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Environmental Science

SUSTAINABLE DEVELOPMENT AND MARKET EXTERNALITIES

KEY WORDS:

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ABSTRACT

Sustainable development is all about ensuring the sustainability with development i.e. the development that sustains our natural resources, ecological and climatic balance. It is the development strategy that ensures the sustainability of a fair, livable and viable world with socio-economic progress having environmental responsibility thereby leaving the planet and its resources for the use of future generations. But in the wake of increasing deregulation and drive towards market, the goal of sustainable development appears to be unattainable especially in the context of third world developing countries because of inherent failure of businesses to address and subside the large scale negative externalities particularly in production. The present paper attempts to address the issue of sustainable development in the developing countries in the light of rising corporatization and intense inclination towards market. Forming a close linkage between sustainability, market failure and externalities, the paper asserts that India like developing countries may not perform well in addressing the issue of sustainable development primitively because market, due to its implicit profit orientation, cannot grapple with the detrimental environmental threats of business processes, and thus their negative by-products (CO2 emission, fossil fuels; deforestation; water, air, sound pollution etc) are over produced than the socially optimum level. Further, there is a trade-off between the objective of Economic Development and Sustainable Development in these countries since speedy economic development cannot be compromised in view of high incidence of poverty, hunger and unemployment. Also the irresponsible human behavior consistent with low education, lack of awareness and rising population has posed a threat to sustainability in these countries. Lastly, some suggestions have been floated to ensure sustainability such as environmental taxation, financial penalties, enforcement of legislations regarding environmental standards, caps and trading schemes to limit carbon emission etc.

INTRODUCTION

Sustainability envelops the fundamental canons of acquiring from the planet earth only what it can provide indefinitely thereby leaving future generations no less then what we have access to over selves. It implies the balance between environment, equity and economy. It is defined as: "the integration of environmental health, social equity and economic vitality in order to create thriving, healthy, diverse and resilient communities for this generation and generations to come.

The practice of sustainability recognizes how these issues are interconnected and requires a systems approach and an acknowledgement of complexity." It is a state of living that is able to continue for long and thus looks to protect our natural environment, human and ecological health, while driving innovation and not compromising our way of life.

Sustainable development is all about ensuring the sustainability with development i.e. the development that sustains our natural resources, ecological and climatic balance. It is thus the development strategy that ensures the sustainability of a fair, livable and viable world with socio-economic progress having environmental responsibility thereby leaving the planet and its resources for the use of future generations.

Basically, the concept of Sustainable Development was first described by the 1987 Bruntland Commission, a UN Sub Organization, and formerly World Commission on Environment, that aimed to unite countries in pursuit of sustainable development, and to find the ways to reconcile economic development with environmental protection. The Bruntland Commission Report defines sustainable development as the "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." In the recent past, in October 2015, the UN General Assembly adopted a Resolution thereby launching a 2030 Agenda of Sustainable Development Goals (SDGs) as a set of 17 interlinked global goals and associated 169 integrated targets designed to be a "blueprint to achieve a better and more sustainable future for all."

This Agenda, which is to be implemented by all countries and stake holders, is an holistic plan of action for humanity, planet and prosperity, and is intended to be achieved by the year 2030. The SDGs are in fact a call for action by all countries – poor, rich and middle income- to promote prosperity while protecting the planet. These SDGs include: No Poverty; Zero Hunger; Well Being; Inclusive Quality Education; Gender Equality; Clean Water & Sanitation; Clean & Affordable Energy; Inclusive Growth with Decent Work; Inclusive Industrialisation with Resilient Infrastructure and innovation; Reducing Inequalities; Resilient Cities & Communities; Sustainable Consumption and Production Pattern; Climatic Security; Conservation of Life Below Water; Conservation of Ecosystem and Biodiversity; Peace, Justice and Inclusive Institutions; and Global Partnership for SDGs.

Objectives and Importance of Study.

Now the question arises- how a developing third world country like India will perform in view of these global SDGs since there is an intense drive for compulsive privatization to push the growth rate through market forces. Proponents of privatisation are welcoming this move to promote the case for greater private sector participation, particularly in the global south. The recent proposal of the Govt of India to privatise the state owned companies in the coming year is seen as an important step by the Govt to achieve long term sustainable growth of the companies. This move needs to be taken a serious look at the history of the private sector leaving behind the most marginalised and vulnerable. This is particularly silent in the global context where investment treaties increasingly limit the ability of states to uphold human rights

commitments when they are deemed to interfere with profits. It becomes therefore important to address the issue of sustainability in view of the large scale externalities created on account of the market failure in these countries. The paper thus focuses on the under mentioned objectives:-

1. To study the threats for Sustainable Development in the Developing World in the light of increasing drive towards privatization and External Diseconomies caused by the market failure.
2. Whether there exists a trade-off between Growth, Sustainability and Conservation?
3. To suggest a few policy measures that developing countries can resort to deliver for the Sustainable Development Goals.

Sustainability, Externalities and Market Failure.

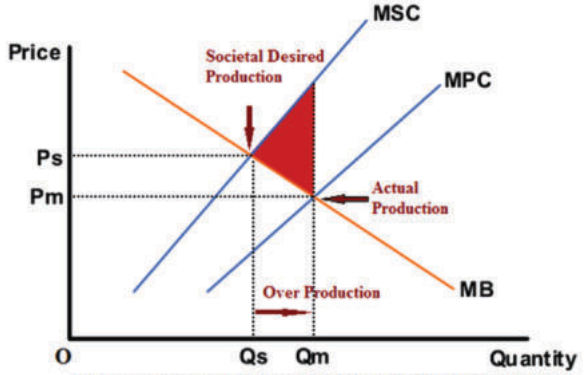
Externalities, also called the Neighborhood Effects, are the external effects of any business process which may be beneficial and detrimental. The positive external effects are called as External Economies or positive externality, and harmful external effects of such processes are termed as external diseconomies or Negative Externalities. "When the action of an economic decision-maker creates benefits for others, for which he is not paid, there occurs an external economy for others (and the economy as a whole). When the action of an individual agents creates costs for others for which he does not pay, there occurs an external diseconomy for the other (and the society as a whole)".

Since there has been unplanned and unregulated exploitation of the world's natural resources, the threat to sustainability is inevitable. Further in view of the shift towards increased reliance on businesses and market forces, the issues of achieving SDGs have become more challenging. The market regulated economies are governed by the fundamental principle of profit motive, competition. self-interest, private property with limited or no government intervention. The basic intent remains confined to profit and productivity with intense cut-throat competition without addressing the socio-economic objectives of public policy along with welfare and sustainability issues of the country. Competition wipes out the disadvantaged (older aged, children and physically challenged) having inherent competitive disadvantage. Market driven economy hardly cares for the vulnerable and deprived since it reflects the values for winners only. "A market economy may produce private jets for some people while others have no food or place to call home"

In the absence of imperative government intervention, when externalities exist, market prices do not reflect the full costs or benefits in the production or consumption of a good. Basically, market efficiency and social optima in production is ensured if production costs of negative by-products include both private costs and the social costs as well. The inclusion of social or marginal external cost raises the production costs thereby restraining these products from getting overproduced and over consumed. Also the products are made available for society at higher prices. But due to the structure of markets, it may be impossible for them to be perfect. Reasons for market failure include: positive and negative externalities, environmental concerns, lack of public goods, under-provision of merit goods, overprovision of demerit goods, and abuse of monopoly power. Externalities thus lead to market failure because a product or service's price equilibrium does not accurately reflect the true costs and benefits of that product or service.

Negative Externalities especially in production causes divergence between Private Costs and Social Costs. Due to the profit –oriented production processes, the private enterprise determines the price of products on the basis of their private marginal costs and thus excludes the marginal environmental/social costs in terms of negative by-products e.g. noise, air and water pollution; excessive emission of greenhouse gases etc. Since private enterprises do not include this external social and environment costs, the products creating the threats to sustainability are over produced and are made available at low price thereby resulting in overconsumption. Thus the whole external environmental costs are borne by and shifted to the society and the future generations.

In the case of external costs, such as pollution, producers may not bear all the societal costs of production, and this would translate to lower prices to consumers than they should pay. A company causing pollution as a by-product could profit by not paying the true cost of managing its waste, and others (the broader public) would be burdened by the costs—including loss of natural resources, loss of pleasure from the environment because of environmental degradation, and public health problems caused by the pollution. Oil and oil sales and consumption can have high external costs to society beyond the price charged by the oil company. The pollution from oil use has external costs and oil use can increase dependency on foreign resources, including on foreign countries with repressive governments. The over-production and overuse of fossil fuels raises environmental as well as economic concerns, since coal, petroleum, and natural gas contain high percentages of carbon, the burning of which generates greenhouse gasses (GHGs) such as Carbon Dioxide contributing to the process of global warming.



Market Failure and Over Production of Negative Externalities

For market efficiency, consumers should pay the full costs, private and social as well, of the products and services they consume. If an individual or business does not pay the full (private and social) costs of goods and services they consume, this would cause a good to be overproduced and over consumed while pushing additional costs on to individuals not involved in the transaction. "Negative externalities usually come at the cost of individuals, while positive externalities generally have a benefit. For example, a crematorium releases toxic gases such as mercury and carbon dioxide into the air. This has a negative impact on people who may live in the area, causing them harm. Pollution is another commonly known negative externality. Corporations and industries may try to curb their costs by putting in production measures that may have a detrimental effect on the environment. While this may decrease the cost of production and increase revenues, it also has a cost to the environment as well as society".

Presence of negative externalities in the production processes caused by the market failure leads to the over production of the product causing external harms since producers to minimize cost and price, don't pay the social cost of such negative by-products, may be air pollution, noise pollution, water pollution, soil infertility on account of excessive use of chemicals, water scarcity, deforestation, biodiversity loss and COs emissions etc. So in view of the increasing marketisation of the developing economies, these negative by-products which are a serious threat for the

sustainability, are further likely to be over-produced and over consumed than desired by the planet.

Dilemma of Sustainable Development in Third World Countries.

The threat for the Sustainable Development has largely been posed by the Developed Countries mainly because of the excessive emission of Green House Gases especially CO2, but developing countries are mandatorily required to deliver for the issues of sustainability through appropriate policy measures. But the principal challenge for Sustainable Development is the dilemma of developing nations who seek a faster economic growth for the elimination of poverty, hunger, inequality, unemployment and social injustice without further impacting the global environment. Therefore, the issues of sustainable development in the developing country like India needs to be addressed in the light of the existing socio-economic ills e.g. abject poverty, mass unemployment, social injustice and high population growth.

High incidence of Poverty and open unemployment in the developing world are major threats to the sustainable development since poor and unemployed persons are overexploiting the natural resources to earn livelihood e.g. over exploitation of land and water resources. The depletion and degradation of natural resources are posing serious challenges not only to produce enough food and other agricultural products to sustain local livelihoods, but also to meet the needs of urban populations which rely on this supply. So there appears to be a trade-off between Economic Development and Sustainable Development in these countries since Sustainable Development cannot be achieved by compromising economic development and without reducing poverty, unemployment, hunger, malnutrition, inequalities and social injustice.

These socio-economic ills, which themselves are creating negative externalities for Sustainability, if addressed through rapid growth and productivity i.e. through conventional model of growth and development, will further take away these countries from achieving the goal of Sustainable Development. Also there is a Conflict between Economic Development and Conservation. As rapid economic development goes on, more and more natural habitats will be depleted and will ultimately limit or even inhibit economic development. Further, human population has been growing exponentially in the developing countries. Increased population growth has put increased pressure on food production, land masses, water body, transportation and biodiversity losses etc. Meeting the needs of the global population initiates all the subsequent problems. "Understandably, all the demands resulted from the increased population lead to the stress on the existing resource, depletion of the non-renewable resources and imbalance of the natural integrity". Therefore, the global population needs to be proportionate with the natural resources.

Now the dilemma is, "What should be the priority in LDCs?". Should it be development and economic growth targeting not only the faster productivity along with effectively addressing the socio-economic ills such as poverty, hunger and social injustice? Or, should it be a reduction of Co2 emissions for protecting humanity from the destructive consequences of climate change? We are living in a critical time. We stand today at a crossroad. While the developed nations are responsible for this situation, developing nations have been left to act responsibly and find solutions to come out of this dilemma of sustainable development.

Strategy and Suggestions for Sustainable Development.

Sustainable Development is, a historic opportunity for the world communities- both developed and developing) to deliver inclusive growth, eliminate poverty and reduce the risk of climate change by changing perspectives and approaches to economic development. It entails everyone to participate in making efforts to achieve sustainable development. The following are some of the suggestions and strategies that developing countries can pursue to deliver for the issues of sustainability:-

1. Issues of Economic Development i.e. poverty, unemployment and high population growth etc needs to be addressed at the priority basis by the national governments of developing countries. Because of their continuously high fertility rates, the developing countries like India will continue to see the number of youth and adolescents rising. A growing share of young and productive population presents opportunities for reaping a demographic dividend. However, this dividend will pay out only if these countries can create employment opportunities, which will be a major challenge for least developed countries in the decades ahead.

2. There is also a strong scientific consensus that global warming is induced by human behaviour, predominantly by fossil fuel use and, to a smaller extent, by changes in land use and deforestation. Climate change poses numerous and stark challenges for sustainable development. Degree of vulnerability will vary even more, with developing countries and the poor, which have contributed the least to global warming, likely to suffer the most. The increased concentration of greenhouse gases in the atmosphere—most importantly, CO2—is leading to a warming of the planet. National governments can respond to negative externalities of production and to resource depletion and CO^2 pollution using a number of mechanisms designed to reduce emissions of global greenhouse gases and promote sustainability. These include: environmental taxation, such as carbon taxes, to recover the external costs of pollution; legislation setting environmental standards and banning firms which fail to meet these standards. Taxation and financial penalties increase the market price of carbon. This provides strong incentives to reduce carbon emissions by sending signals to **consumers** about what goods and services produce high carbon emissions and which should be used more sparingly; to **producer**s about which inputs emit more carbon, and which emit less, so encouraging them to move to lower-carbon technologies; and to **inventors and innovators** to develop and introduce lower-carbon products and processes.

3. Caps and Trade Scheme needs to be introduced effectively to reduce the emission of green house gases. A cap (upper limit) and trade scheme is a market-based approach to reducing carbon emissions through financial incentives. It's a system designed programme to limit, or cap, the total level of emissions of certain chemicals, particularly carbon dioxide, as a result of industrial activity. The government issues a set amount of permits to companies that comprise a cap on allowed carbon dioxide emissions. Companies that surpass the cap are taxed, while companies that cut their emissions may sell or trade unused credits to those who already have reached the emission limits. The total limit (or cap) on pollution credits declines over time, giving corporations an incentive to find cheaper alternatives. Further, the government lowers the number of permits each year, thereby lowering the total emissions cap. This makes the permits more expensive. Over time, companies have an incentive to invest in clean technology as it becomes cheaper than buying permits.

4. Promoting Clean and Green Technologies e.g recycling, renewable energies (wind and solar power, biomass and biofuels and hydropower), green transportation, waste water recycling and energy efficient lighting, homes, buildings, electric motors and commercial and domestic appliances. Further, nations should increasingly resort to the Green Growth Strategy of inclusive sustainable development- a sustainable growth strategy that incorporates environmental issues such as efficient and appropriate use of land, energy,

water and other resources, conservation of significant habitats, endangered species along with our archeological treasure. "Green growth is necessary, efficient, and affordable. It is the only way to reconcile the rapid growth required to bring developing countries to the level of prosperity to which they aspire with the needs of the more than 1 billion people still living in poverty and the imperative of a better managed environment".

Shift towards Market Economy and Big Businesses are, however, an increasing Global Phenomeneon, even the developing countries should not follow the LPG model blindly. Further, Business, as usual, will not help us to get the future we want. It is therefore critical for companies to change the purpose of doing business which expects them to make profits with a greater social and environmental responsibility than ever before. So, while well-thought out policies by developing countries will make growth and climate objectives mutually reinforcing in the short and long term, businesses will be required to make investments in the drive to low carbon economy. And, we as individuals also have to grow into responsible consumers by committing to a changed lifestyle. If we do not act now, we will be delayed to reverse the impact.

CONCLUSION.

In essence, in can be concluded that in the wake of increasing marketisation, the goal of sustainable development appears to be unattainable especially in the context of developing countries like India because of inherent failure of businesses to address and subside the large scale negative externalities particularly in production. The paper has attempted to address the issue of sustainable development in the developing countries in the light of rising corporatization and intense inclination towards market. Forming a close linkage between sustainability, market failure and externalities, it is argued that India like developing countries may not perform well in addressing the issue of sustainable development primitively because market, due to its implicit profit orientation, cannot grapple with the detrimental environmental threats of business processes, and thus their negative by-products (CO2 emission, fossil fuels; deforestation; water, air, sound pollution etc) are over produced than the socially optimum level. Further, there is dilemma of Economic Development and Sustainable Development in these countries since speedy economic development cannot be compromised in view of high incidence of poverty, hunger and unemployment and social injustice. Also the irresponsible human behavior consistent with low education, lack of awareness and rising population has posed a threat to sustainability in these countries. Therefore to deliver for global goal of sustainability it is suggested that assertive governments should enforce some measures such as environmental taxation, financial penalties, enforcement of legislations regarding environmental standards, caps and trading schemes to limit carbon emission and adoption of green growth strategies etc accompanied by major steps to address the threats of poverty, unemployment and high population growth.

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