

**SUSTAINABLE DEVELOPMENT MANAGEMENT -EXPERIENCES IN  
EDUCATIONAL ENVIRONMENT**



**A.N. Priyanka & Y. Praveen Choudary\***

*\*Both are Sanskrithi School of Business, Puttaparthi, (Anantapur Dist), Andhra Pradesh.*

**ABSTRACT**

Our nation's economic growth principally hinges on few crucial factors such as population, unemployment followed by callousness in wastage of precious natural resources. However, these have become major stumbling blocks and are causes of stunted economic growth of our country. Our country is endowed with vast amounts of precious natural resources, but efforts towards conserving and regeneration of expended resources are woefully inadequate despite frantic wake-up calls made by various expert committees on natural resources utilization. India is signatory of sustainable development, Resolutions of RIO & KYOTO summits. 'No' significant steps are 'on the ground' except grand plans developed on paper.

In our view each and every citizen of our nation has a moral responsibility and need to involve at the individual level towards the use of natural resources and specifically in conserving them to the extent possible. The first step should start from our own house premises. This reminds us the maxim "charity begins at home". In this paper, we have put forth the experiences in our college premises (SANSKRITHI SCHOOL OF BUSINESS (SSB), PUTTAPARTHY) where we were involved in creating an environment suitable for nurturing, protecting and regenerating the natural resources. Our efforts have commenced with planting saplings from the main entrance of SSB to the hostel (1km stretch). Care is taken to water them using drip irrigation and sprinkler systems. Solar modules illuminate the pathways, street lighting, solar water heating system is installed to meet hot water requirements. Vegetable garden in the hostel backyard meets the daily requirements. Special arrangements are made to recycle the used water through the water treatment for

re-use and channelize back to gardens and plants. Vast amounts of daily garbage, degraded vegetation are decomposed to convert as organic manures. Plans are afoot to generate Biogas. In all these programs we have involved ourselves from planning to implementation stages. Though it is a small step we have put forward, we believe that this is the right step in the right direction towards sustainable development efforts.

## KEY WORDS

Afforestation, Alternate wet & dry irrigation, Bio-gas, Drip irrigation, Exploitation, Pollutants, Recycling, Regeneration, Renewable resources, Solar, Sprinkler system, Sustainable development, Wind energy.

## INTRODUCTION

Concern for the environment has grown in its approach. Earlier, the approach was a mere control of pollutants and the punishment of guilty industries. Now the emphasis is on sustainable development. Sustainable development refers to development that leads the needs of the present without compromising the ability of future generations to meet their own needs. The concept of sustainable development goes much beyond the environmental protection, it is based on a recognition that economic growth must be viewed as a process that provides fairness and opportunities for all the world's people, not just the privileged few, without further destroying the world's finite natural resources and without compromising the world's carrying capacity.

Sustainable development is a global concern. Several summit meetings were held and many declarations were made by countries across the globe-all to achieve clean environment and sustainable development. The RIO conference of 2002, popularly known as earth summit, brought the international community together to institute actions on various fronts such as combating climatic change, conservation of biodiversity. The existing international agreement is known as Kyoto protocol that came into force in 2005. The protocol has been ratified by 175 countries (except the US,

THE BIGGEST polluter), including those in the European Union, Japan, Canada, and Russia. This agreement sets legally binding targets to 175 countries to reduce their greenhouse gas emission targets: (i) joint implementation among the developed countries, (ii) emission trading among the developed countries, and (iii) clean development mechanisms.

The Kyoto protocol is due to expire in 2012 but its achievement has not been significant for the reason that the US stayed away from the agreement. Several other countries too reneged on their commitments to reduce emissions. On December 15, 2007, as many as 190 countries have signed an agreement, known as the "Bali Roadmap". Post 2012, this roadmap shall be the binding force on the signatories.

### Major provisions of the road map are as follows:-

- No compulsion on developing countries to cut carbon emissions
- Clean technology to be transferred to developing countries
- Rich countries will pay poor countries to adopt threats from climate change, such as quakes, floods, and droughts.

- No funds for Indian forestry. Rich countries may not pay for upkeep of Indian forests, which India maintains as global reserves at the cost of its own development.

### Sampling:-

Sanskriti School of Business, Puttaparthi, Ananthapur district, A.P has been chosen as base of sample as it was having all the required infrastructure and data needed for this study.

## OBJECTIVES OF THE STUDY

The objectives of the study are:

1. To study the relevant literature on the “sustainable development”.
2. To widen our knowledge base on the subject
3. To explore the area where ‘youth’ can initiate efforts towards creating an environment which is conducive for sustenance and the habitation of humanity as well as flora and fauna.
4. To share our experiences and efforts made by the student community of the Sanskriti School of Business.

## CURRENT SCENARIO IN THE INDIAN CONTEXT AND ITS IMPACT ON NATURAL RESOURCES

Daily news reports amply reflect the pathetic state of affairs with regards to the states of exploitation of precious natural resources of our nation. Despite stern strictures from the Supreme Court to shift the industries polluting the atmosphere, water resources all along the Yamuna River, which has become the origin of health hazards as well as marine organisms, action taken by concerned agencies is dismal. Major rivers like Ganga, Yamuna continues to be polluted 24x7 by industrial effluents, untreated sewage, chemicals, decomposed human bodies and animals.

## METHODOLOGY

In order to attain the above objectives data has been collected from both primary and secondary sources.

### Primary sources:-

Information gathered from the students’ community who was involved in the practical implementation of mini projects for conserving the vital natural resources in the institute premises. Personal interviews, visual aid collection archives, have been made use of.

### Secondary sources:-

In order to enhance our knowledge base; articles on sustainable development appearing in the text books, Research articles, reports in the public domain, newspaper, and the internet were used.

Industrial sectors pertaining to chemical, pharma , tanneries thermal power stations, Paper mills continues to spew enormous untreated poisonous gaseous substances polluting the atmosphere. Action paralysis on the part of controlling establishments is shamefully evident.

### Mineral resources misuse:-

Iron ore, coal mining is under control of ‘mafias’ instead of official agencies. Coal gate scam, cases of illegal exports of iron ore are the main focus of Supreme Court precious time and attention since years. Indiscriminate and illegal quarrying of precious minerals and sand are the principal unaccounted wealth centers of political nexus.

**Forest resources exploitation:-**

A rich forest resources of our country have become part of our cultural heritage and have become an 'archive' in the library collection. Whatever is remaining forest wealth has become soft targets for the persons of influences who can make or break the rules based on their whims & fancies. Depletion of forests by denuding and indiscriminate felling has become the order of the day. Regeneration of forests is of concern for 'No-one'.

**Inter linkage of rivers:-**

Eminent engineering stalwarts like Bharath Ratna Moksha Gundam Vishweshwariah, Dr. K. L. Rao has pleaded throughout their life period for integrating/linkage of the major rivers of our country in order to optimize the utilization of water resources and control the of floods, wasteful discharge of usable water in to ocean have gone to the deaf ears of all the governments in power since 1947. Interstate river disputes are continuing unabated without any results, but creating animosities among the common public.

The current scenario of our nation does not create any amount of trust to the citizens of our country on the part of law enforcing agencies, Government in protecting, nurturing and sustaining the natural resources to the current as well as future generations.

Indifferent attitude of our society towards natural resources in the modern culture is one of the major concerns. Apathy, callousness, lack of accountability wastage and attitude "of it is someone's (Govt's) responsibility" are the principle reasons for the current plight of our Nation.. Individual's role and involvement in the Nation's development as well as

conservation of natural resources is woefully inadequate.

The time has come for the 'youth' to take the 'mantle' from the existing Baby boomers generation who were the 'silent spectators' while the rampant exploitation of natural resources was continuing unabated. It has become very clear that unless we the 'youth' take initiative 'now', the alarming situation would become unmanageable and uncontrollable for saving/conserving the natural resources. Saving the existing bare minimum natural resources, searching for the ways to protect them, regenerate wherever possible, commence popularizing and effectively utilizing the renewable resources fortunately which are 'abundant' need to be pursued vigorously. This will enable 'us' to create a 'path' for future generations to tread and develop further.

- Women have a vital role in environmental development and management. Their full participation is therefore essential to achieve sustainable development.
- The creativity, ideals and courage of the youth of the world should be mobilized to forge a global partnership in order to achieve sustainable development and ensure a better future for all.
- Indigenous people and their communities, and other local communities have a chattel role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture, interests and enable their effective participation in the achievement of sustainable development.



### **EFFORTS IN OUR INSTITUTION (SSB) TOWARDS SUSTAINABLE DEVELOPMENT**

Sanskriti School of Business is situated in Anantapur District, which is "ever drought prone ", minimum rain fed district of A.P. The campus is surrounded by rocky terrain radiating intense heat with minimum green cover. Poverty laden, undeveloped mini villages around have minimum levels of ground water facility.

Our College is built on a 30 acre plot in the year 2010 (1 km away from unauthorized, illegal granite quarrying sites leased by others spewing plenty of dust and sound pollution).

In the short span of 3 years the scenery in the college campus has completely transformed in a "lush green canopy of avenue tree plantation and thick green foliage providing protection from hot winds and scorching temperature".



*Green canopy in SSB*

Thanks to the vision of the management and voluntary participation of MBA students of this institute towards the ongoing efforts in creating a clean and a green sustainable environment under harsh and inhospitable surroundings.

#### **Solar energy utilization:-**

From the institute main entrance gate to hostel premises (1 km stretch) the approach roads and street light illumination needs are enabled through the

solar modules and hot water requirements for the hostel and kitchen are being met through solar water heating systems, students of this institution have participated in the workshop organized by the solar system consultants. This technical session has provided an opportunity for the students to gain knowledge regarding utilization of solar energy and meeting the domestic energy needs.



### ILLUMINATION OF PATH WAYS WITH SOLAR ENERGY&SOLAR WATER HEATER@SSB

#### Conservation of water resources:-

In order to meet the water requirements for sapling and avenue tree plantation, horticulture needs. Scheme of drip irrigation, alternate dry and yet irrigations (AWE), sprinkler system installation have been planned and realized with active participation of students. This



*Channel irrigation & sprinkler system at SSB*

#### Mini vegetable garden and fruit, yielding variety plantations:-

Considering the vast vacant place available in the hostel campus, students have taken the initiative to raise one acre plot vegetable garden, which is fed through drip irrigation and recycled water has yielded satisfactory results. A considerable portion of vegetable requirements of the hostel is met through this garden. The garden uses compost organic manure generated through degraded vegetation and kitchen garbage.



experience has enhanced the knowledge of conservation practices followed under arid and dry lands. Waste water from post washing, cleaning is treated through appropriate natural and chemical methods and is channelized and recycled for gardening and irrigating the dry patches for raising cattle feed. These methods of 'recycling of water' provided an effective means of conservation of both electrical energy as well as underground water supply.



*Vegetable garden at SSB*

Livestock raised by the helping hands working in the garden, horticulture and security divisions meet the dairy requirements of the hostel. Inputs required

for the cattle are raised in the house. These practices have helped in reducing cost of vegetable resulting in much require 'cost reduction potential'



*Plant of biogas unit afoot*

## SUGGESTIONS

NATURE IN OUR PLANET IS EVOLVED over a long period of time. However the urbanization all over the world played a major role in the environmental devastation which has taken place rapidly in a very short span of time (approx) within the last 50 years unless serious and concerted efforts on stopping this Rot is made sustainable development remains an insurmountable obstacle. Some suggestions are as follows:

### 1. Cluster Development:-

To begin with, it is prudent to initiate action in a decentralized passion. For example, selecting a cluster of villages which are in proximity and most underdeveloped. Involvement of locals of these villages, private and NGOs needs to be made mandatory. Channelized the government funds in an equitable manner for these clusters of villages selected. This will provide an opportunity for this agency to work in critical functions achieving on mutually agreed and identified set of goals which are socially relevant. Further, this empowers the people involved to plan and

realize the local specific needs. Care is to be taken to keep politics and politician away from interfering in this self-development endeavor.

### 2. Utilization of solar energy:-

Extensive awareness program is to be created regarding the benefits of using the solar energy for meeting all their domestic energy needs

### 3. Government investment:-

Government has to invest in the renewable energy efforts, with subsidy and banks provide low interest loans. Volume of production is a key factor as the benefits of Economies of scale is a natural outcome of mass scale production.

### 4. Revisit on Agriculture:-

Migration from villages to cities is a result of neglecting agriculture sector, which was traditionally a principal occupation in the villages. Government concerted efforts of reviving agriculture is called for and it must be the top most priority.

### 5. Frustration of youth:-

Village youth is the most frustrated segments in our country as their educational needs and health care needs are pathetically inadequate and in most of the villages they are not available. The government has washed off their hands by leaving education and health care in the private and corporate door steps. It is obvious that these services are not cost free and hence the service provider always Eye-at reasonable rates of returns on their investments

### 6. Misuse of subsidies:-

Despite Government's major funding is in the form of subsidies for the below poverty line segment, the ground reality is that the ultimate beneficiary (villagers) is the ultimate loser by not receiving his basic minimum resources. The entire subsidy program has not made any impact on the lives of poor people. Instead the most part of the funds fill coffers of the devils of the society. Subsidy program needs a thorough overhaul and funds be used for creating self employment in the villages by developing the cottage industries which provides inputs for Renewable Energy Technologies.

### 7. Forestry and water resources conservation:-

Social forestry and recycling of water must be given impetus and are made National priority projects throughout the Nation.

### 8. Fund crunch:-

In our perception the imaginary fund crunch as most of common public are made to believe is Fiction. In fact the vast amount of funds are not only misdirected and wasted on schemes (which are not required in the first place itself) which are unproductive, but sometimes it is creating

a means to encourage laziness among the some segments of the population. In this regard it worthwhile to adopt "Tough measures initiated in the country like China, which has more population than India, yet it is progressing rapidly on all fronts. China's slogans "work or perish". Our Nation is most indifferent and reluctant towards in providing "Motivated Direction" and making people self reliant and prepare them for facing challenges. We lose the race before start itself. Our attitude needs a drastic change in the path of work culture.

### CONCLUSION

Participating and involving in the efforts of our institution and nurturing, protecting, conserving and sustaining the green and clean environment has provided an opportunity to widen the knowledge base on sustainable development and its needs, implication of misutilization and its consequences. Continued efforts of all citizens in this endeavor will make the society a clean and rich with a natural resource environment for the future generations.

### REFERENCES

1. *A.D.P Report. 2006. Tehran: Baztab News Agency.*
2. *Dalby, Simon. 2002. Environmental Security: Ecology or International Relation? Article presented at the*
3. *annual convention of the International Studies Association, New Orleans.*
4. *Harris, Jonathan M. 2000. Basic Principles of Sustainable Development. Massachusetts: Tufts University.*
5. *Homer-Dixon, Thomas F. 1999. Environmental Scarcity and Mass Violence. In The Geopolitics Reader, by Routledge Gearoid Otuathail, Simon Dalby and Paul Routledge. New York: Routledge.*



6. Hossein, Shakuie. 2005. *Environmental Philosophies and Geographical Schools*. Tehran: Gitashenasipublication.
7. Kaplan, Robert D. 1999. *The Coming Anarchy*. In *The Geopolitics Reader*, ed. by Routledge Gearoid
8. Otuathail, Simon Dalby and Paul Routledge. New York: Routledge.
9. Mojtahedzadeh, Pirouz. 2002. *Political Geography and Geo politics*. Tehran: SAMT Publication.
10. Muschett, Douglas. 1997. *Principles of Sustainable Development*. Florida: CRC Press.
11. Otuathail, Geariod. 1996. *Critical Geopolitics*. London: Routledge.
12. Porter, Gareth. 1999. *Environmental Security as a National Security Issue*. In *The Geopolitics Reader*, ed. By Routledge Gearoid Otuathail, Simon Dalby and Paul Routledge. New York: Routledge.
13. Taghi Rahnamaee, Mohammad. 2000. *Development and Environment*. In *The Total Articles of the Meeting of Research and Abilities of Geography's Science in the Constructive Area*. Tehran: The University of Tehran.
14. United Nations. 1987. *Report of the World Commission on Environment and Development*. General
15. *Assembly Resolution 42/187*.
16. *World Bank. 1992. Development Final Report*.
17. *Wikipedia.org. free encyclopedia*