# Leadership for Sustainability in Schools and Higher Education

# Institutions Lt General Arjun Ray, PVSM, VSM (Retd) 04 October 2012

#### Introduction

Future competition between nations will not be between competing ideologies and competing economic systems; rather, it will be between competing education systems. The side – individual, family or nation that invests in knowledge and sustainability is the side that will survive and prosper. Traditionally, we invest in stocks and shares, in gold, in real-estate, and fixed deposits. For sustainable development of an individual and nation, we must now invest in knowledge and action.

The sustainability bomb is ticking away. The wolf is already at our doorsteps; yet most of us seem unconcerned. The only powerful weapon to defuse this grave threat is education. Education for sustainability is more about vision and leadership than pedagogy. This is the primary reason why most countries are well short of the UN sustainability deadline of 2014.

We have the technology, the brains, and all the resources at our command; yet we are unable to make this world sustainable. It is because we do not have the leadership, and sustainability is all about transformational leadership. The failure of leadership has been in the classrooms of our schools and universities. We talk a lot; we do very little.

My presentation will address the leadership challenges in sustainable development in schools and higher education institutions. Our failures are more because of lack of leadership rather than developing content in classrooms.

#### What is Sustainability?

Sustainability means different things to different people. Most have a narrow understanding as they link it with climate change and **environment**. This is why schools and even higher educational institutions focus mainly on environment science. The truth is that environment is just one-third of sustainability. The other two-thirds are made up by **social equity** and **economic progress**. Sustainability is relevant to all areas of society, and not just environment.

Of the many definitions of sustainability that I have come across, the one given by Ms Brundtland, former Prime Minister of Norway and head of an international commission on environmental and developmental problems, is simple and all-embracing. Sustainability is defined as, "...development that meets the needs of the present without compromising the ability of future generations."

# **Increasing Threats to a Sustainable Society**

**Tomorrow is unknown**; and uncertainty, chaos and high speed change are its key features.

Social and economic inequalities arising from globalization and market economy

**Complexity** because of growing inter-dependence and multi-disciplinary nature of life

**Climate change**. There are nine essential life-support systems for human survival. We have already crossed the danger levels of three of these systems - biodiversity, nitrogen, and climate change systems.

**Poverty and malnutrition**. In India 456 million people live below the poverty line, i.e., those who earn less than \$1.25 a day. As a result, India has the second highest number of children who die from malnutrition before the age of 5. It is a staggering 2.1 million. India is also home to one-third of the worlds hungry. 10 million starve to death every year and 200 million sleep hungry every night.

Conflict arises out religion, climate change, rising intolerance, and migration. At 11 million, India has the 11th largest population of Internally Displaced People because of terrorism and alienation on grounds of alienation.

Sharing of scarce resources of the planet in a scenario wherein 7 billion people are consuming five planets worth of resources already. North America alone, which constitutes just 5 percent of the world's population, consumes 40 percent of the planet's resources. It is, therefore, unthinkable what will happen by 2050 when the world's population will be above 9.2 billion?

**Spiritual emptiness**, as poverty of the mind is more disconcerting than the poverty of the body.

# Sustainable Leadership

A new kind of leadership is needed to address the challenges of sustainability that is different to **traditional leadership**. Traditional leadership has been greatly influenced by Newtonian thinking that is deterministic and mechanistic. Newton believed that human beings are like machines; they can be broken down into parts, and reassembled. He failed to realise the randomness and non-linearity of life, and that the sum total of the parts can be larger than the whole. The dynamics of the 21<sup>st</sup> century demands a new form of leadership for sustainability. Theories of quantum physics, chaos theory, and complexity, are challenging traditional models of leadership.

First; I call this paradoxical leadership.

Life in its most natural state is chaotic and unpredictable, and continuously evolving. Relationships keep on evolving to higher and different states; they are never the same. Likewise, two loves are never the same either. For every heroic act there is also tragic fallout. A leader should be capable of holding two opposite ideas in his mind at any one time; and be able to synthesise them, if required. At times, one's actions may be rational and logical; but if it brings unhappiness in an organization, a leader must rethink it over. F Scott Fitzgerald, the great American novelist, describes this idea very succinctly:

"The test of a first-rate intelligence is the ability to hold two opposing ideas in mind at the same time, and still retain the ability to function."

Sustainable leaders should, therefore, be able to think in opposites, or **dialectic thinking**. This involves formulating a thesis and an anti-thesis, and following it up with a synthesis. There are no right answers or wrong answers. There are only good questions and bad questions. Leaders should train themselves to ask good questions; that is the hallmark of a sustainable leader.

**Second**; leaders must develop the ability operate through **chaos and uncertainty**, often with little or no information, and relying on one's **intuition**. In such a mental state, confusion and cognitive dissonance are only natural and should be welcomed. Confusion happens because the human mind is discovering that old thoughts are simply not working. Confusion, like disruptive creativity, is a good sign and will inevitably lead to new answers.

Chaos theory is based on the premise that in every order there is disorder, and in every disorder there is order. It is the function of leadership to try and determine these two states to enable sound decision-making. Chaos theory also states that small changes can initiate major upheavals. This is called the *Butterfly Effect*, and was vividly played out in the recent Arab Spring revolutions.

At an individual level as well chaos theory has relevance. When you see events too closely they appear to be a series of chaotic events. But when you lean back, you are able to see the big picture.

**Third**; new leadership demands the practise of **Complexity Leadership**.

Complexity should not be confused with chaos. Today's world is increasingly becoming more interconnected with a large number of stakeholders and actors, requiring specialization. Invariably, there are many variables and no simple answers. The very nature of complexity sends a strong signal that the day of the heroic leader is over. Heroic leaders were expected to have all the answers; not anymore because of complexity. Complexity places greater reliance on **collaboration**, **dialogue**, **conversations**, and dependence on **composite teams** with various professional backgrounds. Individuals have already been replaced by teams.

Fourth; the significant rise in Horizontalism.

This is a new word in the English language and has been derived from political and social protest movements in post Argentina 2001, the recent Arab Spring, and the Occupy Movements.

In a flat and inter-connected world, **citizens do not trust traditional hierarchies** any longer. Throughout history, hierarchies have constituted 1 % of the population of a state or organization, with 99 % having little voice in policy that affects them. So hierarchy implies the rule by 1 % over the 99 %. This is clearly undemocratic.

Horizontalism is mobilization by social media, a leaderless and bloodless revolution that is asking the government to apply "emergency brakes" on whatever they are doing, because it is simply not benefitting the people. Horizontalism is, therefore, a movement that **forces the hierarchy to re-think and review**.

In the style of the city states of Greece, **citizens prefer to talk directly** with their leaders and not their representatives. People in nations and organizations have lost confidence in representatives; they prefer the use of social media, Internet, and 24x7 TV channels to get their point of view across directly to their leaders, and not representatives. Horizontalism is a methodology for engaging in conversation and dialogue.

#### Fifth, servant leadership.

There are over 200 definitions of leadership. The closest definition to servant leadership I have across is by Morst Meyerson, CEO of Perot Systems: "The first task of a leader is to make sure the organization knows itself." My understanding of leadership gives an added dimension. I believe that leadership is the ability to **lead oneself first;** then others. In order to lead oneself, one must serve others. By serving we give greater importance to those who are poor, marginalized, alienated, and suffering. You become self-aware only with the help of others.

#### Sixth, leadership has to be learnt like any art and science.

Man is born potential; he becomes talent. Leadership including values have to be learnt like any other subject, like mathematics, engineering, medicine, dance, or management. Leadership training demands the same discipline and experience in learning like any skill.

#### **Premises for Sustainability**

- 1. **Man is innately good**. I agree with Rousseau that man is born good but is corrupted by society.
- 2. **Reverence for life**, an ethical principle based on respect for all forms of life, and not human beings alone. Those who believe in this principle, are non-violent,

they serve the poor and the suffering, and practise compassion and forgiveness. Interestingly, one survey says that only 38 percent Westerners believe that man is good.

- 3. **Human security** lies at the core of a nation's security.
- 4. Sustainable development cannot be based exclusively on GDP. Robert Kennedy once said that GNP "measures everything except that which makes life worthwhile." **Gross National Happiness** is as important as the GDP of a nation.
- 5. Forgiveness (and atonement) is a value that brings durable peace and conciliation in society. Forgiveness helps us to live with diversity. To forgive is not to forget; but to resolve not to take revenge. The Truth and Reconciliation Commission in South Africa after the collapse of apartheid is a living example. As Mandela walked out a free man from Robben Island, journalists asked him if he hated his perpetrators for what they had done to him. He replied, "Where was the time to hate?"

#### **Purpose of Education**

The purpose of education cannot be to prepare students to succeed in examinations and career. Careers will keep on changing throughout one's life. Sociologists say it can be up to nine career changes by the time one reaches the age of 38. To add to these changes, the future is completely unpredictable. Scoring high marks in examinations does not prepare anyone to deal with the unknowable future ahead

I believe that the purpose of education is two-fold: to prepare students to face the **challenges of life**, and be **engaged citizens** – individuals who are citizens first, and whatever else later; citizens who think global but act local. Such a purpose will see the birth of leadership for sustainability.

# Redefine Academic Rigour

Academic excellence, as commonly understand, is about scoring high marks in examination. To be able to succeed in a unknown future students will need to be equipped with survival skills that go beyond the 3 Rs. These competencies will enable students to understand complexity, think in an interdisciplinary way, collaborate with others, and participate in decision-making. They may be taught either as stand-alone subjects or be integrated with other subjects:

**Character** and values, because character will always beat brains

Persuasive **communication** 

Collaboration and the ability to listen

Critical thinking and problem-solving

#### **Creativity and innovation**

# Lifelong learning

# Higher Education Institutions (HEI) for Sustainability – The "Triple Bottom Line" Approach

HEIs play a critical role in creating world citizens who are motivated to make the planet sustainable. Regrettably, sustainability has not received its due attention in colleges and universities. HEIs and even schools need to reflect o whether they are making a difference to the world's sustainability? I suspect the reason is because universities over-focus on academics and preparing students for careers. Instead, HEIs need a lot more sensitization in education for sustainable development in three specific areas: economic progress, social equity, and environmental sustainability. These three areas could form part of an overall study package regardless of the student's area of specialized focus.

HEIs need to go beyond providing degrees and careers by addressing global challenges and making meaningful contribution towards sustainable development in their respective regions. Apart from making their campuses green and sustainable, and imparting education in sustainability, HEIs could consider the following novel initiatives:

- Provision of think-tank and consultancy services, and funding for research in social, environmental and human developmental aspects of sustainability. Key areas that merit attention are renewable energies, consumption patterns, and sustainable urbanization.
- 2. Setting-up incubators for entrepreneurs.
- 3. **Human capital development** through:
  - Vocational skills development in local communities, and up gradation of local labour skills.
  - Provision of scholarships to individuals from disadvantaged background, or from communities with low tradition of higher education.
- 4. Provide **solutions to social and ecological problems** in their respective regions, e.g., wetlands, land reclamation, drought, waste disposal and re-cycling, etc.
- 5. Encouraging setting up of **advocacy groups** on human rights, health care like AIDS and HIV, and poverty eradication.

6. Compulsory **community service** or internships with NGOs and industry by students for a period of three to six months should be made a graduation requirement.

# **Adaptation and Mitigation Strategies**

Of the nine life-support cycles for sustainability of human beings and the planet, we have already crossed the danger levels of three – environment, nitrogen, and biodiversity. While we should continue to work earnestly towards bringing down the threat levels, we should intellectually accept that, possibly the damage is irreversible. As such, we should adapt to change and prepare elaborate strategies, technologies, and plans for adaption and mitigation. Some of the areas could be:

Development of alternative non-fossil fuels

Integration strategies to de-alienate migrants

Coping strategies, technologies, and plans to deal with damages due to greenhouse emissions, rise in temperatures, melting of glaciers and rise in sea levels. The rise in sea level in the San Diego region has been as high as 1.5 metres.

#### Conclusion

Competitive individualism and material success are dominant values of Western societies. Even the educated class in India and other Asian and African countries are following suit. Individualism is praiseworthy except that only a strong sense of community can give man his identity. The Africans call it "ubuntu" or humanity. Ubuntu implies that you are what you are because of other people. It is only when we interact intimately with the communities that are diverse that we get our identity.

**Localism** is a pre-condition for globalism. You cannot become a world citizen at the cost of losing your cultural identity. Our mind is shaped by culture, and culture gives us a reference point to understand others. Knowledge of one's religion and language constitutes nearly 75 percent of what is culture. In my experience, with the ferocious onslaught of consumerism, most children are fast forgetting their rich cultural heritage. Heritage is not mere sentiment. It is what forms a strong sense of identity and frame of reference.

**Education** is the only powerful tool for transformation. Transformation will happen only when schools and HEIs set an example in sustainability through syllabus, sustainable campuses, enhanced academic rigour, and an action plan to remedy or remedy the challenges on sustainability in their respective regions.