## Sustainable Development 2050: Spirituality - The Missing Link

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#### Abstract

We live in the Anthropocene and "The future of humanity and of our planet lies in the hands of today's younger generation..." In spite of the SDGs and the Paris Agreement; assured sustainable development is still far from reality; and many challenges persist. Science became part of the mainstream sustainability dialogue after the publication of the planetary boundaries. We argue that mainstreaming spirituality holds the key to win over the final challenges in sustainable development. For this paper, 'Spirituality' is synonymous with service to mankind (Swami Vivekananda). It is a way of life upholding truth, moral, ethical and human values. Spirituality assures that in the eternal fight between truth and untruth; truth always wins. Therefore, mainstreaming spirituality in our sustainability dialogue is essential for the Holocene period to continue.

Keywords: Sustainability, Spirituality, Sustainable Development

#### Introduction

"Segregating Science and Spirituality has been the greatest crime against humanity in the past century."

-Amma, Mata Amritanandamayi Devi (2015).

Mankind witnessed unprecedented growth during the last half of the 20th century, accompanied by equally unprecedented environmental consequences. Ban Ki Moon who served United Nations as Secretary General from 2007-206 in 2009 said: "Our foot is stuck on the accelerator and we are heading towards an abyss". Resolution of United Nations adopted by the General Assembly on 25 September, 2015 in seventieth session on the issue 'Transforming our world: the 2030 Agenda for Sustainable Development' noted: "The future of humanity and of our planet lies in the hands of today's younger generation who will pass the torch

next fifty years would decide humanity's future for the next 10,000 years.This paper was presented at International Conference on Sustainable Development 2017

Conference on Sustainable Development 2017 organized at Columbia University, USA on the theme: "The World in 2050: Looking Ahead for Sustainable Development". We believe that ideas presented in the paper are particularly relevant for all stakeholders in the education sector, as this sector has the unique opportunity to mould the future citizen of our planet, in order to 'Bend the Curve'; steer away from the mistakes of the development models followed so far, and embrace a new lifestyle as well as a new development agenda. This paper addresses two themes: 1. Education for Sustainable Development: An Issue of Consciousness and Values; and 2. Sustainable

to future generations" (United Nations, 2015). Water Environment Federation (2017) says, "The Consumption and Production.

In this paper, we attempt to answer the question, "How to balance the aspirations of youth, (particularly in the developing nations) against the demands for sustainable development?"

Right education can generate correct awareness and understanding of the imperatives of Sustainable Development Movement (SDM), leading to acceptance of the 17 Sustainable Development Goals (SDGs) and its 169 targets by the youth and children, as well as all adults. This education should not be confined to awareness of the SDG goals and their corresponding targets alone, but also the underlying logic behind these goals and targets. Such an education process should answer the following two questions for it to have any chance of making the necessary impression upon our new generations (i) Why it makes sense to embrace this new lifestyle based on sustainable consumption? and (ii) Will we be happy or even happier if we embrace these changes?

To provide the answer to the first question, we need to sensitize and educate them about the multiple challenges that the planet is facing due to the unsustainable practices of the past, as well as the likely hardships that they themselves and their own children are likely to face at a personal, family and community level if we do not make a course correction in time. The answer to the second question is the real, and the more significant and unavoidable challenge - as it involves a transformation of consciousness on a mass scale from happiness through fulfillment of lower order materialistic needs to happiness through selfactualization and self-transcendence (Maslow, 1943; 1969). If we succeed in answering these two questions convincingly, our current and future younger generations would embrace the new values of sustainable consumption quite happily and willingly. Following their acceptance, they may be encouraged to get involved in any one of the processes to achieve the targets. Acceptance and involvement are likely to lead to a strong commitment to these goals. We propose that spiritual education along with science holds the key to answering both these important questions. Where Science can provide convincing evidence about the need for change (1<sup>st</sup> question), spiritual education can provide a convincing, life transforming answers to the second question.

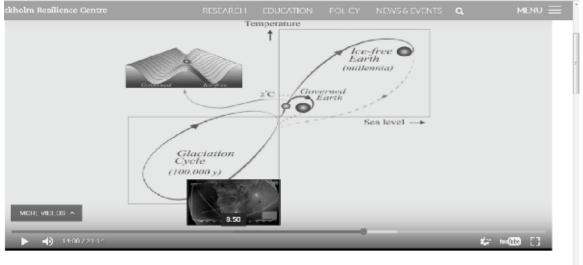
In the following sections, we briefly trace how we ended up in the Anthropocene, the Sustainable Development Agenda, achievements and shortfalls so far, barriers to sustainable development, and how spirituality could be the answer.

## Post WW-II Developments & it's Consequences:Humanity at Cross Roads

Last 50 years of 20<sup>th</sup> century saw mankind occupying the driving seat on planet Earth with the onset of the epoch 'Anthropocene' (Crutzen, 2006). The first fifteen years of the 21<sup>st</sup> century has seen positive developments, most important being the Millennium Developmental Goals (MDGs) and SDGs. What we do in the next 35 years will decide if planet earth would continue to be in the Holocene phase for the next 10,000 years, or irreversibly move into a completely new and devastating icefree state, Ref. Fig. 1 below,

From the time of publication of the 'Silent Springs' (Carson, 1962), the global community has been struggling with the issue of Sustainable Development, with varying degrees of success. The Paris agreement is a welcome sign, but the withdrawal by the US recently has given this healthy process a rude jolt.

It is this backdrop, which sets the context for this paper.



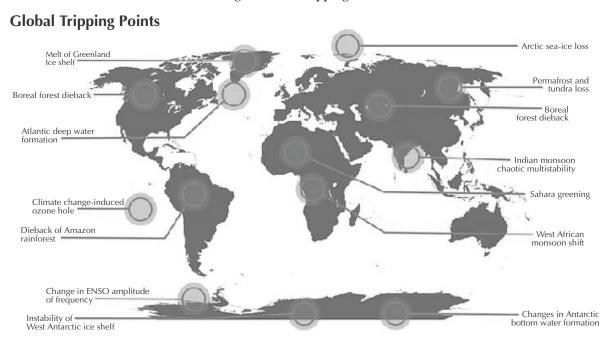
#### Fig.1: Possibility of entering into an ice-free state

GLOBAL CHANGE

(Source: WEF 2017: Beyond the Anthropocene - Stockholm Resilience Centre).

The issue before us is a choice between living in a known environment of the Holocene that mankind has known for the past 10,000 years, since the onset of agriculture and human settlement, or getting into a completely unknown, ice-free state, that would not spare any nation, rich or poor, north or south, developed or developing or whatever distinctions we make. All of creation sails on the same boat: Mother Earth. The tipping points (Fig. 2) identified by science across the globe bears evidence to this fact.

In order for mankind to successfully navigate towards 2050, with a projected population load of 9 - 9.5 billion, with higher aspirations of populations living in Asian, African and Latin American continents, it is absolutely essential to find completely new solutions. Recent history as well as scientific evidence tells us that it is possible to successfully sustain a global population of 9 billion plus, but it is equally certain that 'Business as Usual' (BAU) can only lead to disaster.



**Fig. 2: Global Tipping Points** 

(Source: WEF 2017: Beyond the Anthropocene - Stockholm Resilience Centre)

From 1972 onwards, beginning with the Stockholm conference where the concept of Sustainable Development was aptly defined, as being development that does not affect the development potential of the future generations,

the world has seen many ups and downs. But as we have seen, there is irrefutable evidence that we are pushing Mother Earth out of the Holocene. Correcting this trend requires 'Bending the Curve' (Fig. 3) as proposed by WEF (2017).

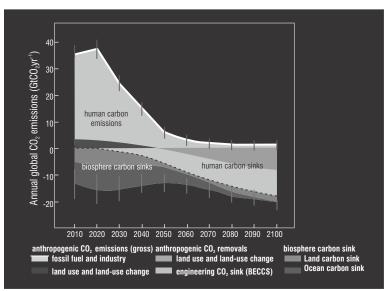


Fig. 3: 'Bend the Curve'

(Source: WEF 2017: Beyond the Anthropocene - Stockholm Resilience Centre)

WEF (2017) have proposed a Carbon Law (Fig. 4) towards this objective, halving the total  $CO_2$  emissions every decade, after the emissions peak out in 2020.

These changes call for drastic departure from BAU mindset, and we propose in this paper that a

solution may perhaps lie in combining spiritual principles with scientific facts, in order to convince one and all that we must join hands and try as a single body of humanity under the auspices of the UN, and embrace all possible measures in our respective domains, towards fulfilling the SDGs.

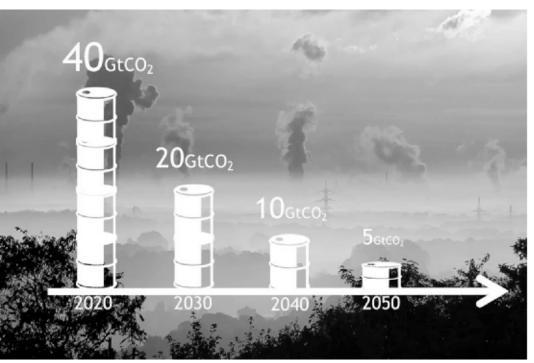


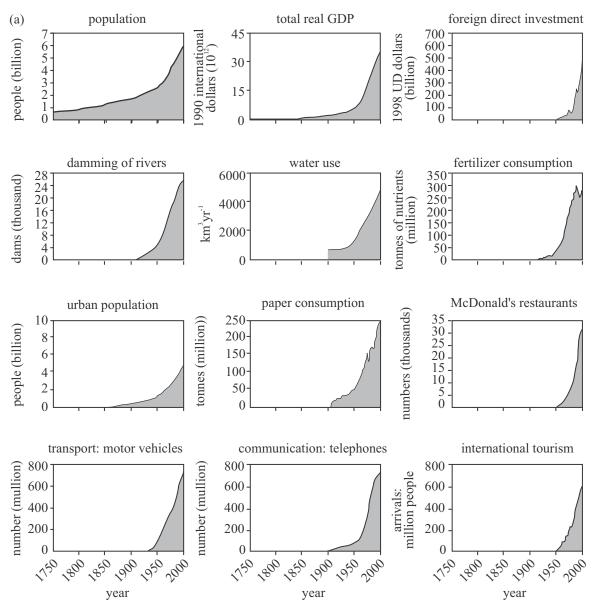
Fig. 4: Carbon Law

(Source: WEF 2017: Beyond the Anthropocene - Stockholm Resilience Centre)

### The Sustainable Development Agenda

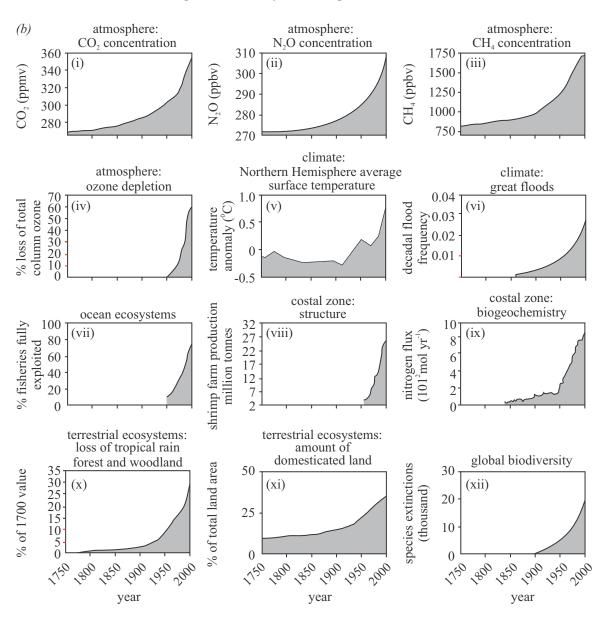
The 20<sup>th</sup> century witnessed two World Wars, followed by the formation of the UN; end of the colonial era; and a spate of development, characterized by the 'hockey stick' pattern, seen

both in terms of all development indicators as well as in its effects on the environment – see Figs. 5 and 6 below. As noted above, we have the 17 SDGs accompanied by the 169 targets, as well as the Paris Agreement as a path to be followed by mankind.



#### Fig. 5: The History of Anthropocene

(Source: Steffen et al., 2011a)



#### Fig. 6: The History of Anthropocene continued

(Source: Steffen et al., 2011a)

We repeat, the IPAT equation (Steffen et al., 2011b) shows that consumption is at the root of the problem.. Hence implementation of the SDG 12 on Sustainable Consumption and Production assumes greatest significance.

The new challenge is: "How to satisfy the aspirations of 3 - 5 billion people living in countries

on a fast track towards development, assure basic human rights to the remaining 2 - 4 billion while retaining our Mother Earth's resilience?"

### Achievements and shortfalls towards Sustainable Development

Fortunately, the turn of the current century

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witnessed the acceptance of the MDGs, SDGs and the historic Paris Agreement on Climate change. The SDGs are in fact one single set of closely interlinked set of 17 goals.

However, the challenges persist. The problems of poverty and accompanying denial of basic human rights to one and all will remain, even if we assume that renewables would become cheap and universal. In addition, we are faced with the problem of 'two giants colliding' (Rockstrom 2013) - the rising aspirations of the burgeoning middle class (4 - 6 billion by 2050), and ecological imperatives - with several tipping points hanging as the Damocles' sword.

Aart de Geus (Chairman and CEO, Bertelsmann Stiftung) and Jeffrey D. Sachs (Director, Sustainable Development Solutions Network) in the Preface to the first progress report on the SDGs, point out the complexities and challenges faced by all nations in implementation of the SDGs on two fronts. The first challenge arises from pursuit of economic, societal as well as environmental goals simultaneously. The second one arises from the extended time span of 15 years and beyond, coupled with the resource constraints. They recommend that all of this will call for "...new orientation of governments and a new approach to multi-stakeholder policy design and implementation".

The report (a first of its kind) provides countrywise dashboards reflecting the performance of each nation, on each of the 17 SDGs and uses a color code: green, yellow and red to indicate if a country is well on its way to achieve the goal – green, or if a country is making some progress, but is not enough – yellow, or if the country is way behind the target, and needs to do much more than before. A look at the regional dashboards shows that even in rich (OECD) countries, there are challenges, while the poor nations in Sub-Saharan Africa face the greatest challenges, and need global support. South Asia, with India (no green and 3 yellows) included in it come next, in terms of challenges faced.

As mentioned before, humanity is at crossroads, and the current generation would determine if the Earth continues to remain in the stable Holocene period of the next 10,000 years, or irreversibly move out into a hot era, completely unknown to mankind, with unpredictable consequences.

# Science and Sustainable Development – achievements and limitations

Scientific evidence of bio-diversity loss was evident as far back as in 1950. The next evidence of N & P Loading of marine bodies came up in 1970. Around the same time, scientists noticed the phenomenon of ozone depletion, which was taken up as a global challenge, leading to the success story of the Montreal Protocol to ban the CFCs. The good news is that recently evidence shows that the ozone layer is regenerating itself. This certainly indicates that the nations of the world can achieve big sustainability goals if they work in a concerted manner. Seen in that light, the recent global acceptance of climate change as a major challenge before mankind, with the historic Paris Agreement in December 2015, is an extremely encouraging sign. The SDGs include goals to address Land Use & Land Use Change. We have mentioned the 'Global Tipping Points' earlier, as well as the proposed 'Carbon Law'.

Despite all the efforts being made, we have a mixed scorecard so far. Science became part of the mainstream sustainability dialogue after the publication of the planetary boundaries. Science, as it has been practiced - separated from spirituality, had enough time and opportunities to prove its capacity to clearly ameliorate global problems – but it has shown many limitations.



We shall argue in a later section that mainstreaming spirituality would complement science effectively and thus holds the promise to scale the remaining frontiers in sustainability.

# Barriers to sustainable development – individual, national and trans-national

### Individual barriers

We know that all SDGs are interconnected, and the first and foremost goal is to eradicate poverty. Consider AMMA's statement on 'poverty' (Amma, 2015):

"There are two types of poverty in the world. The first type is due to the lack of food, clothing and shelter. The second type is the poverty of love and compassion. We need to tackle the second type of poverty first. For, if we have love and compassion, we will wholeheartedly serve and help those who lack food, clothing and shelter"

The second type of poverty involves the human consciousness. As long as individuals feel themselves separated from one another, from other living beings inhabiting the planet, and lack empathy for each another's suffering, they would not be able to serve the collective as Amma suggests above. Embracing the spiritual principles would enable mankind to rise in the level of its consciousness and regain these qualities of love and compassion.

The next barrier, we believe lies in the individual's urge for seeking happiness through consumption. One might ask, "Why do the messages for sustainable development fall on deaf ears?"

The answer to this question may be found in theories of motivation that deal with root causes of human behavior. For example, why, I myself agree to take a car ride in the city, for no real necessity. It

is because I value personal comfort over the considerations like sustainability that affect the entire planet. My motivations are rooted in my selfish and short sighted short term interests and not in the well-being of the collective. The idea is to investigate such inclinations, with a view to figuring out the root cause/s behind such behavior. Without understanding these root causes, we cannot transform people's consciousness and values from narrow selfish interests to well-being of the collective. People learn in one of the two ways, (i) expansion of awareness from the interests of 'self' to interests of 'all'; or (ii) through painful experience which forces a change in perspective and hence behaviour. In connection with the second point, there is a very insightful Bengali saying that may be quoted here:

"Even if you see my pain from a snake bite, hear me crying out of pain, and seemingly understand my pain, it is impossible for you to feel the pain unless you are yourself stung by a venomous snake".

We have already seen the power of the painful experience in effecting change in the arena of sustainability. The ozone hole affected large segments of population, including all in OECD nations, and hence received global support which helped us to come together to address and solve it. Fortunately, there was a rather simple solution as well to this problem. But, the larger problems facing us now do not admit of opportunity for learning from painful experience. They would be too disruptive for us to be able to absorb their effects.

The only way is to try to transform the minds and attitudes of all human beings – a noble but very challenging task. As the Buddha said, 'winning over one's own desires is 1000 times more difficult than winning against armies 1000 strong'. Learning, teaching and embracing the spiritual principles that help us expand our awareness and world view offer the only viable and practical way to meet the situation.

Hence, in addition to the statement that 'Business as Usual (BAU)' is no more feasible, we suggest that 'Lifestyles as Usual (LAU)' also is no more possible. All right thinking people, especially those from the developed nations, who are seen as role models for the rest of the world, might consider this proposal of embracing and imparting spiritual education seriously. Scientifically determined metrics like the per capita *Carbon footprint measurement* may be good complementary tools to see how far we are succeeding in generating this new kind of awareness.

### National barriers

Every nation faces its own socio-economic as well as geo-political circumstances, coupled with the environment it has inherited. Together they pose specific challenges. The interests of the rich (with control over a majority of the resources) within a country do not necessarily align with the SDGs. Added to it; we have the personal stances of the political leadership. The latest example of this may be seen in the US deciding to withdraw from the Paris Agreement. Perhaps all national leaders need a better appreciation of the inter-connected nature of the Earth System we live in.

## Trans-national barriers

Looking at the challenges from a global perspective, we believe that the strong and weak solutions proposed by Fuchs and Sylvia (2005) and Hobson (2013) offer a good perspective. As stated earlier (IPAT equation), consumption has been identified as a root cause leading to the present difficulties. SDG 12 addresses this unique issue by trying to advocate sustainable consumption and production (SCP). Fuchs and Sylvia (2005) define 'strong' and 'weak' solutions for SCP as under:

They have pointed out inadequate action towards SCP by almost all concerned actors including United Nations Department of Economic and Social Affairs (UNDESA) that houses The Commission on Sustainable Development (CSD) and the Division for Sustainable Development (DSD), UNEP, OECD, Other Actors (National governments and non-governmental organizations (NGOs) and finally the Consumers. They conclude:

consumption element) as strong measures."

"Both consumers and business (and therefore also governments) tend to oppose strong sustainable consumption measures despite claims to the contrary. International governmental organizations (IGOs), in particular, have avoided strong sustainable consumption issues".

How do we convince everyone that adoption of the 'strong' solutions for SCP is in our common interest? We believe that spiritual principles hold the key.

We further note that there are contradictions within the UN System. The UN SDG resolution 'commits to make fundamental changes in SCP'; and asks for mandatory 'contributions from all actors for changing unsustainable consumption patterns'. Consumption patterns have been linked with lifestyles, and the need for appropriate education for SCP has been recognized as an important segment in the 10YFP. However, 10YFP – Sustainable Lifestyles and Education Programme (SLE) envisions "...A world where sustainable lifestyles are desirable, beneficial and accessible for everyone ..." This vision shies away from expressing the imperative for adopting sustainable



lifestyles. A more ambitious vision might be:

"We envision a world where sustainable lifestyles are <u>embraced</u> by all sectors of society, including governments, the business sector and civil society".

In the next section, we turn our attention to spiritual principle, and attempt to find suitable solutions from this domain.

## How can Spirituality join hands with Science for Sustainable Development?

We begin with some supporting statements.

At the UNAI – Amrita seminar on July 2015, Chancellor Sri Mata Amritanandamayi Devi (AMMA) gave a clarion call to combine spiritual energy with the scientific knowledge as a means towards realizing the SDGs.

She said: "I often reflect deeply on the future of the Earth, the preservation of nature, and the disappearing harmony between humanity and nature. This contemplation has led me to the conviction that science, technology, and spirituality must unite in order to ensure a sustainable and balanced existence of our world. The present age and the world around us demand this transformation."

She also emphasized:

"Spirituality is also a science—it is a valid branch of knowledge that cannot be ignored"

In his remarks, in the same seminar, the UNDP Ambassador H. E. KahaImnadze, Permanent Representative of Georgia to the United Nations quoted Sri Mata Amritanandamayi: "We can no longer afford to see these two streams of knowledge [scientific knowledge and spiritual wisdom] as flowing in opposite directions. In truth, they complement one another... we will find that we are able to create a mighty river—a river whose waters can remove suffering and spread life to all of humanity."

The Vivekananda Kendra in Kannyakumari, India publishes a monthly Newsletter, 'Echoes of Eco' providing interesting quotes and information related to sustainability issues. We provide significant quotations from Western thinkers from the April 2017 issue:

- "Lester Brown and his Worldwatch Institute, (www.worldwatch.org/) warn that mankind is on the wrong track, cutting the very branch [of the tree] on which it is sitting.
- "Edward Goldsmith calls for a total spiritual revolution to overcome our ecological problems.
- "Fritjof Capra has identified a number of parallel points between Ultra-modern science and Eastern Mysticism imaging creation as an integrated whole with hidden connections.
- "Schumacher and Hazel Henderson tried "to solve it at economic, spiritual, social, and technical levels and come out with practical suggestions for sustainable development. These suggestions are based on an integrated vision of reality, marching in the footsteps of our Rishis, Gandhi and the Eastern thought in general".
- "Al Gore Former American Vice President of USA stated, "Both in our personal lives and in our political decisions, we have an ethical duty to pay attention, resist distraction, be honest with one another and accept responsibility for what we do - whether as individuals or together. It's the same gyroscope; either it provides balance or it doesn't. In the words of Aristotle: "Virtue is one thing."

*Why spirituality must be integrated into the SDM?* The above statements emphasize the utter need for seeking solutions in the realms of spirituality. All human endeavors are aimed at gaining 'happiness' for oneself. The dominant paradigm promotes happiness through better standards of living, higher consumption levels and through the satisfaction of all physiological desires that directly contradicts the tenets of 'Sustainable Consumption and Production'. As a result, we are already consuming every year roughly 1.4 times the resources Mother Earth can offer us, and if an additional 3 - 5 billion population join the developed nations and adopts an identical lifestyle, even 3 earths would not be sufficient to support these demands.

We propose that an answer to this dilemma may be found in spiritual principles that tell us that real happiness cannot be found in the external world of existence. It must be sought within our own being, and our true nature is hidden in our soul which is in fact a part of the Universal Soul and this realization can only lead us to an eternally blissful existence. We have lost our connection with our own true nature, and spirituality helps us to get re-connected with our own inner Self. We offer some similar evidence from the theories of human motivation and personality which have suggested that happiness of different people does not come from the same sources (Maslow, 1943; Erikson, 1963; Jung, 2014). Even within the life of the same person we can see that the relative values of objects change as she/he gains in maturity. For example, the attraction that a child has for chocolates becomes less intense as she matures into an adult. We posit based on the insights of eminent personality theorists such as those cited above, that this happens because of development of awareness from a more rudimentary level to mature levels expected of adults. Maslow's famous theory of motivation which states that human needs are arranged in a hierarchy starting from lower levels

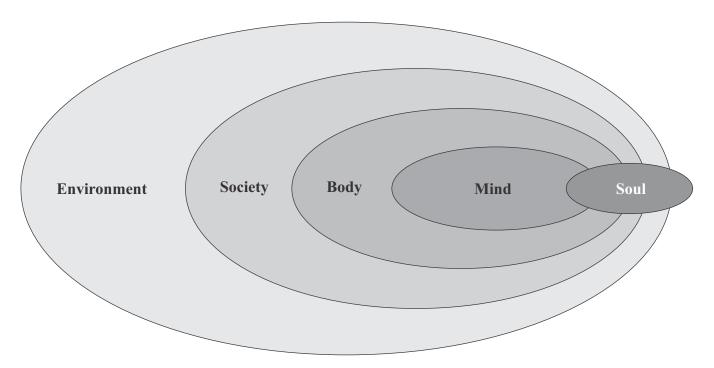
of physical needs, safety and belongingness to higher levels of self-esteem, self-actualization and self-transcendence is one such theory among others which can be used to understand these shifts in motivation as the human consciousness moves from lower level of awareness to a higher one. An insecure and average young man seeking to eke out a career in law later transforms into the selftranscendent Mahatma Gandhi inspiring hundreds of millions of people across the world for the last hundred years. We can clearly see the movement across the needs hierarchy in his case.

Ancient Indian texts (Taittiriya Upanishad) gave a similar theory rooted in five levels or sheaths that constitute the human consciousness called the Pancha kosha (Five sheaths) theory. It states that a man is composed of five sheaths starting from the most gross (least evolved) to the most subtle (most evolved) level. These are the bodily sheath (annamaya kosha), vitality sheath (pranamaya kosha), emotional sheath (manomaya kosha), intellectual sheath (vijnanamaya kosha) and the bliss or happiness sheath (anandamaya kosha). Whenever the intellect of a man stops, he enjoys his own inner happiness because of contact with the last sheath beyond the intellect viz. the bliss sheath. For example, when watching a movie; immersed in producing a work of art; state of deep meditation; and so on. Modern psychology research has validated this ancient insight (for example, see Csikszentmihalyi and Csikszentmihalyi, 1988). Beyond these five sheaths is the centre of one's being which is called the 'atman' (in Sanskrit) or the 'soul'. This soul is the real 'self' that inhabits the body-mind system and is essentially divine in nature. More a person is able to come in contact with his 'soul' consciously; more sublime, loving, wise and selfless his personality becomes. An average person is not able to touch the deepest core sheath or the 'self' consciously. If he/she could do so, he/she would be able to remain happy with very little on the material plane as a deep sense of



contentment and love for all would flood his/her consciousness. Spiritual practices like meditation help a man to gradually deepen his awareness of these deeper sheaths and that is why they are so therapeutic in nature. There are hundreds of studies now that have established the validity of this claim made by the ancient Indian sages (benefits of spiritual practices). Raymond et al. (2017) acknowledged the connections between mind, body and environment as an 'Embodied Model of Cognition'. In order to link the ancient Indian insight with modern scientific deliberations, we propose a spiritual model of existence, at Fig. 7 below. In this conceptualization derived from the teachings of Indian philosophy, every human being has three dimensions of existence: physical indicated by our body, intellectual indicated by our mind and intellect and spiritual indicated by our deepest existence, our soul or the 'Spirit' or 'Atman'. The Atman is visualized as belonging to the center of our chest, the spiritual heart of every human being that is essentially connected with the entire universe. It should not be mixed up with the physiological heart that pumps blood throughout the body, rather the nearest analogy may be one of the intensely feeling heart, that, after guided practice, enables one to realize that each one is connected with all of creation.

Fig. 7: Spiritual Model of Existence



The model tries to depict that every human being (comprising of body, mind and soul) exists within the society, and every society exits within the physical environment of our Mother Earth. The interesting point to note is that the soul belongs at the center, and it touches the mind, the body, the society as well as the environment, but it extends beyond all of these. In other words, there exists something, some connections and some dimensions of our existence that goes beyond those of natural perception. We exist being connected with everything around us, and beyond. All



humans have that potential to realize this unity with the entire creation and realize the fact that 'The creation and the creator are one and the same'; often repeated by Sri Mata Amritanandamayi Devi.

Based upon this hypothesis, we propose:

"As soon as a human being understands that his / her fate is inextricably linked with the entire creation, that his future wellbeing and the wellbeing of his children and grandchildren are dependent on the preservation of the entire Nature, he would start taking care of his environment".

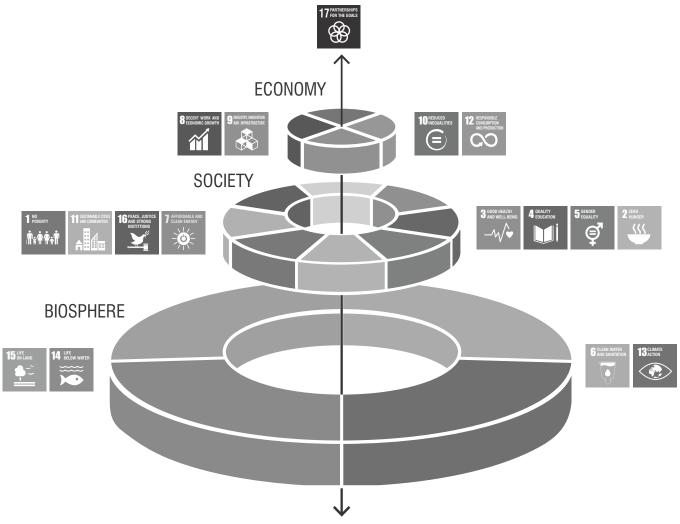
This is the primary thesis of this paper.

"The Soul or 'Atman' is like the bottom of the ocean, even when a cyclone is raging on its surface, the bottom is calm and quiet as ever" says AMMA, explaining the true nature of our existence. It is the moving force behind all actions, but it does not participate in any action. This is why the circle of action and perception does not touch it. It is in fact a microcosm of the entire Universe, with a built in potential to experience and get connected (Yoga means connection) to its own divine and transcendent source.

There was a time when science was looked upon with some mistrust in the sustainability dialogue, and many tried to spread the idea that science is unnecessarily painting a gloomy picture of the future. But after the publication of the findings on 'Nine Planetary Boundaries' in 2009, and its revision in 2015, many of these have found global recognition in the SDGs as illustrated in the following representation. It may be seen that SDGs 6, 13, 14 and 15 directly incorporate the planetary boundaries as shown in the following table 1:

SDG	Corresponding Planetary Boundary
6. Water and Sanitation	Fresh water use
13. Climate Action	Climate Change
14. Life under Water	Ocean acidification, N & P loading
15. Life on Land	Bio-diversity loss, Land use

Table1. SDG and Corresponding Planetary Boundary



#### Fig. 8: Biosphere, Society and Economy

(Source: http://www.stockholmresilience.org/images/18.36c25848153d54bdba33ec9b/1465905797608/sdgs-food-azote.jpg)

Now it's time for humanity to embrace the next reality wholeheartedly: that we have a spiritual dimension to our existence, and we must try and nurture that element of our existence. Thus a fusion of science and spirituality in the sustainability dialogue appears to be the final goal to make sustainable development a reality. In the following section, we provide some pathways, shown by Indian masters towards this end.

In order to experience the essence of spirituality, Indian Masters have laid stress on completely calming of the mind, which always rushes outwards following the five senses.

#### Sri Krishna says in the *Gita*:

"The turbulent senses, O Arjuna, do violently snatch away the mind of even a wise man, striving after perfection. For the mind which follows in the wake of the wandering senses, carries away his discrimination, as a wind carries off its course a boat on waters."

-(Bhagawad Gita 2.60.67 as quoted by Swami Budhananda)



#### Implications of this worldview

It follows from the above discussion that an education system that teaches everyone the core principles of spirituality which is nothing but 'science of happiness', would help create a society that is contented with lower level of consumption as it would understand that true happiness comes from evolving spiritually and connecting with the deeper levels within, than from an excessively materialistic lifestyle. We propose that this approach is necessary for bringing in the required changes in our fundamental beliefs and goals in life that enables everyone to lead a fulfilling life, while simultaneously contributing towards sustainable development.

The ancient spiritual model explained above naturally led to a way of life in ancient India where the purification of mind was the most necessary ingredient to attain long term and refined happiness. It was encapsulated in terms of four fundamental pillars of human life viz. dharma (ethics), kaama (fulfillment of desires), artha (the wealth or the material means which enable such fulfillment) and moksha (self-realization or enlightenment). Earning sufficient wealth was necessary to fulfill one's own and family members' desires, but it was to be done guided by the principles of 'dharma' or ethics. Leading such an ethical life based on sound values or principles such as truth, honesty, non-covetousness, care for other living beings etc. led to a gradual purification of the mind, which was considered a prerequisite for spiritual evolution and ultimately enlightenment.

Viewed from the above context, Spirituality becomes a way of life upholding timeless moral, ethical and human values. All great epics like the Mahabharata, the Iliad; great authors like Shakespeare, Milton and Tagore; all spiritual leaders (The Pope, The Archbishop and AMMA to

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name a few living today); all the great humanists like Gandhi and Martin Luther King; many great writers, philosophers, scientists, artists, musicians, and inspired people from all walks of life have been upholding these values in multiple ways. Several leading scholars of our times (Otto Scharmer, Peter Senge, Arthur Zajone, author of 'Earthdance' –Elisabet Sahtouris, David Korten, S K Chakraborty and many more) base their arguments on similar lines.

The representative of UN member state Georgia quoted Mata Amritanandamayi:

"We can no longer afford to see these two streams of knowledge [scientific knowledge and spiritual wisdom] as flowing in opposite directions. In truth, they complement one another... we will find that we are able to create a mighty river—a river whose waters can remove suffering and spread life to all of humanity."

We, therefore, propose that if mankind embraces these spiritual principles consciously, sustainability is automatically assured.

#### **Proposed pathway**

Based upon the above deliberations, we propose the following:

1. The solution lies in rediscovering and embracing the spiritual principles in order to integrate them in all aspects of our collective life. We quote Amma (2003) here:

"If Amma's wealthy children made up their minds, they could alleviate the suffering of these [poor] people to a great extent. Amma would like to urge Her wealthy children to be compassionate and serve the people who are poor and suffering." 2. For this, education at all levels needs to include sustainability and its links with science and spirituality; as Swami Vivekananda said, "Education is the manifestation of the perfection already in man". United Nations could integrate "the SDGs into their sustainability strategies, research, teaching, pedagogy, and campus practices" and become "key drivers for achieving the SDGs".

We make a few concrete suggestions for this:

- To begin with, include sustainability in the HEI's vision and mission statements.
- Include value based courses based on principles of spirituality with practical components like Yoga, meditation, Tai Chi, Vipassana etc. right from earliest level of schooling itself; values imparted at this level are likely to be permanent.
- The next step might be to include sustainability topics, with its scientific and spiritual foundations; as a required learning goal of all the programs.
- All accreditation bodies in all domains; like AACSB, EQUIS, AMBA etc. in management domain and ABET etc. in engineering domain may be requested to include this as a recommended learning goal for accreditation
- All national bodies like CBSE, ICSE, UGC, AICTE, IMC in India, and their counterparts in other nations; could incorporate these requirements in their statutes.
- SDSN might call for organizing a special UN session focusing on this theme: "Sustainability Education Links with Science and Spirituality: An Issue of Consciousness and

Values".

- 3. Eventually such an education system would lead to a paradigm shift from the current view that: 'consumption produces happiness' to 'holistic development of man through a sustainable lifestyle produces happiness'.
- 4. Mainstreaming spirituality in our sustainability dialogue is essential for the Holocene period to continue for another 10,000 years. Our educational system requires an overhauling, towards this objective. Our value systems need to be aligned with these principles. We must ensure all Stakeholders' acceptance and participation, including business, governments, civil society, educators and non-state actors including religious leaders. Since business plays the dominant role in today's world, it is important to recognize the potential role of business, as reported in the report: "Future of Spaceship Earth".
- 5. We propose initiating a mass movement towards SCP, making it fashionable.

## Conclusion

There are ample evidence from the lives of those practicing spirituality in their own lives, the benefits they derive in terms of peace, contentment and more holistic thinking in their own lives. We have made an attempt in this paper to show how and why spiritual principles and value based education hold one of the two keys – the other being Science, to meet the challenge of sustainability.

## References

Amma, Mata Amritanandamayi Devi (2015). Reconciling Ancient Spiritual Wisdom and Modern Technology for Societal Transformation. *Address at UNAI-START* 



*Conference* on 10<sup>th</sup> July. https://www.amritapuri.org/36660/15-un.aum.

United Nations (2015). Transforming our world: the 2030 Agenda for Sustainable Development. *Resolution adopted by the General Assembly on 25 September in seventieth session*. http://www.un.org/ga/search/view\_doc.asp?symbol=A/RES /70/1&Lang=E.

WEF (2017). Beyond the Anthropocene. *Stockholm Resilience Centre*.

http://www.stockholmresilience.org/research/researchn e w s / 2 0 1 7 - 0 2 - 1 6 - w e f - 2 0 1 7 - b e y o n d - t h e anthropocene.html. Accessed on February 16, 2017.

Maslow, A.H. (1943). A theory of human motivation. *Psychological review*, 50(4), 370.

Maslow, A.H. (1969). *The farther reaches of human nature*. *The Journal of Transpersonal Psychology* 1(1), 1.

Crutzen, P. J. (2006). The 'Anthropocene'. In Ehlers E., and Krafft T. (Eds.) *Earth System Science in the Anthropocene*. Berlin, Heidelberg: Springer.

Carson, R. (1962). Silent Spring. Houghton Mifflin.

Steffen W., Grinevald, J., Crutzen, P., and McNeill, J. (2011a). The Anthropocene: conceptual and historical perspectives. *Philosophical Transactions of The Royal Society A*, 369, 842-867.

Steffen, W., Persson, A., Deutsch, L., Zalasiewicz, J., Williams. M., Richardson, K., Crumley, C., Crutzen, P.,

Folke, C., Gordan, L., Molina M., Ramanathan, V., Rockstrom, J., Scheffer, M., Schellnhuber, , H.J., and Svedin, U. (2011b). The Anthropocene: From Global Change to Planetary Stewardship. *Ambio*, 40(7), 739–761.

Rockström, J. (2013). The Future of the Sustainable Earth. *TED Blog*, June 13.

Fuchs, D.A., & Sylvia, L. (2005). Sustainable Consumption Governance: A History of Promises and Failures. *Journal of Consumer Policy* 28(3), 261–288.

Hobson, K. (2013). 'Weak' or 'Strong' Sustainable Consumption? Efficiency, Degrowth, and the 10 Year Framework of Programmes. *Environment and Planning C: Government and Policy*, 31(6), 1082–1098.

Erikson, E. (1963). Childhood and society. New York: Norton.

Jung, C.G. (2014). Psychological types. Routledge.

Csikszentmihalyi, M., and Csikszentmihalyi, I. S. (1988). *Optimal Experience: Psychological studies of flow in consciousness*, Cambridge: Cambridge University Press.

Raymond, C. M., Giusti, M., and Barthel, S. (2018) An Embodied Perspective on the Co-Production of Cultural Ecosystem Services: Toward Embodied Ecosystems. *Journal of Environmental Planning and Management*, 61(5-6), 778-799.

Amma, Mata Amritanandamayi Devi (2003). *If Wealthy Make up Their Minds, Could Alleviate Poverty*. https://www.amritapuri.org/36660/15-un.aum.