planet could be catastrophic. Apart from the threat to human life, if temperatures exceed 1.5 degrees Centigrade, over the next four decades, then approximately 20 to 30 percent of plant and animal species are likely to become extinct (IPCC 2007: 11). Currently the species extinction rate is 2000 species per year which is 1000 times the natural extinction rate of 2 species per year⁶. This has led some scientists to suggest that the earth may have entered the sixth mass extinction period. But unlike the previous five mass extinction periods, this one has been induced by the forms of production and social life of humans within the capitalist mode of production.

At the same time, during the process of production and consumption, forests and freshwater sources are being depleted. The disposal of toxic materials into soils, the hydrologic system and the atmosphere have reached levels which may be approaching the maximum loading capacity of the planet. As the delicate balance in nature that is now called the eco system is being disturbed, the ability of the life support system of the planet to sustain life is being threatened.

Environmental Policy, Technological Change and the problem of Market Failure

The recent Conference of Parties (COP-21) held in Paris has achieved a broad commitment from the comity of nations of limiting the average global temperature increase by the end of this century to 1.5 to 2 degrees Centigrade above pre industrial levels. In the pursuit of this aim, they hope to achieve zero net emissions between the years 2050 A.D and 2100 A.D.

The apparent success of the Paris Agreement is that it has won a commitment from 187 countries to do what they can towards the collective goal of zero net emissions and restricting the temperature increase to well below 2 degrees Centigrade. Its weakness is that there are no specific national goals that can be made consistent with the aggregate global goals, much less an enforcement mechanism to ensure that countries honour their commitments. As it stands, the Agreement creates a zero-sum game: there is an incentive for each country to do less while expecting others to do more.⁷

Implicit in the Paris Agreement in particular and the mainstream literature on Sustainable Development in general, is the belief that green technologies will become available and get adopted within the required time frame through the market mechanism regulated by environmental and technology policies of government. This it is assumed can be achieved by states creating the appropriate incentive/disincentive structure through a combination of subsidies and taxes for the private sector.

There are four forms of market failure that render these presumptions unrealistic: First, in the case of green technologies that are available, and are relatively cheaper than non-green technologies, adoption by capitalists quickly and across the board means that the investment embodied in the existing stock of machines would have to be written off. So if green technology adoption is to be financially feasible for firms then the gain from the relatively cheaper green technology would have to be at least equal to the loss resulting from premature replacement of the existing machine stock.

In cases where the green technology in terms of the market calculus is economically infeasible, the magnitude of government subsidies required by profit seeking entrepreneurs to adopt it, may involve a prohibitive fiscal burden for governments already operating under tight budgetary constraints.

A second form of market failure that may operate in the adoption and diffusion of green technologies originates in an aspect of the phenomenon of dynamic economies of scale. This occurs when the gains from technology adoption for one user depend on a number of other users. These gains from the scale of technology adoption may be generated through learning by doing by various firms or network externalities. Such externalities occur in the case of technologies which require operability of components made by different firms, hence the need for standardization and collaboration between firms adopting those technologies (Popp, Newell and Jaffe 2010: 878). Since the financial feasibility of adoption of such technologies for any one firm requires adoption by a number of others, the issuance of a patent by the government to any one party as an inducement for the development or adoption of such technologies may be counter-productive. On the other hand the market would be inherently incapable of internalizing for any one firm the feedback of gains in such cases of inter-

dependence between firms. Thus the development and adoption of green technologies subject to network externalities would be uncertain.

A third form of market failure results from information asymmetry between an investor in the production of a green technology and its user. Popp, Newell and Jaffe call this a principal-agent problem which arises when for example a builder invests in the construction of an energy efficient building which enables a prospective user to save on energy bills. If the magnitude of energy saving estimated by the user is lower than that of the builder due to inadequate information, then the builder may not be able to price the product at a high enough level to recover the investment. Hence this asymmetric information problem may lead to underinvestment in such green technologies (ibid.).

There is a fourth problem with the assumption that economic growth can be sustained through green technological change. In the case of knowledge intensive technologies the problem arises out of the nature of the relationship between the development of science and the pace and pattern of innovative activity. To begin with, a necessary condition for science research to translate into new technologies is the establishment of an institutionalized linkage between science research organisations and industry (Hussain 1988: 87-89). Where technological changes require breakthroughs in science, there is uncertainty that they will occur within the required timeframe. This is because even where institutionalized links exist between science research and industry, the fact remains, the domain of pure science is to some extent autonomous. Therefore breakthroughs in science, their immediate relevance for industry and their timing are not necessarily simply a function of the amount of money made available for science research.

Sometimes scientific discoveries are made without any concern for their applicability but only later technological applications are undertaken. For example Harvey Brooks has argued that in some cases opportunities for fulfilling previously identified social needs arise when “a scientific discovery is made in the course of an exploration of natural phenomena undertaken with no potential application in mind” (Brooks 1994: 479). As examples he refers to the discovery of laser which happened to have numerous subsequent applications; similarly the discovery of X-rays was made in pure science but turned out to have many “applications in medicine and industry...” (ibid.). These examples illustrate the fact that scientific discoveries are not necessarily subject to the imperatives of market driven technological change.

The discussion in this section indicates the uncertain prospects of achieving a time bound development and adoption of green technologies for making economic growth consistent with conserving the environment.

The limitations of the efficacy of policy as well as markets notwithstanding, governments of the world are expected to strive in concert to seek ways to protect the life support systems of the planet. Since nothing less than life on earth is at stake, alternative approaches to managing the crisis ought to be considered too. In this context it is vital for the people of the world to seek sustainable levels and forms of production and social life through a change in the existing relationship between humans, commodities and nature: a relationship which has emerged over the last three centuries and which lies at the root of the present crisis.

Recovering our Humanity for Sustainable Development

Preventing an environmental catastrophe essentially involves achieving a profound change in the consciousness that has emerged within the economic and cultural framework and the underlying

institutional structures and forms of production in Capitalism. Beyond the immediate mitigation measures the long term effort by the human community to restore the life support systems of the planet requires recovering our humanity and a shared sense of the sacred in nature and our own nature.⁸ Such a consciousness can underpin the effort to change the mode of production, the trajectory of technological change and the structures of political power.

The Relationship between Humans, Nature and Commodities within Capitalism

The social and economic life in the industrial era has shaped a particular relationship between humans, commodities and nature. The relationship between individuals is in most cases structured by the market system where most people are engaged in aggressive competition for profits or consumer goods. The ‘other’ is experienced not as a source of enhancing the self but rather as a means or a threat to achieving material ends.

The relationship of the individual with commodities is also shaped by the market based production system that has a tendency to continuously increase output. Such a production system has inculcated in the individual an insatiable desire to acquire more and more commodities. Here a commodity is perceived not merely in terms of its functional attributes but as the embodiment of the qualities of physical attractiveness, efficacy, power and success.⁹ Thus I have argued elsewhere “... qualities which are inherent to human beings are alienated from them and transposed into commodities. We are then invited by the advertisement industry to acquire commodities not simply to fulfill our material needs but essentially to repossess ourselves” (Hussain 2015:23).

In an atomized society, where the individual is driven by the single minded desire to consume and acquire commodities, nature is seen as an exploitable resource to fulfill this desire. Within such a consciousness there is a propensity to objectify nature as if it were divorced from the experience of knowing ourselves as human beings connected to all creation and thereby to a transcendent reality (ibid.).

An Alternative Relationship between Humans, Commodities and Nature

Building a new relationship between humans, commodities and nature, will involve overcoming a sensibility in which the ego dominates and pits humans against each other in competition and conflict. Such a sensibility is engendered by a culture wherein accumulation of commodities has become an exclusive measure of human worth and welfare; and where alienation from nature and our own nature leads to the mutilation of both. These forms of consciousness are counter posed to those implied by the wisdom traditions across the world. If this “unanimous tradition” is to be brought to bear as a vital element in the social and political process of dealing with the contemporary crisis of civilisation, then we need to rediscover the sense of “the sacred, the true and the beautiful” (Perry 1999: 5).

In South Asia, as in many other regions, the interplay of diverse cultures and religious beliefs across centuries has developed a tradition of placing the inner development of a person above the pursuit of commodities. I have suggested elsewhere that this dimension of consciousness lies dormant in many strata of South Asian society, but finds expression in Sufi poetry that continues to resonate in the living folk cultures of various regions. The poor peasants of the Punjab inherit this rich philosophical tradition that is reflected in their comprehension of commodities and forms of social action, through which they create their individual and collective history (Hussain 2009: 80). Thus for example the 17th century Punjabi Sufi poet, Shah Hussain suggests that the path to the inner Self goes beyond material goods:

“Those who have accumulated millions that too is mere dust”¹⁰

Shah Hussain suggests the challenge of an exchange relationship which is counter posed to the market, where loving the other makes possible a kind of ‘remuneration’ that is nutrition for the inner self:

“Become a lover if you want to earn love”¹¹

Earlier the Vedanta Treatise suggests, according to Parthasarathy, that

“Your real Self is the abode of eternal peace and happiness ... Only the rare one who has directed his search inward has reached the state of supreme bliss.”¹²

As Kapila Vatsyayan argues, “... the voices of poets, the mystics, and the Sufis continue to reverberate in South Asia in rural as also urban milieus.” (Vatsyayan 2014: 482).

The journey to self realization in this tradition is a journey of love for the other. Rabindranath Tagore, the iconic nineteenth century Bengali poet bathes in the perennial stream of South Asian consciousness as he recalls this transcendent journey to the other:

*“You and I have floated here on the stream that brings from the fount
At the heart of time, love for one another”¹³*

The relationship of oneness with the other is evoked by the great contemporary Punjabi Sufi poet, Najam Hussain Syed:

*“Every pore is suffused with the warmth of the loved one,
There is neither nearness nor distance”¹⁴*

It is when love and compassion define social and economic relations rather than commodities alone, that human beings can fulfill themselves and give meaning to their existence.

Recovering a Humane Consciousness for Deepening Human Development and Achieving Sustainable Development

The contemporary pre-eminence given to commodities can also be counter posed by the Classical Greek tradition. Aristotle in his Nicomachean Ethics suggests that goods cannot be of value since they are merely useful. What is of value is human functioning according to the principles of virtue. He argues: “ifwe state the function of man to be a certain kind of life, and this to be an activity or actions of the soul implying a rational principle, and the function of a good man to be the good and noble performance of these,if this is the case, human good turns out to be activity of soul in accordance with virtue...” (Aristotle 1999: 11).

Human Functioning and the Development of Human Capabilities. Amartya Sen 2,400 years later, in taking up Aristotle’s insight on human functioning achieved a paradigmatic change in the framework of development thinking by positing the concept of human capabilities (Dreze and Sen 1989: 12). This involved a shift away from income (hence goods), as the aim of development to being a means to an end, which is developing the capability to undertake *activity* which a person may value. The concept of human capability thus broadens the idea of development because while including the ability to earn a higher income, it also includes socially useful activity which a person may consider to be of value (ibid.). Mahbub Ul Haq’s work on Human Development based on the Human

Development index (income, and quantitative measures of health and education respectively), which had a significant positive impact on public policy worldwide, was anchored in Sen's concept of the development of human capabilities (UNDP 1990). Living a life of virtue as a form of human functioning that was raised by Aristotle, however remains to be brought into consideration in this context.

Amartya Sen does allude to ethical behaviour as a possible feature of human rationality in his powerful critique of the Neo-classical theory of rationality. He rejects the Neo-classical idea of rationality being exclusively restricted to self interested behaviour on grounds that it is not a good approximation of actual human behaviour. The Neo-classical conception, Sen argues, does not for example take account of varying combinations of individual sacrifice out of group loyalty on the one hand and greater fulfillment of individual interests through the group on the other; much less does it account for an individual's effort to fulfill family obligations that may involve a substantial sacrifice of purely personal gains (Sen 1987: 15-20). Indeed, Sen emphasizes that concern with the lives of others is a "basic human motivation" (Dreze and Sen 1989: 13).

The Self and Rationality: An Alternative Perspective. One could suggest that the missing dimension in the contemporary idea of rationality is the conception of individual choice resulting from a consciousness of the Self that finds fulfillment in its relationship with the other. The development of such a *relational* selfhood and thereby the possibility of virtuous behaviour, as a form of *rationality*, could be considered an aspect of human development. Furthermore, it could be argued that a vital aspect of the development of human capabilities is nurturing a consciousness that could enable a re-awareness of empathy and hence caring for others, as a form of virtue. Thus the choice of sacrificing narrow self interest to release the other from suffering for instance would flow out of a developed Self which at a fundamental level identifies ontologically with the other. The integrated Self in this conception is *apprehended* in society while the Neo-classical concept of the atomized self is *prior* to society.

Human development can be seen essentially as a form of education that develops a humane sensibility. At the inner level, it is a journey from the narrowed self, counter posed to the other, towards a greater Self into which the other is integrated and which is therefore actualized through its relationship of loving care with the other. Nurturing this dimension of our humanness could make a vital contribution to the process of knowing ourselves: a self awareness that could reconstruct human relationships so as to form the basis of cooperation in facing the challenge of a planet in peril.

In the context of this discussion, it may be helpful to refer to Karen Armstrong's work. She considers the process of becoming aware of our ability for compassion to be essentially educative (the Latin *educere* means 'to lead out'). Armstrong links up with the religious and wisdom traditions of the world in suggesting that compassion "exists potentially within every human being so that it can become a healing force in our own lives and in the world." (Armstrong 2011: 21).

The Normative Basis of Sustainable Development. Developing the sensibility of caring for others can be seen not only as an aspect of human development but can become a material force for Sustainable Development. Consider the original definition of Sustainable Development as formulated by the U.N. World Commission on Environment and Development, chaired by Mrs. Harlem Brundtland: Sustainable Development is development that "...meets the needs of the present without compromising the ability of the future generations to meet their own needs" (World Commission on Environment and Development 1987: 8). There are two key aspects of this definition. First, there is

inter-dependence of individuals in the human community both in the present and future. This inter-dependence and hence a sense of responsibility of humans towards each other, arises out of the fact that the process of fulfilling material needs by present and future generations occurs within a shared eco-system. Second, the responsibility towards each other implies overcoming poverty and inequality of opportunity today and in the future. Therefore human development in terms of nurturing the consciousness of care and compassion becomes an essential normative basis of Sustainable Development.

Of course recent work by economists has shown that contrary to the view of the economics orthodoxy, inequality has adverse economic and social consequences. Indeed greater equality of opportunity by developing the capabilities of individuals in society, broadening the base of investment and creating greater social cohesion enables long term economic growth.¹⁵ It can also broaden the knowledge base which can induce a more effective response to government incentives for technological change in a green direction.

The physical environment is seen in the South Asian tradition not in terms of a static and fragmented set of exploitable resources but as an integrated and dynamic natural process that enables material existence. At the same time, meditating upon the beauty of nature is a mode of knowing one's own nature and thereby nurturing, our aesthetic and ethical sensibility. Thus the mountains, the rivers, the fertile plains and the deserts are experienced in the South Asian tradition as part of a sacred unity that sustains both the physical and intellectual life of the human community. The term intellectual is used here in its Medieval sense of *intellectus*, meaning "the faculty which perceives the transcendent" (Lings 1993: 48). In this context Martin Lings suggests that the term *heart* in both the Western and Eastern traditions is taken to give access to the "centre of the soul", and in the ancient world is "often found as a synonym for intellect" (ibid.).

Religion (from the Latin *religio*) means re-establishment of the ligament with God. The Qur'an invites us to reestablish that ligament whereby in prayer or in beholding God's creation we become aware of His presence as loving mercy (*rahma*):

"... withersoever
Ye turn, there is Allah's countenance".¹⁶

In this context Seyyed Hossein Nasr argues, that the interrelation between God, humanity and nature is specified within a sacramental view of the physical universe. He observes that many Muslim sages saw the phenomena of nature as 'signs' of God (Nasr 1992: 88).

Re-experiencing our humanness through a sense of harmony with nature could create a sustainable relationship with the physical environment. Humans have the potential to harness nature for sustaining physical life and at the same time to experience its transcendent beauty. Cultivating such a sense of beauty could be another element in the normative basis for developing forms of production, social life and ways of being that could underpin Sustainable Development.

Conclusion

In this chapter the current world economic crisis and the longer term global environmental crisis have been analyzed in terms of the systemic tendencies of Capitalism. This analysis indicates the inherent limitations of markets which at one level underlie the instability of the of the world Capitalist economy.

At a deeper level the analysis suggests that a market based process of economic growth has engendered a particular relationship between humans, commodities and nature which has led to an environmental crisis that threatens life on earth. The limitations of government policy to effectively induce adoption of green technology and green technological change within the market based system have been analyzed in the context of the aims of the December 2015 Paris Summit.

The concluding section of the chapter presents the possibility of an alternative relationship between humans, commodities and nature. This is based on the “unanimous tradition” of re awareness of humanness in which caring for others is experienced as a vital fertilizing force in the growth of the self; and harmony with nature enables both the sustenance of physical life as well as the experience of a transcendent beauty that could enrich human civilisation.

The analysis here suggests that the missing dimension in the contemporary conception of the self is the idea of a Self that finds fulfillment in its relationship with the other. Thus nurturing the consciousness of compassion for others and a sense of relatedness with nature, as the source of individual choices could be another form of rationality. This could be a vital aspect of the development of “human capabilities” which would constitute the normative basis for Sustainable Development. Such a consciousness could also enable a shift away from a zero sum game in national environmental policies towards meaningful co operation for saving the life support systems of the planet.

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Notes

¹ For a more detailed analysis of growth and structural change in the global economy since the industrial revolution, see Hussain (2004).

² See for example Salop and Stiglitz (1977), Stiglitz (1982), Stiglitz (1987), and Hellman, Murdock and Stiglitz (1996).

³ Leverage ratio is the ratio of total liabilities to net worth of a bank.

⁴ Perhaps the most influential report proposing institutional changes for financial market regulation so as to reduce instability is a recent report of a UN Commission chaired by Joseph E. Stiglitz: Report of the Commission of Experts of the President of the United Nations General Assembly on Reforms of the International Monetary and Financial System, United Nations, New York, September 21, 2009.

⁵ For a discussion of institutions and how informal norms underlie formal rules, see North (1990: 4).

⁶ Estimated from World Wildlife Fund (2016) and Ceballos et. al. (2015) data.

⁷ For a discussion of this zero sum game theoretic constraint to country level implementation of the commitments in Paris, see: Green Light, *The Economist*, December 19th, 2015, page 89.

⁸ For a more detailed discussion of this issue, see Hussain (2015).

⁹ For an elaboration of this point, see Hussain (1991).

¹⁰ "Lakh, crore jinhaan de jurriya, so bhi jhuri jhuri", Shah Hussain, Kaafian, Majlis Shah Hussain, Lahore, second edition, March 1976, Page 22.

¹¹ Aashiq hovain, taan ishq kamaanwain, Shah Hussain, poem 11 in Kaafian Shah Hussain (Punjabi), Majlis Shah Hussain, Lahore, Second edition, page 25.

¹² Parthasarathy (2009: 25).

¹³ Tagore (1995: 49).

¹⁴ Najm Hussain Syed, *Baar di Vaar*, Rutt Lekha Publications, Lahore, 2000, page 37.

¹⁵ See for example, Atkinson (2015), Hussain (2014) and Stiglitz (2012).

For empirical evidence of the negative impact of inequality on economic growth, see Berg, Ostry and Zettelmeyer (2012), Herzer and Vollmer (2012) and Easterly (2007).

For an analysis of the relationship between social cohesion and economic growth, see Easterly, Ritzen and Woolcock (2006).

¹⁶ The Qur'an, Surah II, Verse 115, Translation by Mohammed Marmaduke Pickthall, Tahrike Tarsile Qur'an Inc., New York, 2006, page 34.