



IBMT BUSINESS SCHOOL
BANGALORE

Sustainability & Corporate Governance

Research at IBMT



INSTITUTE OF BUSINESS MANAGEMENT & TECHNOLOGY

Delivering Knowledge for Creative Solutions

We now live in a world that is increasingly defined by Globality, Cybernity and Complexity. Technologies of transport and communication are accelerating the trans-border flow of data, goods, services and people. Collapse of time and space is sharpening the process of rapid integration of world societies creating increased possibilities for interaction among people across borders. Convergence of technologies such as satellites, computers, television, telecommunications, genetics & biotechnology, etc is changing the way we live. The most profound impact has been felt on business organizations and processes marked by increasing complexity. The problem in today's complex environment is that business and the target are constantly modifying each other and co-evolving. Therefore, the linear path is no longer feasible to achieve targets. In order to comprehend the emerging complexity and select intelligent pathways one requires not only the knowledge of technology but new cognitive skills to manage complex organizations.

Education is at the heart of this continent of the unknown. These are epoch-making times for the education and research, training and human resource development that must cater to the needs of a new mind extension era.

The Institute of Business Management & Technology has been designed as an innovation-mediated knowledge enterprise focused on the new economy. IBMT education aims to develop future managers with holistic perception through unity of thought, vision and action to operate in the emerging complex business environment. The central concern is to nurture creative contributors with enhanced creative skills and technologies to contribute to the creation, application and extension of knowledge for the benefit of the society.

The Institute aspires to become an important link in the chain of leading centers of professional and creative education around the globe. With this objective the Institute has partnered with a world's largest network of comprising 116 B-Schools.

PERSPECTIVE

The Institute of Business Management & Technology (IBMT BUSINESS SCHOOL) has been designed as an innovation driven B-School focused on the new economy. We at IBMT believe that the future ecology of global society, business and human enterprise will be defined by sustainable paradigm and creative enterprises. Clearly the future belongs to those companies, societies and nations that will harness the power of innovation & creativity with a global framework of sustainability. In our search for sustainability models, we at IBMT are exploring our past to build future models. Ancient Indian intellectual traditions offer valuable insights to construct such models. Gandhian perspective is situated as link between the ancient tradition and modernity. Governance at all levels of organizations will be critical to deploy innovative & creative energies of individual entities to mould human enterprise towards sustainability.

IBMT believes that the integration of global systems is now creating an intelligent space where empowered individuals will work as intellipreneurs to generate wealth in the society. New signposts of creative economy are on the horizon. Therefore intellectual perspective at IBMT is now evolving around I 4 - C model.

IBMT began a systematic research activity in the year 2008. Based on our survey, using 5Cs model, of the current and emerging issues that are likely to influence the managerial process in the future we selected Sustainability and Corporate Governance as the broad themes of our research efforts.

Currently there are three senior members of the team

1. Dr. Anil Rawat, (Project Leader) Theory, Philosophy and science of sustainability
2. Prof. M D Saibaba (Lead Researcher) Ancient traditions and sustainability models, Corporate Governance
3. Prof, Arun Mudhol (Lead researcher) Education for Sustainability

The institute is now exploring the possibility of expanding the scope of sustainability research in all its dimensions.

Research papers Prepared by the team have been presented at various International fora where IBMT approach has been widely appreciated.

NAME OF THE PROJECT ---- PROJECT 2012 (2008-2012)

Sustainability project has been organized in two phases.

First phase (2008-2010) focuses on theory, philosophy and science of sustainability for the purpose of understanding sustainability. The emphasis here is on highlighting Indian ethos from ancient to modern era.

The second phase (2010-2012) of research is focused on case studies, development of sustainability models, developing a code for human engineering, sustainable life and governance.

Focus is to incorporate principles enunciated in our scriptures and articulated Gandhian Philosophy.

*"SUSTAINABILITY PARADIGM" TECHNOLOGICAL CHANGE, ECONOMIC GROWTH &
TRANSFORMATION IN DEVELOPING COUNTRIES"*

Dr. Anil Rawat

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PROJECT 2012

THE AWAKENING

"There's no impediment, other than a failure of imagination, that will keep us from delivering on a truly global win-win solution."

Paul Romer

THE FOCUS IS TO:

- (1) DELINEATE THE EDGES OF AN EMERGING PARADIGM
A NEW SYSTEM OF WORLDVIEW THAT ARRANGES
A SET OF FACTS IN A NEW ORDER*
- (2) TO PROPOSE A SET OF ELEMENTS AIMED TO ENHANCE THE
EFFICACY OF THE SUSTAINABILITY PARADIGM*

THEORETICAL PROPOSITION

Phase I 2008-2010

SETTING THE CONTEXT: EVOLUTION AND SUSTAINABILITY

WE ARE IN THE MIDST OF AN EVOLVING PARADIGM OF ECONOMIC GROWTH.

THE CONCEPTS AND THEORIES SUCH AS,

THE EVOLUTIONARY ECONOMICS,

THE ENVIRONMENTAL ECONOMICS,

SUSTAINABLE DEVELOPMENT,

ECOLOGICAL ECONOMICS,

NEW GROWTH THEORY,

*KNOWLEDGE ECONOMY,
ENLIGHTENED ECONOMICS ETC*

*DURING THE PAST THREE DECADES OR SO ALL THESE HAVE GROWN
AS INDEPENDENT STREAMS OF KNOWLEDGE,
THE EVOLUTIONARY SYNTHESIS OF ALL SUCH KNOWLEDGE STREAMS
IS LEADING TOWARDS A NEW PARADIGM
THE SUSTAINABILITY PARADIGM.*

*THE DEVELOPMENT OF ECONOMIC THEORY THROUGH TIME HAS COINCIDED WITH THE INCREASING COMPLEXITY
OF SOCIETIES AND ECONOMIC ACTIVITY. HENCE THESE MOVEMENTS CORRESPOND TO DIFFERENT STAGES OF
ECONOMIC DEVELOPMENT.*

- 1. Evolution of Sustainability Concept*
- 2. Evolution of New Growth Theory*
- 3. Evolution of Evolutionary Economics*
- 4. Evolutionary Process and Sustainability*

Literature Survey used as a tool

- ⇒ To define the context;*
- ⇒ To ascertain the definitive meaning of the concepts;*
- ⇒ To situate growth, economics and sustainability in the evolutionary context*

SUSTAINABILITY DILEMMA

- A. The conventional development paradigm has generated unprecedented wealth but has increased greater amount of poverty.*
- B. Benefits of conventional development cannot be overlooked; however, these do not reach a vast majority of world's population equitably.*

ISSUE:

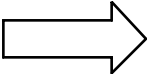
Current economic model is based on linear extractive resource processing. It does not sustain the very biosphere which it uses for its own expansion. Concept of sustainability is fundamentally incompatible with conventional economic theory.

Preventing unsustainable practices

Promote sustainable practices

THE CHALLENGE:

TECHNOLOGY "LOCK-IN" TO "TECHNOLOGY-LOCK-OUT"

SUSTAINABILITY CONCEPT  COMPLEX PROPOSITION

A systemic approach may provide some clue.

All existing systems are open, having exchanges of energy, matter and information within constituent elements and the external environment. Its behaviour, depends not only on the system itself, but also on the input variables coming from the environment of the system. Therefore, what the system is at a given time, will be determined by the previous state of the system and by the inputs received by the system in the last period of time.

A system is defined as a set of interrelated elements or subsystems. The elements can be molecules, organisms, machines or their parts, social entities, or even abstract concepts. The interrelations, interlinkages, or "couplings" between the elements may also have very different manifestations.

"SUSTAINABILITY IS THE NATURE'S MECHANICS OF THE EVOLUTIONARY PROCESS"

- A SELF ORGANISING COMPLEX ADAPTIVE MECHANISM
- A HOLISTIC PROCESS

Ecosphere

Convergence

Holistic Paradigm

Inclusiveness

Knowledge expansion = Greater Wealth

Evolutionary economics is the modern recapitulation of the primacy of that evolutionary process underlying all the realms of nature.

Evolutionary approach to economic development has gained wide acceptance.

Most people now accept that our existence is the result of an extremely long history of evolutionary process. This process is responsible for the diversity among species on this planet, and is also responsible for the development of conscious, creative human minds.

Economic evolution is about how knowledge grows.

In this approach, technologies are “lumpy” that is, interconnected to other factors of development, technological change not exogenous but contextualized. Technological change is incremental.

SOME FEATURES OF EVOLUTIONARY ECONOMICS

1. Heterogeneity between economic agents or economic units.
2. Economic selection much like natural selection.
3. Dynamic disequilibrium

One cannot make a useful distinction between “economic” and “non-economic” factors when trying to explain economic growth.

Multiple domains, techno-economic, socio-technological, socio institutional may exist, but they exercise strong mutual influence.

1. Economic growth is a process of transformation, not a convergence to a steady state.
2. Technology is a key factor shaping economic growth and its rate of change.

Radical innovations open new possibilities. Incremental innovations help diffuse these technologies.

Innovation vs imitation. Imitation helps diffusion of technology, growth and catching up.

3. Process of economic growth is characterised by structural change.
4. Notion of economic selection. Population dynamics.

Technologies are “lumpy” that is, they are linked with other technologies, economic activities, and production and user practices, and whole range of institutions that form part of technological regime.

Technological change is contextualized, ie something that occurs within actor networks, and is shaped by technological capabilities being available in company and the knowledge institutions, demand and cost conditions, and techno-managerial feasibility.

That requires a new policy regime triggering institutional change including cultural.

Peter Mulder, Carl H. Reschke, Rene Kemp, “ Evolutionary Theorising on Technological Change and Sustainable Development, IEPE, INRA. Grenoble, France, 1999.

The way in which we understand the mechanics of technology generation is of primary importance for the understanding of the growth phenomenon.

NEW GROWTH THEORY AND DEVELOPING COUNTRIES

1. TECHNOLOGY DEVELOPMENT IS AN ENDOGENOUS PROCESS
 2. TECHNOLOGICAL DEVELOPMENT IS FACILITATED BY SOCIETAL FACTORS
 3. INCREASING RETURNS
 4. DYNAMIC DISEQUILIBRIUM
 5. KNOWLEDGE GENERATION CAN ACCOUNT FOR GROWTH
 6. ADVENT OF CREATIVE ECONOMY
- THE CREATIVE ACTIVITIES COULD ACCOUNT FOR AN ECONOMICALLY PROFITABLE VENTURE

New Growth Theory offers greater space for Developing Countries

Policy Issues relevant for Developing Countries.

Value of public policy a necessary tool for developing countries.

Edward Barbier, Joshua Bishop, Bruce Aylward and Joanne Burgess point out:

'Market mechanisms determine the prices of natural resources and of products derived from them, by reconciling demand and supply. However, markets do not automatically account for environmental values, such as the subsistence use of natural products for food, fuel, medicines and building materials, the protective and supportive roles of ecological functions, or the use of biodiversity for agricultural and medicinal research. Nor do markets capture option and existence values, values derived from preserving certain natural environments, species and resources today as an option for future use or simply because their existence is valued'.

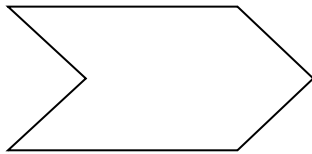
Public policies can influence allocation of resources

The economics of creative industries must be based on evolutionary economics.

The value of the arts and culture to an economic system is dynamic. New ideas and technologies are the drivers of economic growth, to the extent that people adopt and retain. The creative industries are the entrepreneurs and manufacturers of the socio-technological process.

Step 1

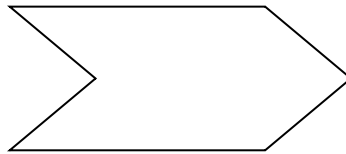
Factor Driven Economy



Institutions
Infrastructure
Macro-economic stability
Safety
Human capital - 'basic'

Step 2

Efficiency Driven Economy



Human capital - 'educated'
Efficient product market
Efficient labour market
Efficient financial market
Technological eagerness to learn

Step 3

Innovation Driven Economy



Sophisticated firm strategies
Creativity
Innovation
Entrepreneurship
International openness
/ market size

THE CURRENT DEBATE IS MISSING OUT ON
DEEP HUMAN VALUES OF HIGHER MORAL ORDER THAT SHAPE
THE ATTITUDES, PERSPECTIVES BEHAVIOUR PATTERNS AMONG HUMAN BEINGS

EVOLUTION IS NOT AN EVENT IT IS CONTINUOUS PROCESS

IN ORDER FOR IT TO SUCCEED AS HUMAN DEVELOPMENT STRATEGY

SUSTAINABILITY MUST BE AN INGRAINED MINDSET

SUSTAINABILITY PLANNING AND DESIGN MUST TAKE IN TO ACCOUNT

THE INTERIORITY

SPIRITUAL DIMENSIONS OF HUMAN DEVELOPMENT

SUSTAINABILITY, GLOBALISATION AND ECONOMIC GROWTH IN DEVELOPING COUNTRIES

PRESENTATION BY
DR. ANIL RAWAT
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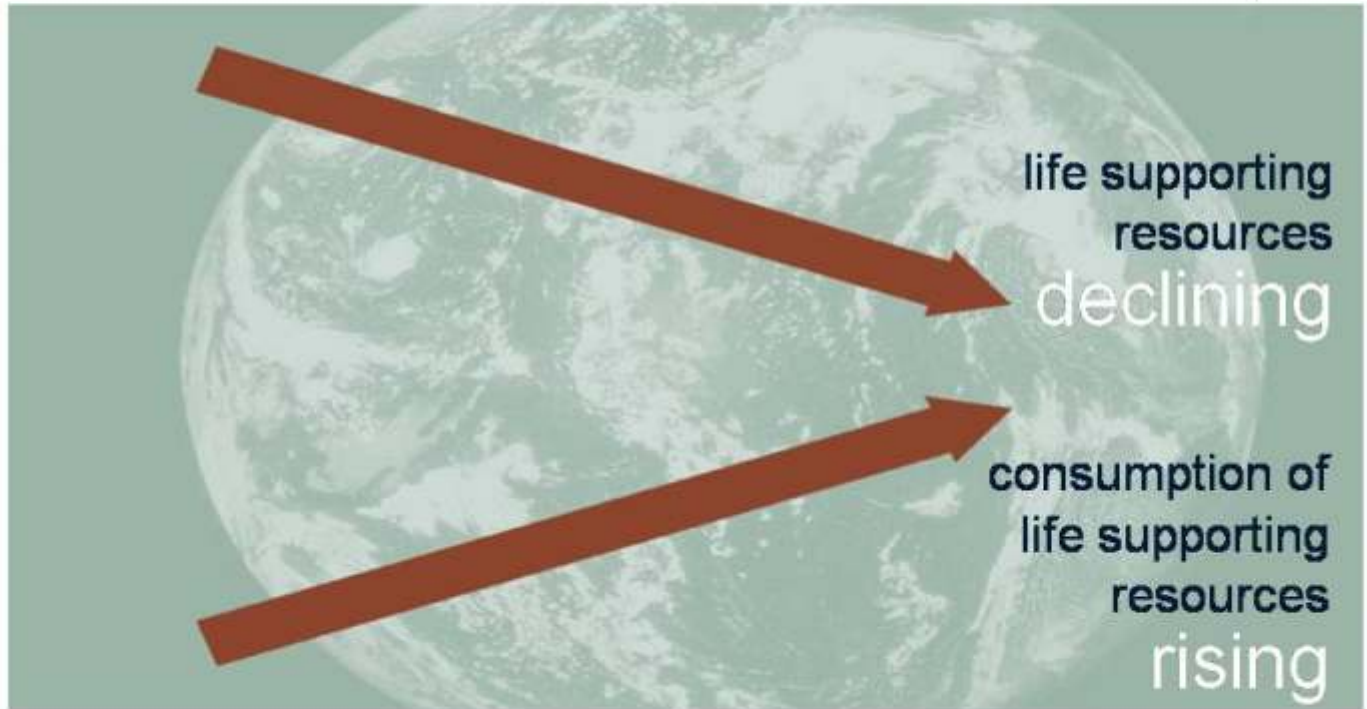
ESCIIP – INTERNATIONAL DAYS 2009

SUSTAINABILITY PARADOX

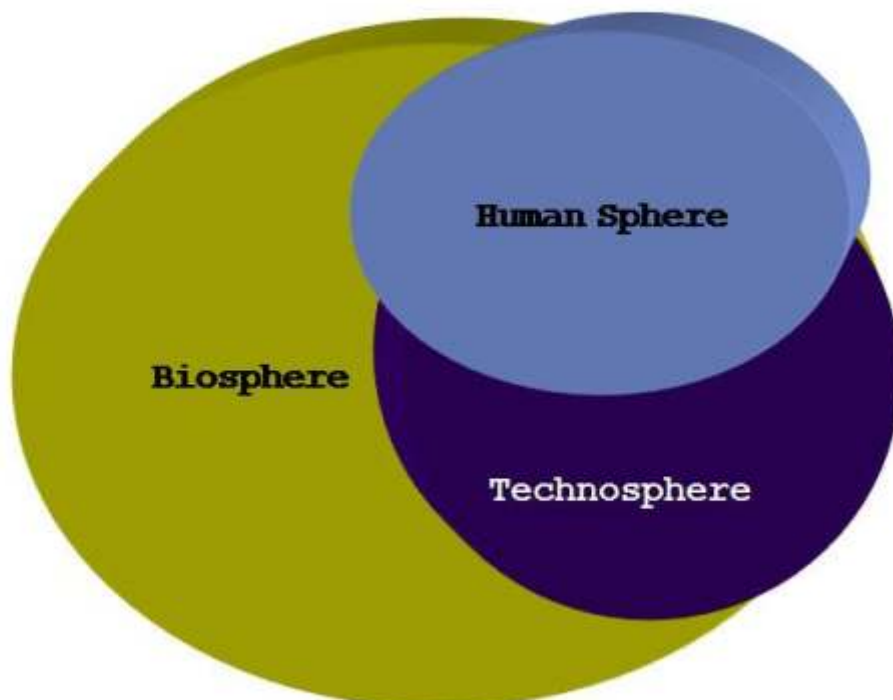
**THE PRESENT TRENDS IN ECONOMIC DEVELOPMENT MODEL =
CONCENTRATED POWER IN CENTRALIZED HIERARCHIES. IT HAS PRODUCED
WEALTH, TECHNOLOGICAL GAINS AND CROSS-CULTURAL INTERACTIONS.
YET, THIS PROGRESS HAS BEEN, AND CONTINUES TO BE, SUPPORTED BY
LINEAR, EXTRACTIVE FLOWS OF RESOURCES “FROM TERRITORIES TO THE
CENTRE” THAT DO NOT SUSTAIN THE VERY BIOSPHERE THAT SUPPORTS
PROGRESS. THIS ECONOMIC MODEL HAS BEEN A KEY FACTOR IN BRINGING
HUMAN SOCIETIES PERILOUSLY CLOSE TO SEVERING THEIR CONNECTION WITH
THE BIOSPHERE – THE VERY ECOLOGICAL MILIEU IN WHICH HUMANS AND
MILLIONS OF OTHER SPECIES EXIST.**



SUSTAINABILITY - PROBLEMATIQUE



Sustainability Problematique



SUSTAINABILITY



- Difficult to define however in evolutionary perspective

Sustainability is nature's mechanics of evolution

Technology is human mechanics of evolutionary process

Phenomena of Globalisation

- Globalisation - development of increasingly intricate linkages between states, societies, business & cultural entities in the 'world system'



- Process vs Ideology
- Process = Multifaceted
- Ideology = Uniformatisation





Drivers of global change

1. Technological change
2. Economic liberalism



Classical Economic Principles

- First, economic growth depends on the economy's ability to generate a surplus; i.e., an amount of output that exceeds the subsistence requirements of the population.
- Second, not all sectors of the economy are able to produce a surplus, and third, growth
- depends on the reinvestment of a sufficient fraction of the surplus to enable the economy
- to at least 'reproduce' itself.



Sustainability Thinking

- Human development (HD) is considered as the ultimate objective of all human activity.
- Human development = enlarging people's choices to lead longer, healthier and fuller lives.
- Economic growth = human development.
- Economic growth provides necessary resources for sustained human development which in turn proves an important factor in economic growth.



New Economic Growth Theory

- Evolutionary Economics
- Ecological Economics
- Environmental Economics
- Spiritual Economics
- New Growth Theory
- Sustainability Economics
- Creative Economy



Aspects of New Growth Theory

- Includes technology and knowledge as factors of production
- Allows for imperfect competition & economies of scale
- Increasing returns on investment
- Increased knowledge output for economic growth
- Scope for public policy
- In consonance with Knowledge economy

SUSTAINABILITY FRAMEWORKS & TOOLS

- **Systemic, holistic, integrative thinking**
 - The Natural Step
- **Ecological Footprint**
 - Biomimicry
- **Natural Capitalism**
- **Life Cycle Analysis**
 - Others





Global Transition

From

- Fossil powered
- Take, make, waste
- Living off nature's capital
- Market as master
- Loss of cultural & biological diversity
- Individual centered

To

- Solar powered
- Cyclical production
- Living off nature's income
- Market as servant
- Increased cultural & biological diversity
- Community centered

SUSTAINABILITY IS ABOUT CREATING COMPETITIVE ADVANTAGE FROM ALIGNING FINANCIAL, SOCIAL AND ENVIRONMENTAL GOALS



Definition of Sustainable Development

"For the business enterprise, sustainable development means adopting business strategies and activities that meet the needs of the enterprise and its stakeholders today while protecting, sustaining and enhancing the human and natural resources that will be needed in the future."

Sustainability Principle



- CULTURAL MIND SET – Vasudhaiv Kutumbakam
- Respect for DIVERSITY.

Gandhi – The universal Man

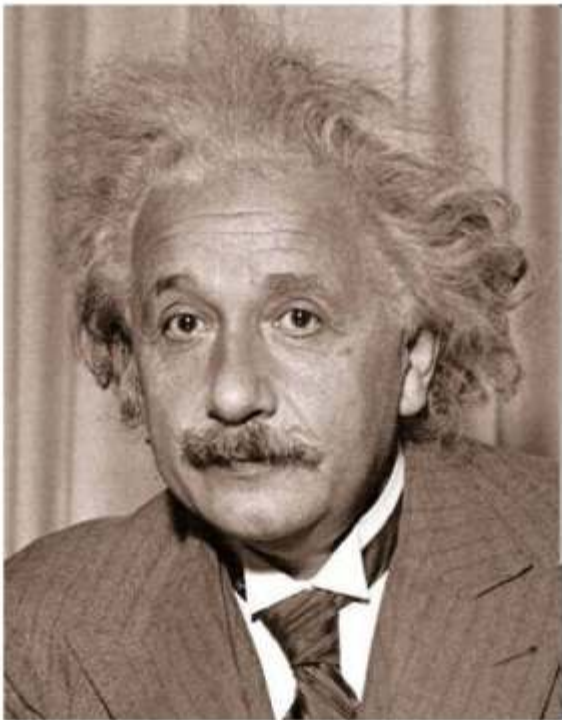
"Earth provides enough to satisfy every man's need, but not every man's greed"

- Mahatma Gandhi





Gandhi – The universal Man



•“Generations to come will scarce believe that such a one as this walked the earth in flesh and blood.”

-- Albert Einstein

INDIAN ETHOS IN SUSTAINABILITY FROM ANCIENT TO GANDHI: SUSTAINABILITY EDUCATION AT IBMT

Prof. M D SAIBABA

Institute of Business management & Technology
Bangalore

Presented at the ESCIP International Business School France, International Days 2010

IBMT Perspective on SUSTAINABILITY

Built into the workings of Nature

Essential code of human conduct of beings on earth

Underlying principle of oneness

Sustainability - code of universal existence

- Integral part of Indian philosophy
- Vedas - storehouse of knowledge and wisdom
- Rigveda and Atharva-veda (5000 years B.C.), the earliest documented ancient texts

PROPOSITION OF VEDAS

- The Atharva Veda, expounds universal truths of the oneness of the universe, the way to live in communion with the world of evolved souls, to pray for a healthy life and finally to merge with the Supreme.

PANCHA BHOOTAS

(The Five Elements)

THE FIVE ELEMENTS OF THE PHYSICAL UNIVERSE

- * EARTH
- * WATER
- * FIRE
- * AIR
- * ETHER (Aakaash)

PANCHA BOOTHAS AS DIVINE ELEMENTS

- All that exists consists of these elements
- Therefore, reflections of divinity
- All of these elements have been worshipped and revered since ancient times

ATHARVA VEDA

In the Atharva Veda there is a prayer which draws attention once again to ecological balance and how the earth, like Varuna, is the upholder of the moral order. Like the river goddess, she represents fecundity. Truth and moral order sustain her. She is the mistress of past and future, giver of the wide and wildlife world of human life. She has high heights, stretches on level ground, reaches to the sea, bears herbs of manifold potency, on whom food and crops grow and animals roam whom Indra from the sky fertilises, and that earth is invoked as Mother.

Man says "I am the son of the earth, the rains are my father, let him, the Lord of the rain, fill the Earth for us.

- Earth, protect us, purify us. Let people milk her with amity.
- Earth, give us sweet words. The snowy mountain heights and thy forests,
- Earth, shall be kind to us and we to them."

REVERENCE TO PLANTS

■Plants are frequently invoked as deities, chiefly in enumerations along with waters, rivers, mountains, heaven, and earth.

One entire hymn (x. 97) is, devoted to the praise of plants (Aushadhi) alone, mainly with regard to their healing powers.

Vedic texts mention offerings made to plants and the adoration paid to them. One hymn of the Rigveda (x. 146) celebrates the forest as a whole, personified as Araṇya, the mocking genius of the woods. The weird sights and sounds of the gloaming are here described with a fine perception of nature in the dark solitudes of the jungle

POEM ABOUT FORESTS --ATHARVA VEDA

Goddess of wild and forest who
Seemest to vanish from sight
The goddess never slays unless
Some murderous enemy approaches.
Now have I praised the Forest Queen,
Sweet scented redolent of balm
The mother of all sylvan things,
Who tells not but hath stores of food. (ĪV,X.146)

Water

- The Vedas devote many hymns to waters. Mythically, Varuna is the god of the waters; he is considered the great superintendent of the cosmic moral order (Īta);. He is the guardian of the West. In a hymn dedicated to Varuna in the Atharva Veda (IV.16), it is said:
- This earth is King Varuna's as also this great far-flung sky: the two seas are his belly (appetite); at the same time he is hidden in this little water. Even we who may cross the sky will not escape King Varuna; from heaven his spies are patrolling this earth with a thousand eyes; they scan through the earth. King Varuna sees all that is between heaven and earth and that which is beyond (them).

AIR-THE BASIC LIFE GIVER

- Many beautiful hymns are dedicated to Vaayu, the pure air. Mythical Vaayu in the Vedic pantheon, is associated with Indra; he rides the same chariot with him, indeed Indra and Vaayu are often identified with each other. We know that Indra is the most powerful god of the skies and free spaces. Logically, just as Vaayu and áiva are interconnected and finally conjoined as áiva-áakti, Agni, Vaayu and Surya constitute a distinct group. The place of Agni is on earth, of Vayu (air) or Indra in space and of Surya in heaven.

ECO EQUILIBRIUM

- Water, earth, tree and plant maintain the spatial balance of the cosmos, the night and dawn are the keepers of celestial temporal order and each is the goddess, mother, wife, woman or girl. They are essential for the celestial or terrestrial order, the Íta - a central concept of Indian cosmology and philosophic thought. Any disturbance in the order needs penance, ritual or sacrifice. 11

MAN'S LIVING PARADISE

- Man's paradise is on earth; This living world is the beloved place of all; It has the blessings of Nature's bounties; Live in a lovely spirit; Do not die before your assigned time. Remember anything which is born dies not before your destiny calls you. (Atharva.5.30.6)

AURVEDA-INDIAN PHARMACOPIA

- Ayurveda originated in India long back in pre-vedic period. Rigveda and Atharva-veda (5000 years B.C.), the earliest documented ancient Indian knowledge have references on health and diseases. Ayurveda texts like Charak Samhita and Sushruta Samhita were documented about 1000 years B.C. The term Ayurveda means 'Science of Life'. It deals elaborately with measures for healthful living during the entire span of life and its various phases. Besides, dealing with principles for maintenance of health, it has also developed a wide range of therapeutic measures to combat illness. These principles of positive health and therapeutic measures relate to physical, mental, social and spiritual welfare of human beings. Thus Ayurveda becomes one of the oldest systems of health care dealing with both the preventive and curative aspects of life in a most comprehensive way and presents a close similarity to the WHO's concept of health propounded in the modern era.

SCIENCE OF LIFE IN TUNE WITH NATURE

- That is why Ayurveda is said to be the off shoot of *Atharva Veda*. *Vanaspati Vana*? Scheme for raising medicinal plants especially of mother and child ...

Mother nature-integrating the five elements

- Bless that Mother Nature be kind to us; The heavens give us peace. The earth be gentle; Gentle be the waters that flow; Gentle be the plants and herbs that grow. May the past be kind; the future benign. (Atharva.19.9.1)

In Praise of nature

- Nature's beauty is an art of God. Let us feel the touch of God's invisible hands, in everything beautiful. By the first touch of his hand rivers throb and ripple. When He smiles the Sun shines, the Moon glimmers, the stars twinkle, the flowers bloom, By the first rays of the rising sun, the universe is stirred; The shining gold is sprinkled on the smiling buds of rose; The fragrant air is filled with sweet melodies of singing birds, The dawn is the dream of God's creative fancy. (Rig.1.6.3)

YOGA

- Yoga - A Hindu spiritual and ascetic discipline, a part of which includes breath control, simple meditation and the adoption of specific body postures widely practiced for relaxation. Sanskrit, literally meaning 'union', referring to the union of the mind, body and spirit.

ECO PHILOSOPHY

- As an answer to the present challenge, eco-philosophy insists that mankind should rediscover the human meanings related to the meaning of the environment or its surrounding (including all living organisms, rocks and the environment) or life ecosystem. Eco-philosophy is a social sciences' philosophy that has a strong foundation on biological and ecological concepts. Social sciences' philosophy is the study of the aims and methods of social science. Standard anthologies organize their material around such questions as whether natural things differ fundamentally from social things and whether the sciences of social things must then use different methods from the sciences of the natural things, and so on.

LINKAGES-PAST-PRESENT & FUTURE

- Eco-philosophy is a rational restatement of the unitary view or a holistic approach of the globe in which all the living organisms (including plants, animals, environment, and human race) belong to the same structure. Man has been modifying his natural environment in ways that have made it answer more closely to human requirements. In the heart of modern scientific civilization flows the conception that man and nature are two opposed entities and that for the sake of human profit it is necessary to conquer nature. Scientific methods and philosophies have been largely instrumental in effecting this conquest. In an attempt to conquer the natural world, mankind has upset the fixed, basic rhythm of nature. Having suffered and been brought to the verge of destruction by man's action, nature is now rebelling against human ambitions and designs. If mankind is not to destroy itself, it must now adopt a new and healthy approach toward nature by changing its attitude and basic conceptual system.

GANDHI-THE MODERN INDIAN CONNECT

- Gandhi, reverently called as Bapu, has been the modern connect-his philosophy is centered on sustainability

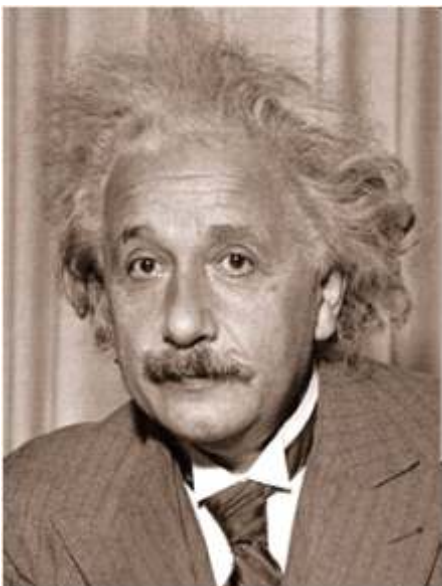
Apostle of peace & harmony on Earth



"Earth provides enough to satisfy every man's need,
but not every man's greed"

- Mahatma Gandhi

Gandhi The universal Man



- Among the tributes to Gandhi upon his death were these words by the great physicist, Albert Einstein:
- "Generations to come will scarce believe that such a one as this walked the earth in flesh and lood."
- We owe a lot to the Indians, who taught us how to count, without which no worthwhile scientific discovery could have been made.

- Albert Einstein.

TRUTH - HARMONY: ETHICAL CODE OF SUSTAINABILITY

● In a recorded talk Gandhi sought to prove the existence of the benevolent, unifying power- The God.

* (His Voice) "I do dimly perceive that, whilst everything around me is ever changing, ever dying, there is underlying all that change, a living power that is changeless, that holds all together, that informing power or spirit is God... for I see that in the midst of death, life persists; in the midst of untruth, truth persists; in the midst of darkness, light persists..."

Hence I gather that God is Life, Truth, Light.

Faith transcends reason..."

CARBON FOOT PRINT - Minimise the consumption

- The religious text lay an emphasis on the regeneration process and minimising the carbon foot print
- Countries with huge population can only sustain with moderating the consumption
- The Indian rituals are aimed at purification of the soul and minimum consumption of the natural resources.

WHAT IS FUTURE EXPECTATIONS

- On the flip side the technology has its own merits.
- It should be our endeavour to harness its potential to benefit the mankind
- Its benefits have to be diffused for sustainability since the world is becoming a global village.

CONCEPT OF GLOBAL TECHNICAL POOL

- The concept of public goods is to be imported into free social goods.
- Research in technology is to be shared as a social good.
- The interdependency of physical resources and its global connectedness needs a holistic view.

SUSTAINABILITY THE NEEDED APPROACH

- The developed countries have the technological skill whereas resources are untapped in the developing countries like India
- Hence cementing technology with resources is an imperative

CALL FOR GLOBAL CITIZENS

- Global funding for social equitable distribution
- Transforming business concepts to recyclable, renewable and regenerative
- Equitable distribution within the global frame work as opposed to national frame work.

SHARED BENEFITS WHEN SHARING NATURAL RESOURCES

- Our vision for global continuum where there is harmony of technology and nature enables to leapfrog the change process by incorporating in our pedagogies.
- Platform /window to the growing economies of the world

EDUCATION

- THE EDUCATION SYSTEM ALSO NEEDS RE ENGINEERING TO REFLECT THIS CHANGE

IBMT

- Being autonomous and flexible we are agile in our response.
- The geographical location has its uniqueness-technological and cultural trappings for sustainability
- Education system can foster transformation

IBMT VISION OF SUSTAINABILITY

- CONVERGENCE PLANET-PEOPLE-TECHNOLOGY
- EVOLUTION THROUGH EDUCATION
- CONCEPT OF EARTH AS INHERITANCE
- LEGACY TO BE PASSED ON TO GENERATIONS
- BUILDING VALUE SYSTEMS BASED ON SUSTAINABILITY
- SHARED VISION OF THE SAME

(Not to be quoted)

Sustainable Development through Education

Prof. Arun Mudhol
Dean Academics
Institute of Business Management and Technology
Bangalore, INDIA.

Presented at the International Conference held at Harvard Business School, Boston

Introduction

The 1987 Brundtland Commission Report introduced the term “ecologically sustainable development,” and this phrase was further cemented at the 1992 Earth Summit in Rio de Janeiro (Shrivastava, 1995). The report presented a framework and a set of principles to address ways to protect our planet's resources while taking into consideration economic and social concerns. Over the last two decades, there has been a growing need to understand what sustainable development or sustainability means to an organization and to its business model to help solve the mystery of how to create a balance between profitability to shareholders and responsibility to stakeholders.

Human race is at the cross roads for survival. We are at a stage where we need to keep trying new things for the survival of our species as well as for the cause of some of the species which have still survived. We are at a time where we are challenged to experiment with new things hopefully to get a solution for future sustainability at a speed which is unprecedented but hopefully not impossible. We try to explore various such new approaches for our common goal of sustainability. Education is one such area where new methods can be adopted so that a paradigm shift can be brought about for the common benefit of all of us. We need to have a social revolution, a change in the mindset of an entire generation for this to happen successfully. The coming generation should never feel the burden of dependency and should be fully geared to responsibly take up the ownership of preserving the right for sustainability for their future generations to come.

1.1 Indian approach to Sustainable Globalization:

India has always been known as the land of wisdom, knowledge and continuous evolution. We have always reinvented ourselves and have been always giving a holistic developmental approach for all the issues including the part on sustainability. As globalization has started to achieve new heights and depths, the world is increasingly confronted by problems that cannot be solved by any one country no matter how powerful it may be. While on the one hand the reach and power of the multi-national corporations has increased many fold, the UN and its specialized agencies have increasingly intervened to guide the destiny of the world. The civil society has not lacked behind in voicing its concerns much before the national governments woke up to see the dangers ahead. It is for the present generation to wake up and look at the dangers lurking just around the corner.

Social Sustainability through Education:

From the times immemorial, India has evolved a unique concept of man in the universe. How important is this man to the sustainability factor and what would be his contribution to the sustainable future should always be understood with the right perspective. Sustainability is nothing but the mechanism of nature to advance the evolutionary process. If this has to happen, our forefathers have always been of the opinion that we need to have a right attitude towards nature. We need to have a check on the consumption pattern and use of the natural resources. Indians have always taken recourse to its knowledge of spirituality and ethics. Rationality alone does not give us the total control of the issue at hand. We need to have a holistic view about all the factors concerning the sustainability at hand and then take a pragmatic approach for solving the problem in the longer run.

Indians have been propagating the science of YOGA for centuries down the line. We look more for a holistic development of a human being at the basic level and claim that it is very much essential for a human being to develop his inner self as well as to develop his exterior personality. The basic education that the Indian system tries to provide for this is the YOGA.

- Yoga is a Hindu spiritual and ascetic discipline, a part of which includes breath control, simple meditation and the adoption of specific body postures widely practiced for relaxation
 - In Sanskrit, it literally means 'union', referring to the union of the mind, body and spirit.
- It is a firm belief in Indians and in Hindus that mind, body and soul or the spirit are the embodiment of the social, environmental and economic factors of sustainability and it is only with the proper union of these three that a human being can evolve.

The Indian philosophy is a rational restatement of the unitary view or a holistic approach of the globe in which all the living organisms (including plants, animals, environment, and human race) belong to the same structure. Man has been modifying his natural environment in ways that have made it answer more closely to human requirements. In the heart of modern scientific civilization flows the conception that man and nature are two opposed entities and that for the sake of human profit it is necessary to conquer nature. Scientific methods and philosophies have been largely instrumental in effecting this conquest. In an attempt to conquer the natural world, mankind has upset the fixed, basic rhythm of nature. Having suffered and been brought to the verge of destruction by man's action, nature is now rebelling against human ambitions and designs. If mankind is not to destroy itself, it must now adopt a new and healthy approach toward nature by changing its attitude and basic conceptual system.

Globalization in terms of earth as a common heritage of mankind and, therefore, the home of all is not new. What is new is the unprecedented speed with which the world is being united by electronic communication and the juggernaut of the capitalist mode of production and consumption, while at the same time being divided by lust, hatred, greed, violence, and conflicts, self centered material advancements is the most sought after goal. What consequences it has for the ecology and environment, cultural heritage and human relations are not the questions that bother us anymore. Families are breaking apart; communities are disappearing; and love and compassion for fellow human beings is on the low ebb. While there is an argument that man must pay for the price of progress (material advancement), it sometimes feels that the price being paid is too much as there is environmental quality deterioration the world over.

Let us take the case of India. Here the concept of Vasudhaiva Kutumbakam was a sort of benign globalization with almost no adverse impact on people, their economy, and ecology. It treats all the people of the world, irrespective of race, religion and place of residence as members of one grand universal family. There was a built-in mechanism for development from below and within. Concept of family is not based on competition; it is based on co-operation, love and affection and give and take. It is a unit wherein the duties are as or even more important as rights. The same is the case with the concept of community. If globalization enriches some and impoverishes others, it goes against the family norms. If it treats nature, the very basis of life on earth as resources for exploitation, it jeopardizes the survival and development of life on earth. Land should be so used that it does not lose its fertility; water should be so used that it is neither polluted nor wasted. Nothing should be thrown in nature that cannot be recycled. Nature is a living system, highly integrated and synergic; we cannot change one part of it without affecting its other parts.

With time and under the pressure of unusual circumstances such as invasions from outside, the Vasudhaiva Kutumbakam model of India gave way to the one, which was economically and socially not adhering to the model set by its forefathers. The new model was ecologically destructive and culturally against the very nature of human beings. It ultimately led to the division of Indian society into innumerable castes and communities and feudal system of governance. The original model is still there to take advantage of if the present society cares for its existence.

To handle the problems we face today, we have to evolve a worldview, which encompasses the values, ethos, perceptions and needs of all the people of the earth. While the western mind would like the world to be materially advanced and dominant, the eastern mind would like a good mixture of inner development with outer development also. While the western mind would like one culture, one civilization, one life style, and one way of thinking, the eastern mind would prefer variety laying more stress on interdependence on each constituent unit such as Individuals, family, community, place, regions and nations. The western mind would lay emphasis on rights, while the eastern one on duties too, for rights and duties are two sides of the same coin. The western mind would see the world in parts and would try to divide and dominate it; the eastern mind would see it as interconnected system wherein all the constituents must live in harmony.

The first and foremost thing we need today is peace. If peace is not absence of war, then we need peace of mind, peace in the community, society and the world. We also need prosperity in parallel. Of what use is peace without prosperity? Prosperity can come through economic growth tempered with equity, social justice and environmental quality. So, along with globalization of the economy, we need the globalization of peace and harmony. Indian culture in the past and in the present represents and upholds this thought process very much. India advocates that we need to have compassion for our fellow human beings elsewhere, cultivate human values in us. We need an economic growth but only if it is accompanied by equity, social justice, environmental quality and peace of mind. We need social development that strengthens family and community solidarity; we need political development that is truly democratic; we need technological advancement that neither strengthens the arms of the exploiters, nor takes away the work that legitimately belongs to people.

Indians have always advocated to aim at a world where due respect and cognizance is taken of the history, geography and culture of the place, region and nation. While international and transnational relations develop further, the family, community and national bonds must become stronger to make human life more satisfying. Only such a life and living will take humanity to higher level of consciousness.

The globalization process today tries to take care of only the economic and technological aspects of our life. All other aspects are not given their due priorities. Technology is geared to economic growth and so are the social and political processes. Even ethics and morality are bent to meet the imperatives of growth centric economy. What is being suggested is that time has come to change, if not reverse the direction of the current process of globalization. It is human development that should form the circle within which economic, political, social, environmental and technological developments should take place. Human developments should be seen in a far broader perspective than the UN agencies do. It must include not only social dimensions such as income, health, education, but also ethical and moral aspect of life. India stood for all these value systems in the past and it is our earnest plea that the world view should once again be the same. The policy makers should have this in mind when resolutions affecting the world over are drafted.

This brings us to a Gandhian perspective of globalization. Gandhi has become an icon of peace and harmony. In Gandhi's scheme of things, cooperation, not competition should pervade all human activities. Competition should be limited to love compassion and sacrifice for others. Gandhi fought the British Imperialism tooth and nail but he never hated the British. Gandhi laid emphasis and worked vigorously for the globalization of love, truth, non-violence, compassion and human brotherhood. He stood for a multi-colored socio-economic tapestry of the world wherein each nation, region, place and culture had a pride of place, and added to the beauty of the whole. He once said "I do not want my house to be walled in on all sides and my windows to be stuffed. I want the cultures of all the lands to be blown about my house as freely as possible. But I refuse to be blown off my feet by any." This is the Gandhian perspective that must guide the process of globalization.

To quote Mahatma Gandhi "Earth provides enough to satisfy every man's need, but not every man's greed". This clearly shows the thought process of Gandhi and his message to the world for sustainability.

Indian model of sustainability calls for building up of a global society based on brotherhood and sisterhood of mankind, no matter to which place, country, or religion they belong. So in our system of sustainability, the goal is moral or spiritual development (not religious), and the means are economic, social and environmental developments. It is because modern approaches to development exclude inner development of human beings as individuals (moral) and as members of the larger society (ethical), one should have not only have good life but also good living. No individual has the right to pollute the society by his immoral and unethical behavior.

Economic Sustainability through Education:

A letter written by Walter Isaacson, the president of the Aspen Institute, a nongovernmental organization (NGO), to Aspen friends and partners reads

"At certain points in our lives, many of us feel the need to reflect on what it takes to lead a life that is good, useful, worthy, and meaningful. Perhaps we have noticed ourselves trimming our principles and making too many compromises in our careers, and we want to reconnect with our values. Or perhaps we yearn, in a world filled with clashing opinions, to understand the great ideas and ideals that have competed throughout the progress of civilization."

(Isaacson 2006)

India's sustainability model presumes that no individual nation is fully developed in all respects. The so-called developed countries are only economically and technologically advanced. They are not necessarily well developed morally. Such people and countries need moral and ethical education so that they can share their riches with others. While those who are economically poor need economic development, a fully developed individual or country will be strong economically and morally.

Sustainable development is process oriented. It is fashioned, promoted, communicated, created, learned, produced and reproduced through what we do, how we work, and what we make, trade and create, ranging from the micro, the immediate and the everyday, to the macro, the long term and the exceptional. Sustainable development and its objective, sustainability, will come about through learning and reflecting on everyday assumptions, habits of behavior, structures of feeling and expectation. This learning will take place in schools, colleges and universities. More importantly it will take place in the home, on the high street, at the workplace, when on holiday, watching television, in the garden, putting the rubbish out for recycling, getting the train, talking with friends, surfing the net and so on.

The EU has articulated the notion of lifelong learning as encompassing formal, non-formal and informal practices. Learning is recognized as taking place throughout society not simply in the formal institutions of schools, colleges and universities, but also in community groups, in the supermarket, on the allotment, in front of the television, at the workplace, while plugged into the computer, when on holiday, while visiting a museum, city farm or community garden, or while enjoying a walk through the countryside. Informal learning in everyday life is perhaps a major key to unlocking the door to a more sustainable world. Computer games are fast becoming bigger business than Hollywood and computer simulations are an important part of the formal learning environment for many professions, from architects and planners to biologists and the US Marines. Games are also an important element in the everyday leisure and learning experiences of many children and young people.

Learning is also a key to how individuals manage the increasingly evident economic and ecological risks, uncertainties and complexities, which often seem beyond our control: it is not obviously our responsibility but they nonetheless shape our lives, hopes, expectations and anxieties. Most young adults today will have more than one career, many jobs will be short term, technology changes rapidly, weather patterns render idyllic holiday destinations less predictably idyllic, we may have to get our drinking water from standpipes in the summer and deal with floods in the winter, and what we eat may be slowly poisoning us. We need to learn to do different things, or the same things but differently. Learning is important if people are to care about themselves, about others and about the world as it is now and as it may be in the future.

Although not many people seem to be talking about it at the bus stop, in the pub or indeed in the universities, we have now entered the United Nations Decade of Education for Sustainable Development, 2005-2014. This global initiative establishes a broad context for learning about sustainability. It is being promoted internationally by the United Nations, to some extent also by national governments, and in many ways comes just at the right time as more people than ever before are currently attuned to the wider issues of climate change, renewable energy, free and fair trade, human rights, animal welfare, social exclusion, civil and political liberties, ethical consumption, and the 'risk society'.

As weather patterns become increasingly severe or volatile, with spring appearing earlier and earlier, images of hurricanes filling the television news, the price of a barrel of oil reaching record highs, petrol and diesel becoming fuels of the past, and debates over the efficacy of renewable energy and the necessity of nuclear power resurrecting fears that had been buried years ago, the UN's initiative is more important than ever. There is a need for educational practitioners in the formal sectors to engage with the sustainability agenda but, as the framers of the Decade of Education for Sustainable Development make clear, that is not going to be enough:

Education for Sustainable Development (ESD) is for everyone, at whatever stage of life they are. It takes place, therefore, within a perspective of lifelong learning, engaging all possible learning spaces, formal, non-formal and informal, from early childhood to adult life. ESD calls for a re-orientation of educational approaches curriculum and content, pedagogy and examinations. Spaces for learning include non-formal learning, community-based organizations and local civil society, the workplace, formal education, technical and vocational training, teacher training, higher education educational inspectorates, policy-making bodies, and beyond. (UNESCO, 2005, p6; their emphasis)

It's not just about learning one discipline or one trade or knowing when to smile or be polite in public. It requires a holistic understanding of the world and the place of humans within it; it has a powerful ethical purpose; it is dialogic; it is about learning to learn how to make sense of the world around us and within us.

Transformative learning is when our meaning schemes (specific attitudes, beliefs and attitudes) and meaning perspectives change as a result of experience and self-reflection. Perspective transformation is the process whereby people become critically aware of how and why their assumptions constrain the way they perceive, understand and feel about the world. It involves the changing of more or less habitual expectations, making possible more inclusive or integrative perspectives and the capability of making choices to act upon these new modes of understanding. Perspective transformation can occur slowly through gradual changes in attitudes and beliefs or through a shattering experience, a 'disorientating dilemma', which may be highly personal or be prompted by an eye-opening discussion, film, book or article that seriously contradicts previously held assumptions. These changes may be painful, involving the questioning of long-held beliefs and personal values; they may even challenge a person's sense of self and personal identity.

occasionally it can occur in quite mysterious ways. We do think about things, reflect on experience, search for answers or that fair trade coffee, which is inexplicably not on the shelf as it usually is. Learning often takes place following or during critical reflection that feeds back into ourselves, rearticulating our experiences and our understanding of those experiences. Some learning is simply an accumulation of facts or experiences easily assimilated into what is already there. On the other hand, a disturbing or disorientating experience may not be so easily assimilated. Some learning and conservation organizations intentionally offer a disorientating experience to their visitors, although this is by no means common.

Alternative conceptions of the world, of rights and wrongs, emerge and become embedded in new conceptions and approaches to sense-making. They may not, however, always be clear. In fact, as the world is perceived as being rather more complex and interrelated than we might at first have assumed, our understanding may become less clear, our confidence less certain, our sense of powerlessness more acute.

Learning just doesn't take place on its own, in isolation, without someone doing the learning, although And this is where formal education comes in. By just sitting at home watching the TV, going to a museum or a zoo, being active in a community group, I have the opportunity and capacity to ignore, resist, distort and reject. I may find it hard to motivate myself, or think things through on my own. There are always pressing reasons, experiences, values, assumptions, prejudices, knowledge and necessary time-consuming, energy-sapping chores that prevent me, and others, from reflecting creatively and critically on experiences in a pro-sustainable or pro-environmental manner.

The experience of seeing the raw and unprocessed elements of finished or processed products the cotton of shirts, coffee beans rather than instant granules, cork bark rather than the manufactured cylinders that keep the wine from spilling out of the bottle connects with the everyday lifeworlds of shopping, consumption and pleasure. Few disorientating dilemmas here, instead gentle associations and calls, without emotional coercion, to reflect and to change. To this end, the learner may activate both the capacity and the capability to make connections intellectually, emotionally, imaginatively and ethically with other, perhaps unfamiliar, lifeworlds, experiences and values, for example fair trade, the experiences of growers in developing countries and our choice of eating Nestlé or Green and Black's confectionary.

If humanity is to respond to the challenges, education has a key role to play in promoting, understanding and helping individuals, society and governments to make informed choices.

This is not simply about giving people information, but ensuring that education and schools specifically is mobilized to re-orient society towards sustainable practices. Education is not a 'magic bullet' in approaching sustainability, but without coordinated educational interventions, even the best thought through technical policies will fail.

In order to promote such a reorientation the International Alliance of Leading Educational Institutes has agreed on eight recommendations, informed by the jointly conducted research project and targeted the world's political decision makers.

1. Sustainable development is impossible without learning. We are therefore clear that policies which promote Education for Sustainable Development should play a key part in the negotiation of global agreements.
2. Societies need to change radically consumption, production and behavior patterns to meet the challenges we face. The urgency of sustainable development risks narrowing the role of education to communication of advice to citizens. This will be counter-productive in the long-term. We strongly recommend maintaining and implementing the more ambitious aims of Education for Sustainable Development providing people with the right communication at the right time.
3. ESD will make demands on all of society but schools will play a critical role, through what they teach and how they model sustainable practices. Governments need to ensure that schools are able to play a leading role in Education for Sustainable Development through the way education systems are managed, schools are organized and pupils taught.
4. Whole-school approaches are promising: societies need to re-orient schooling towards a stronger emphasis on education for sustainability. In practical terms, this means greater interdisciplinary work, participation in authentic sustainability challenges and interaction with others outside school. We recommend these approaches as a way of integrating Education for Sustainable Development into current educational practices.

5. One of the key obstacles to Education for Sustainable Development is teacher knowledge and understanding, because of the lack of pre- and in-service teacher training in Education for Sustainable development. We recommend allocating resources to remedy this: universities should offer Education for Sustainable Development courses for pre- and in-service teachers and governments should implement policies which help all teachers to develop their capacity to implement Education for Sustainable Development.
6. Teacher education in Education for Sustainable Development will not change school practice unless resources and time for experimentation are provided and the sustainability is integrated into the curriculum. Thus, policy initiatives in teacher education should be coordinated with support for Education for Sustainable Development at school level.
7. Interaction between researchers, teachers, NGOs, public officers and others in the field of Education for Sustainable Development is essential, in order to support knowledge sharing, enhance curriculum development and promote more valid and reliable ways of evaluating ESD. We recommend the establishment of mediating organizations and groups to promote this. Regional Centers of Expertise on Education for Sustainable Development, which already exist at some places, may serve as models for this endeavor.
8. Education for Sustainable Development research needs to be augmented. It should be focused on (1) documenting the state of practice and identifying promising practices, (2) exploring educational outcomes and their evaluation in respect of Education for Sustainable Development, (3) identifying and explaining opportunities and problems of general relevance. As people are influenced by a number of different agents and media, informal and non-formal education is an important field that needs to be studied more thoroughly.

Environmental Sustainability through Education:

The importance of environment and its link to development and quality of human life were first addressed on a global level at the United Nations Conference on the Human Environment in Stockholm in 1972. The then Prime Minister of India, Mrs. Indira Gandhi, pointed out at this Conference that "environment cannot be improved in conditions of poverty", thus highlighting the link between environment and development.

Environmental sustainability or the code for universal existence has always been there in the Indian Philosophy through the ages. It has been an integral part of Indian Philosophy. RIGVEDA and ATHARVAVEDA (5000 BC) have been the earliest known documented ancient texts of Indian Origin. The importance of Environmental sustainability has been propounded as the amalgamation or the proper equilibrium of five Pancha Boothas as we call it. The five elements of the Physical Universe are: Earth, Water, Fire, Air and Ether (Aakash). The texts say that all that exists consists of these elements. Hence, we in India consider them to be reflections of Divinity. All these elements have been worshipped and revered since ancient times.

In the Atharva Veda there is prayer which draws attention to the ecological balance of these elements and how the earth is the upholder of the moral order. We beseech the earth to protect us and to purify us. We pray to her to give us the mountains as well as the flowing rivers. We ask her to bear herbs of manifold potency, on whom food and crops grow and animals roam. We seek the blessings of the Ether to bless us by fertilizing the earth by proper rainfall at times. We also pray that let the earth be kind to us and we to it.

This philosophy of coexistence given by the Indians tells us about the high level of importance given by our ancestors for sustainability. We have lot of reverence to our plants. The Rig-Veda tells about the importance of plants & herbs with respect to their medicinal value and personifies the jungle as the mocking genius of the woods.

The Vedas devote many hymns to the water. We consider him to be the great superintendent of the cosmic moral order. It is he who looks after the heaven, earth and well beyond that boundary. Air is similarly considered to be the basic life giver and any kind of disrespect to it is abhorred.

Water, earth, tree and plant maintain the spatial balance of the cosmos, the night and dawn are the keepers of celestial temporal order and each is the goddess, mother, wife, woman or girl. They are essential for the celestial or terrestrial order, the *Ita* - a central concept of Indian cosmology and philosophic thought. Any disturbance in the order needs penance, ritual or sacrifice thereby placing the factor of sustainability at its highest order. The Indian philosophical thought is in tune with nature. The present generation has to fall back upon the previous wisdom and learn by their mistakes.

It is by integrating the five elements of Mother Nature in a balanced proportion that it is possible for us to achieve sustainability of environment.

"Bless that Mother Nature be kind to us; the heavens give us peace. The earth be gentle; Gentle be the waters that flow; Gentle be the plants and herbs that grow. May the past be kind; the future benign. (Atharva-veda.19.9.1). This in a nutshell gives us the much required knowledge for preserving our environment for future generations to come.

As an answer to the present challenge, eco-philosophy insists that mankind should rediscover the human meanings related to the meaning of the environment or its surrounding (including all living organisms, rocks and the environment) or life ecosystem. Eco-philosophy is a social sciences' philosophy that has a strong foundation on biological and ecological concepts. Social sciences' philosophy is the study of the aims and methods of social science. Standard anthologies organize their material around such questions as whether natural things differ fundamentally from social things and whether the sciences of social things must then use different methods from the sciences of the natural things, and so on.

Gandhi, is the modern connect between ancient Indian humanistic traditions and modern values. His philosophy is centered on sustainability. Truth and Harmony according to him are the ethical codes for Sustainability.

The reasoning on social responsibility must be clear; in the sense that it is a set of practices which witness the commitment of a person to himself, to his inner audience and with society, extending beyond the idea that it can only exist in what concerns its economical character. The evaluation of social responsibility of an organization involves its relationship with the external world; and ethics is a more general term, which involves not only internal but also external relationships (ASHELEY, 2002).

The socio-economical view has been showing that times have changed and the expectations of society for businesses have changed in the same way. Corporations are not independent entities, responsible in the presence of shareholders. They possess responsibilities towards a broader society, which creates and sustains them. According to ROBBINS (2000), one can observe, within a socio-economical approach, three related concepts, which constitute levels of social involvement:

Social obligation - when an organization assists its economical and legal responsibilities, nothing else. An enterprise only aims at social goals as long as they contribute to its economical goals.

Social responsibility - it is beyond mere fulfillment of basic economical and legal standards. It adds an ethical imperative so that the company acts so as to form a better society, instead of worsening it, pursuing long-term goals, which are good to society.

Social reactivity - the capacity a company has of adapting to changes in varied social conditions. As such, it is orientated by social norms. Reactive organizations examine the environment to identify changes in habits and attitudes. In addition, it modifies its practices in order to follow the current pattern.

It can be observed that levels of social involvement are crucial for the establishment of an ethical behavior, essential to achieve sustainability. It is in this context, that emerges as a challenge for enterprises the conquest of higher and higher levels of competition and productivity, which leads to growing concern with social legitimacy of its performance. From the 1990's a growing concern with the ethical attitude starts to be noticed. Research shows that:

- The person and the organization are more efficient when there is congruence of values and beliefs in what concerns the work to be done and the expectations and demands of the organization towards success;
- Ethics is broadly constituted by survival rules, behavior rules associated with profession, relationship rules which allow for harmony in social interaction;
- The enterprise, which aims at being ethical, must diffuse precise declarations, which define rules and must create verifying procedures in order to guarantee that everyone inside the organization is following them;

If we again have a look at our ancient Indian texts, the emphasis was on the regeneration process and minimizing the carbon foot print. Hence it is obvious that countries with huge population can only sustain with moderating the consumption pattern. The Indian rituals are aimed at purification of the soul and minimum consumption of the natural resources.

Conclusion:

1. The education system needs to be re-engineered to reflect the changes happening in the world.
2. Strengthen cooperation between formal and non-formal education.
3. Integrate Science and Technology into educational programmes for sustainable development.
4. Include holistic educational system such as Yoga into the curriculum for education for sustainable development.
5. Incorporate key themes for sustainable development in all educational systems. These themes include a wide range of issues: poverty alleviation, peace, ethics, democracy, justice, security, human rights, health, social equity, cultural diversity, economy, environmental protection, natural resource management.
6. There should be a constant meeting of the various stakeholders, including international organizations, business, non-governmental organizations, regional environmental centers and research institutions to take part in the meeting and provided valuable contributions on a consistent basis.
7. The strategy for implementation of sustainability has to take into consideration the political, economic and social diversity in the region, such that it can be made flexible enough, so that its implementation could be adapted to each country's priorities, specific needs and circumstances.
8. Education is a key agent for change and as such a tool for addressing questions on gender equality, rural development, health care, HIV/AIDS and consumption patterns.

Thus, quality education is a prerequisite for education for sustainable development.

Achieving sustainable development requires:

- Recognition of the challenge
- Collective responsibility and constructive partnership
- Acting with determination
- The indivisibility of human dignity

Education provides the skills for:

- Learning to know
- Learning to live together
- Learning to do
- Learning to be

Education not only provides scientific and technical skills, it also provides the motivation, justification, and social support for pursuing and applying them. The international community now strongly believes that we need to foster through education the values, behavior and lifestyles required for a sustainable future.

STUDENTS' LEARNING

Students are equipped with concepts and issues related to Sustainability and Corporate Governance during the orientation programme itself so as to enable them to integrate these ideas in their learning process. The senior students of masters' programmes at IBMT join as team members to assist in various projects and organize applied learning activities. The objective of this programme is to instill among young aspiring management leaders the awareness regarding these core issues of concern, inspire students to engage in innovative thinking, planning, execution and learning.

Under this ongoing programme the students have organized two exhibitions focused on the theme of sustainability.

1. GANDHI GLOBALISATION & SUSTAINABLE DEVELOPMENT (2009)
2. SUSTAINABLE PRODUCTS SUSTAINABLE LIFE (2010)

AaSHA Path to Enlightenment

This is an annual event at IBMT focused on applied learning through business design. Students are required to develop a product, prepare a business plan and develop business. For the last two years all the students have been engaged in developing sustainable product and processes. Students are required to design a sustainable product, prepare a business plan and launch the product in the market.



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