



Story of Sustainable Development

By

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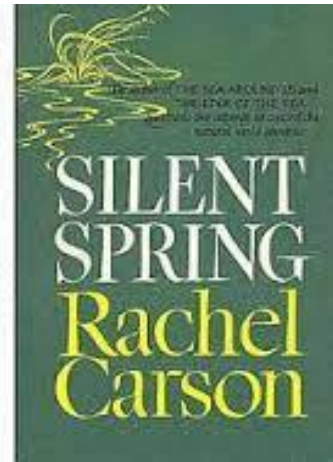
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Dear Friends,

I thank all of you to have given me an opportunity to share some of my thoughts through these blogs over the last year. Briefly, we noted that through our incessant drive for ‘development’ we have acquired the powers to steer the future course of our Mother Earth, and that is very likely to happen in the next 20 – 40 years, unless we take adequate corrective actions. We know that we are living in an age of human beings, the ‘Anthropocene’. We also looked at the story of the nine planetary boundaries, that scientists have found out to be critical for retaining our equilibrium status of the ‘Holocene’ we are so familiar to live within, for the past 10,000 years or so. If left to Herself, Mother Earth can continue to be in this stable state for another 10,000 to 20,000 years, but

In the coming months, I have a plan to discuss the story of Sustainable Development (SD) as it has been unfolding before us from around 1960, when Rachel Carson published her famous book, ‘The Silent Springs’. But in order to get a good appreciation of the complex forces at play, we plan to introduce to you the links between Human Rights and Sustainable Development. In very simple terms, access to basic human rights like food, shelter, education, energy, healthcare, etc. for the



entire mankind on Mother Earth (Captured by the term ‘Equity’) is an essential prerequisite for continued economic development (*Economy*), while retaining the essential balance of our natural environment (*Ecology*). Thus the principal theme of SD is to retain the balance between *equity, ecology and economy*. We shall discuss them in detail later.

In order to base our conclusions on facts, we shall discuss the famous IPAT equation that attempts to measure the impacts of humans on Mother Earth. The equation is as under:

$$\text{IMPACT (I)} = \text{POPULATION (P)} \times \text{AFFLUENCE (A)} \times \text{TECHNOLOGY (T)}.$$

In simple broad terms, human impact may be measured through the increasing load of growing population on Mother Earth, the affluent consumption patterns of the rich segment and the continuous technological developments bearing its own pressure of our environment like climate change, biodiversity loss and ozone depletion. We shall get an opportunity to deal with them in some detail. Which one do you think has the highest impact? Which one has the least impact?

Another important concept that helps to build the framework for SD, is our rather curtailed notion of economics. All our economic measures for growth are sadly focused on GDP that fails to take into account the immense contribution we draw from Nature in the form of ‘free’ ecological services. Prof. Johan Rockstrom says that these are no more ‘free’ and Mother Earth has started to send us ‘invoices’ for these services. In other words, it’s high time that we all take into account our withdrawals from Nature and at least start accounting for it. Our facts show that 15 out of 24 of these ecological services are dwindling, and we consumed whatever Mother Earth can provide over a full year by the beginning of August in 2018, and then we are all living upon borrowed capital. This is certainly not sustainable.



We plan to introduce the concept of Resilience and Tipping Points. All natural systems, including our body has a built in capacity to withstand external forces that attempt to de-stabilize the equilibrium state of the system. This is known as ‘Resilience’. Our Mumbai-Kars are well known to fight back flooding, and resume normal life at the earliest possible opportunity. This is an example of resilience. But there is a long term effect, and the resilience of a system may be slowly but steadily eroded, such that a relatively small external force can lead the entire system to irreversibly move into a different equilibrium state. The point at which such a change happens is called ‘Tipping Points’. We shall have the opportunity to see many such global tipping points identified by Science.

After these introductory concepts, we shall discuss in brief, the history of Sustainable Development, starting with the publication of the book, *Silent Springs*, the first UN Conference on Human Environment in 1972, followed-up by setting up of the Brundtland Commission, 10 years later by the [United Nations Secretary-General Javier Pérez de Cuéllar](#) in December 1983. We shall provide you with the principal milestones in this history as a ‘Timeline for Sustainable Development’.

Studying this history would inform us that the path to SD has been always full of controversies, and we had a mixed score card till the end of the last millennium. Fortunately, The UN could forge a set of Millennium Development Goals (2000 – 2015) before the turn of the millennium and the world had an example of successful implementation of basically societal goals driven by the principle of *Equity* in spite of the differences. Scientists and global leaders found a clue to bypass the controversies and forge ahead with a set of far more ambitious Sustainable Development Goals (SDGs) that were formulated toward the last 3 years of the MDGs, so that we now have a set of 17 SDGs that provide an agreed roadmap for Sustainable Development that attempts to strike a global balance between *Equity, Ecology and Economy*. WE hope to discuss in some details, each one of the 17 SDG.

We do hope that you all would be sufficiently interested in getting to know what is happening and what we can all do as our contributions towards SD. Specifically, I would like to urge all of you to avail of the enormous (and free) literature available on the Internet on this subject, and how the world values contributions.

