

# INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT

I  
J  
R  
C  
M



A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

Indexed & Listed at:

Ulrich's Periodicals Directory ©, ProQuest, U.S.A., EBSCO Publishing, U.S.A., Cabell's Directories of Publishing Opportunities, U.S.A.,

Open J-Gate, India [link of the same is duly available at Inlibnet of University Grants Commission (U.G.C.)],

Index Copernicus Publishers Panel, Poland with IC Value of 5.09 & number of libraries all around the world.

Circulated all over the world & Google has verified that scholars of more than 2592 Cities in 161 countries/territories are visiting our journal on regular basis.

Ground Floor, Building No. 1041-C-1, Devi Bhawan Bazar, JAGADHRI – 135 003, Yamunanagar, Haryana, INDIA

<http://ijrcm.org.in/>

# CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	DIRECTION AND TRENDS OF INDIA'S PINEAPPLE EXPORTS: A STUDY IN THE FREE TRADE REGIME JOMY M THOMAS & DR. MARY JOSEPH	1
2.	A STUDY ON HOUSEHOLDS' CONSUMPTION PATTERN OF AAVIN MILK IN ERODE DISTRICT SARAVANAN. R., YOGANANDAN. G., RUBY. N & KARTHI.C	6
3.	A JOURNEY FROM FERA TO FEMA & ITS IMPACT ON FOREX DHEERAJ GANDHI & DR. I.C.KASHYAP	10
4.	EMERGENCE OF MORAL PRINCIPLES AND ETHICS IN MANAGEMENT EDUCATION U. PADMAVATHI	15
5.	EMPOWERMENT OF WOMEN THROUGH MICROFINANCE: A STUDY IN CHITTOOR DISTRICT K. RAMANAMMA & P. MOHAN REDDY	18
6.	THE IMPACT OF MACROECONOMIC VARIABLES ON STOCK MARKET INDEX: AN EMPIRICAL STUDY PRADEEP K & DR. Y. NAGARAJU	22
7.	IMPACT OF COALMINE INDUSTRIAL EFFLUENTS ON PRODUCTIVITY OF PULSE CROP DR. S. RADHA KRISHNA	29
8.	IMPACT OF MERGER ON THE PROFITABILITY PERFORMANCE OF REGIONAL RURAL BANKS (RRBs) IN BIHAR STATE OF INDIA: AN EMPIRICAL STUDY DR. MANAS CHAKRABARTI	32
9.	PERFORMANCE OF MGNREGA IN MANIPUR: A CROSS DISTRICT ANALYSIS JIYAUUR RAHMAN & ZEBBA SHEEREEN	37
10.	A STUDY ON PROSPECTS AND FINANCE PROBLEMS OF FOOD BASED SMALL SCALE INDUSTRIES WITH SPECIAL REFERENCE TO MADURAI DR. S.FATIMA ROSALINE MARY & D.ANUSANKARI	42
11.	PROGRESS AND PERFORMANCE OF PRIMARY AGRICULTURE CO-OPERATIVE SOCIETIES IN INDIA PARDEEP KUMAR CHAUHAN	48
12.	SUSTAINABLE GROWTH: UTILIZATION OF NATURAL RESOURCES V. VANEENDRA SASTRY	51
13.	HEALTH INFRASTRUCTURE IN HARYANA: AN ANALYSIS ISHU GARG	54
14.	CHALLENGES AND OPPORTUNITIES FOR RURAL WOMEN ENTREPRENEURS JAINENDRA KUMAR VERMA	58
15.	A STUDY ON PERFORMANCE OF STATE CONSUMER DISPUTES REDRESSAL COMMISSIONS IN INDIA GURLEEN KAUR	60
16.	STUDY OF SENSITIVITY TOWARDS IMPORTANCE OF GEOGRAPHICAL INDICATION REGISTRY IN UTTARAKHAND DEEPAK JOSHI	63
17.	MARKET MIX STRATEGIES FOR DESTINATION AS A RURAL TOURISM PRODUCT AJAZ AHMAD DAR, HAMID ABDULLAH & PRIYA SINGH	70
18.	SPECIES-WISE MAJOR MARINE FISH PRODUCTION: TRENDS AND GROWTH PERFORMANCE IN SINDH DR. MOHAMMAD PERVEZ WASIM	74
19.	GOVERNMENT EXPENDITURE AND ECONOMIC GROWTH IN ASEAN-5: LONG-RUN TENDENCIES AND SHORT-TERM ADJUSTMENT EHSAN RAJABI & JUNAINA MUHAMMAD	85
20.	AN ASSESSMENT OF COMPETITIVE STRATEGIES ADOPTED BY COMMERCIAL COLLEGES IN NAIROBI, KENYA IN IMPROVING THEIR ENROLMENT CAPACITY ALICE WAIRIMU KANDE	90
21.	ORGANIZATIONAL ANALYSIS OF PANCHAYATI RAJ INSTITUTIONS IN INDIA PARDEP KUMAR CHAUHAN	95
22.	RELATIONSHIP BETWEEN EXCHANGE RATE AND TRADE BALANCE OF SOUTH ASIA: THE J-CURVE PATTERN ADNAN ALI SHAHZAD	99
23.	VOLATILITY IN GOLD PRICE IN INDIA: AN UPDATE MADHUSMITA BHUYAN	106
24.	A STUDY ON PERFORMANCE OF CONSUMER DISPUTES REDRESSAL AGENCIES IN STATE OF KARNATAKA GURLEEN KAUR	111
25.	THE LONG RUN RELATIONSHIP BETWEEN STOCK MARKET RETURNS AND INVESTMENT GROWTH IN NIGERIA: (1960 - 2010) DR. FREDRICK ONYEBUCHI ASOGWA	113
26.	THE EFFECT OF PENSION FUNDS ON THE GROWTH OF NIGERIAN ECONOMY SAMUEL, KEHINDE OLUWATOYIN & OKE, MARGARET ADEBIMPE	117
27.	AGRICULTURE AND WOMEN ENTREPRENEURSHIP IN INDIA HRIDESHWER GUPTA	123
28.	WOMEN ENTREPRENEURSHIP: AN EMERGING WORKFORCE IN 21 <sup>st</sup> CENTURY JAINENDRA KUMAR VERMA	126
29.	AN EMPIRICAL STUDY ON THE DYNAMICS OF COMMODITY DERIVATIVE MARKET'S IMPACT ON INDIAN INVESTMENT PRASAD R.A	128
30.	AGRICULTURAL GROWTH AND FOOD SECURITY: PROBLEMS AND CHALLENGES KUMARI MARY MATHE	131
	REQUEST FOR FEEDBACK	138

## CHIEF PATRON

**PROF. K. K. AGGARWAL**

Chairman, Malaviya National Institute of Technology, Jaipur

(An institute of National Importance & fully funded by Ministry of Human Resource Development, Government of India)

Chancellor, K. R. Mangalam University, Gurgaon

Chancellor, Lingaya's University, Faridabad

Founder Vice-Chancellor (1998-2008), Guru Gobind Singh Indraprastha University, Delhi

Ex. Pro Vice-Chancellor, Guru Jambheshwar University, Hisar

## FOUNDER PATRON

**LATE SH. RAM BHAJAN AGGARWAL**

Former State Minister for Home & Tourism, Government of Haryana

Former Vice-President, Dadri Education Society, Charkhi Dadri

Former President, Chinar Syntex Ltd. (Textile Mills), Bhiwani

## CO-ORDINATOR

**DR. BHAVET**

Faculty, Shree Ram Institute of Business & Management, Urjani

## ADVISORS

**DR. PRIYA RANJAN TRIVEDI**

Chancellor, The Global Open University, Nagaland

**PROF. M. S. SENAM RAJU**

Director A. C. D., School of Management Studies, I.G.N.O.U., New Delhi

**PROF. M. N. SHARMA**

Chairman, M.B.A., Haryana College of Technology & Management, Kaithal

**PROF. S. L. MAHANDRU**

Principal (Retd.), Maharaja Agrasen College, Jagadhri

## EDITOR

**PROF. R. K. SHARMA**

Professor, Bharti Vidyapeeth University Institute of Management & Research, New Delhi

## CO-EDITOR

**DR. SAMBHAV GARG**

Faculty, Shree Ram Institute of Business & Management, Urjani

## EDITORIAL ADVISORY BOARD

**DR. RAJESH MODI**

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

**PROF. SIKANDER KUMAR**

Chairman, Department of Economics, Himachal Pradesh University, Shimla, Himachal Pradesh

**PROF. SANJIV MITTAL**

University School of Management Studies, Guru Gobind Singh I. P. University, Delhi

**PROF. RAJENDER GUPTA**

Convener, Board of Studies in Economics, University of Jammu, Jammu

**PROF. NAWAB ALI KHAN**

Department of Commerce, Aligarh Muslim University, Aligarh, U.P.

**PROF. S. P. TIWARI**

Head, Department of Economics &amp; Rural Development, Dr. Ram Manohar Lohia Avadh University, Faizabad

**DR. ANIL CHANDHOK**

Professor, Faculty of Management, Maharishi Markandeshwar University, Mullana, Ambala, Haryana

**DR. ASHOK KUMAR CHAUHAN**

Reader, Department of Economics, Kurukshetra University, Kurukshetra

**DR. SAMBHAVNA**

Faculty, I.I.T.M., Delhi

**DR. MOHENDER KUMAR GUPTA**

Associate Professor, P.J.L.N. Government College, Faridabad

**DR. VIVEK CHAWLA**

Associate Professor, Kurukshetra University, Kurukshetra

**DR. SHIVAKUMAR DEENE**

Asst. Professor, Dept. of Commerce, School of Business Studies, Central University of Karnataka, Gulbarga

**ASSOCIATE EDITORS****PROF. ABHAY BANSAL**

Head, Department of Information Technology, Amity School of Engineering &amp; Technology, Amity University, Noida

**PARVEEN KHURANA**

Associate Professor, Mukand Lal National College, Yamuna Nagar

**SHASHI KHURANA**

Associate Professor, S.M.S. Khalsa Lubana Girls College, Barara, Ambala

**SUNIL KUMAR KARWASRA**

Principal, Aakash College of Education, Chander Kalan, Tohana, Fatehabad

**DR. VIKAS CHOUDHARY**

Asst. Professor, N.I.T. (University), Kurukshetra

**TECHNICAL ADVISOR****AMITA**

Faculty, Government M. S., Mohali

**FINANCIAL ADVISORS****DICKIN GOYAL**

Advocate &amp; Tax Adviser, Panchkula

**NEENA**

Investment Consultant, Chambaghat, Solan, Himachal Pradesh

**LEGAL ADVISORS****JITENDER S. CHAHAL**

Advocate, Punjab &amp; Haryana High Court, Chandigarh U.T.

**CHANDER BHUSHAN SHARMA**

Advocate &amp; Consultant, District Courts, Yamunanagar at Jagadhri

**SUPERINTENDENT****SURENDER KUMAR POONIA**

## **CALL FOR MANUSCRIPTS**

We invite unpublished novel, original, empirical and high quality research work pertaining to recent developments & practices in the areas of Computer Science & Applications; Commerce; Business; Finance; Marketing; Human Resource Management; General Management; Banking; Economics; Tourism Administration & Management; Education; Law; Library & Information Science; Defence & Strategic Studies; Electronic Science; Corporate Governance; Industrial Relations; and emerging paradigms in allied subjects like Accounting; Accounting Information Systems; Accounting Theory & Practice; Auditing; Behavioral Accounting; Behavioral Economics; Corporate Finance; Cost Accounting; Econometrics; Economic Development; Economic History; Financial Institutions & Markets; Financial Services; Fiscal Policy; Government & Non Profit Accounting; Industrial Organization; International Economics & Trade; International Finance; Macro Economics; Micro Economics; Rural Economics; Co-operation; Demography; Development Planning; Development Studies; Applied Economics; Development Economics; Business Economics; Monetary Policy; Public Policy Economics; Real Estate; Regional Economics; Political Science; Continuing Education; Labour Welfare; Philosophy; Psychology; Sociology; Tax Accounting; Advertising & Promotion Management; Management Information Systems (MIS); Business Law; Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labour Relations & Human Resource Management; Marketing Research; Marketing Theory & Applications; Non-Profit Organizations; Office Administration/Management; Operations Research/Statistics; Organizational Behavior & Theory; Organizational Development; Production/Operations; International Relations; Human Rights & Duties; Public Administration; Population Studies; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism & Hospitality; Transportation Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic; Web Design and emerging paradigms in allied subjects.

Anybody can submit the **soft copy** of unpublished novel; original; empirical and high quality **research work/manuscript anytime** in **M.S. Word format** after preparing the same as per our **GUIDELINES FOR SUBMISSION**; at our email address i.e. [infoijrcm@gmail.com](mailto:infoijrcm@gmail.com) or online by clicking the link **online submission** as given on our website ([FOR ONLINE SUBMISSION, CLICK HERE](#)).

## **GUIDELINES FOR SUBMISSION OF MANUSCRIPT**

### 1. **COVERING LETTER FOR SUBMISSION:**

DATED: \_\_\_\_\_

**THE EDITOR**  
IJRCM

**Subject:** **SUBMISSION OF MANUSCRIPT IN THE AREA OF.**

**(e.g. Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/Engineering/Mathematics/other, please specify)**

**DEAR SIR/MADAM**

Please find my submission of manuscript entitled '\_\_\_\_\_ ' for possible publication in your journals.

I hereby affirm that the contents of this manuscript are original. Furthermore, it has neither been published elsewhere in any language fully or partly, nor is it under review for publication elsewhere.

I affirm that all the author (s) have seen and agreed to the submitted version of the manuscript and their inclusion of name (s) as co-author (s).

Also, if my/our manuscript is accepted, I/We agree to comply with the formalities as given on the website of the journal & you are free to publish our contribution in any of your journals.

#### **NAME OF CORRESPONDING AUTHOR:**

Designation:  
Affiliation with full address, contact numbers & Pin Code:  
Residential address with Pin Code:  
Mobile Number (s):  
Landline Number (s):  
E-mail Address:  
Alternate E-mail Address:

#### **NOTES:**

- a) The whole manuscript is required to be in **ONE MS WORD FILE** only (pdf. version is liable to be rejected without any consideration), which will start from the covering letter, inside the manuscript.
- b) The sender is required to mention the following in the **SUBJECT COLUMN** of the mail:  
**New Manuscript for Review in the area of** (Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/Engineering/Mathematics/other, please specify)
- c) There is no need to give any text in the body of mail, except the cases where the author wishes to give any specific message w.r.t. to the manuscript.
- d) The total size of the file containing the manuscript is required to be below **500 KB**.
- e) Abstract alone will not be considered for review, and the author is required to submit the complete manuscript in the first instance.
- f) The journal gives acknowledgement w.r.t. the receipt of every email and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of manuscript, within two days of submission, the corresponding author is required to demand for the same by sending separate mail to the journal.

2. **MANUSCRIPT TITLE:** The title of the paper should be in a 12 point Calibri Font. It should be bold typed, centered and fully capitalised.

3. **AUTHOR NAME (S) & AFFILIATIONS:** The author (s) **full name, designation, affiliation (s), address, mobile/landline numbers**, and **email/alternate email address** should be in italic & 11-point Calibri Font. It must be centered underneath the title.

4. **ABSTRACT:** Abstract should be in fully italicized text, not exceeding 250 words. The abstract must be informative and explain the background, aims, methods, results & conclusion in a single para. Abbreviations must be mentioned in full.

5. **KEYWORDS:** Abstract must be followed by a list of keywords, subject to the maximum of five. These should be arranged in alphabetic order separated by commas and full stops at the end.
6. **MANUSCRIPT:** Manuscript must be in **BRITISH ENGLISH** prepared on a standard A4 size **PORTRAIT SETTING PAPER**. It must be prepared on a single space and single column with 1" margin set for top, bottom, left and right. It should be typed in 8 point Calibri Font with page numbers at the bottom and centre of every page. It should be free from grammatical, spelling and punctuation errors and must be thoroughly edited.
7. **HEADINGS:** All the headings should be in a 10 point Calibri Font. These must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.
8. **SUB-HEADINGS:** All the sub-headings should be in a 8 point Calibri Font. These must be bold-faced, aligned left and fully capitalised.
9. **MAIN TEXT:** The main text should follow the following sequence:

**INTRODUCTION**

**REVIEW OF LITERATURE**

**NEED/IMPORTANCE OF THE STUDY**

**STATEMENT OF THE PROBLEM**

**OBJECTIVES**

**HYPOTHESES**

**RESEARCH METHODOLOGY**

**RESULTS & DISCUSSION**

**FINDINGS**

**RECOMMENDATIONS/SUGGESTIONS**

**CONCLUSIONS**

**SCOPE FOR FURTHER RESEARCH**

**ACKNOWLEDGMENTS**

**REFERENCES**

**APPENDIX/ANNEXURE**

It should be in a 8 point Calibri Font, single spaced and justified. The manuscript should preferably not exceed **5000 WORDS**.

10. **FIGURES & TABLES:** These should be simple, crystal clear, centered, separately numbered & self explained, and **titles must be above the table/figure**. **Sources of data should be mentioned below the table/figure**. It should be ensured that the tables/figures are referred to from the main text.
11. **EQUATIONS:** These should be consecutively numbered in parentheses, horizontally centered with equation number placed at the right.
12. **REFERENCES:** The list of all references should be alphabetically arranged. The author (s) should mention only the actually utilised references in the preparation of manuscript and they are supposed to follow **Harvard Style of Referencing**. The author (s) are supposed to follow the references as per the following:
  - All works cited in the text (including sources for tables and figures) should be listed alphabetically.
  - Use (ed.) for one editor, and (ed.s) for multiple editors.
  - When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc, in chronologically ascending order.
  - Indicate (opening and closing) page numbers for articles in journals and for chapters in books.
  - The title of books and journals should be in italics. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.
  - For titles in a language other than English, provide an English translation in parentheses.
  - The location of endnotes within the text should be indicated by superscript numbers.

**PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:**

**BOOKS**

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

**CONTRIBUTIONS TO BOOKS**

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

**JOURNAL AND OTHER ARTICLES**

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

**CONFERENCE PAPERS**

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

**UNPUBLISHED DISSERTATIONS AND THESES**

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

**ONLINE RESOURCES**

- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

**WEBSITES**

- Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 <http://epw.in/user/viewabstract.jsp>



**SUSTAINABLE GROWTH: UTILIZATION OF NATURAL RESOURCES****V. VANEENDRA SASTRY****ASST. PROFESSOR****DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES****NALLA MALLA REDDY ENGINEERING COLLEGE****DIVYA NAGAR****ABSTRACT**

*This paper deals with the focus of regional planning on territorial and economic organization of regions. It visualizes improving and conserving natural resources of a region and helps to promote sustainable development of the region. Sustainable development of a region must be achieved through means and ways that do not disturb and exhaust its natural resources. The problems of regional development vary with region in terms of their complexity and degree of intensity. Regional planning focuses on the efficient utilization of natural resources and infrastructure for sustainable growth of the region. The resulting benefits are distributed among regions so that regional disparities are reduced. Regional planning should basically provide the summary of natural resources of a region, based on which plans are devised to conserve and manage the available resources prudently by applying scientific and technical understanding of the resources of the region. By making use of the latest technological application of GIS and RS, a region can be better understood in terms of its environmental standpoint which paves way for sustainable development. The aim of strategy for growth in the 11<sup>th</sup> five year plan is to achieve a growth process that meets the objectives of inclusiveness and sustainability so that the development process being unleashed has the widest possible spread of benefits.*

**KEYWORDS**

Regional Planning, Sustainable Development, Natural Resources, Management of Natural Resources, Application of RS and GIS.

**1. INTRODUCTION**

Environment in wider sense is a combination of physical and biological elements that affects the life of an organism. The biotic and abiotic structures of environment live together depending on each other and influencing each other. These two structures have a close dynamic inseparable and organic interrelationship. They have a two way linkage – the matter and energy flow from one structure to another and within each structure. The change in one component causes a change in the other. The physical component of environment comprises land, water, air, mountains, forests, rivers etc., Environment is closely intricately woven network of components and functions. Man is the nucleus of this system and in turn affected by the components of the environment.

**2. DISCUSSION****2.1 FUNCTIONS OF ENVIRONMENT**

The major functions of environment are as follows –

1. Supplying renewable and non – renewable resources.
2. Acting like a sink by absorbing solid, liquid and gaseous wastes.
3. Providing life – support services by maintaining ecological balance and genetic diversity. These services help to convert the unused materials and energy into useful materials and energy.
4. Providing natural services such as aesthetic enjoyment and recreation.

**2.2 LINK BETWEEN FUNCTIONS OF ENVIRONMENT AND ECONOMY**

All the functions of environment are inter – dependent and complementary in nature, influencing each other. Failure of a function causes the other function to be ineffective. These functions decide the operation of the economy. Development of the environment causes social development of human beings. Economy and society perpetuate with the active and healthy functioning of the environment.

**2.3 IMPORTANCE OF FUNCTIONS OF ENVIRONMENT**

The functions of the environment explain its importance. It acts as the supplier of raw materials to the economy and absorbs the wastes discharged by it. The resources supplied by the environment can be called as environmental goods, also called public goods which can be used by many individuals at the same time without any competition from other individuals. In the recent times, reckless and exploitative behaviour of the economic activity is setting a limit to the efficiency of environment to supply the resources. Its capacity to absorb the wastes is also declining.

**2.4 NEED FOR BALANCE**

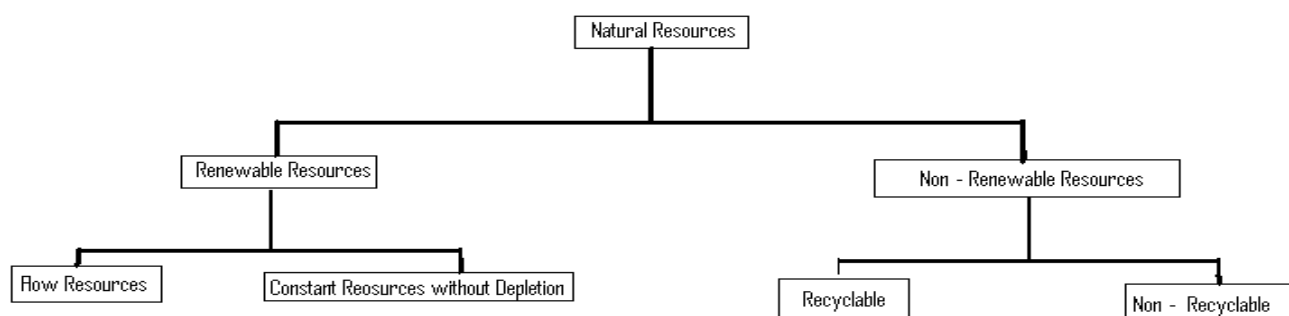
According to the British Economist Kenneth. E. Boulding there should be a balance between inputs and outputs. The inputs received to produce goods and services, must equal the consumption and the discharge of wastes. The entire mass of inputs (raw materials) is equal to the entire mass of outputs (wastes).

**2.5 NATURAL RESOURCES**

Earth is a reservoir of resources. Resources available in the environment which are useful for living organisms are called Natural Resources. They are available on earth in raw form. They have to be extracted and purified. Water, air, forests, soil, minerals etc are natural resources. The stock of land, minerals etc, are fixed by nature.

**2.6 CLASSIFICATION OF NATURAL RESOURCES**

Based on their quantity, mutability and reusability, natural resources are classified. The simple classification of natural resources is shown in the following chart.

**CHART 1**

Natural resources that do not deplete are called renewable resources. They can be used permanently. They regenerate themselves within a short period. The yield of the resource is sustainable if extraction equals growth rate. If renewable resources are consumed faster than their rate of biological growth, the stock depletes. If the consumption continues beyond a limit, the resource becomes unavailable.

The resources that exhaust by use are called non – renewable resources. They cannot be regenerated. All non energy mineral resources that are used in their raw state are non – renewable resources. They can be recycled. The minerals are extracted from mines and we cannot replace them.

### 2.7. OVER HARVESTING OF NON – RENEWABLE RESOURCES

The basic nature of non – renewable resources points out to the necessity for their conservation. Over harvesting of these resources becomes dangerous to the existence of human beings. We must establish a balance between harvest and renewal so as to preserve them and be able to maintain their quality and quantity.

## 3. POLLUTION

Economic activities of man lead to the generation of wastes which are discharged into the environment. The wastes or by – products discharged into the environment lead to undesirable changes in it. They are called pollutants which are classified into different ways. Pollution is a dangerous undesirable change in physical, chemical or biological characteristics of environment. Air pollution is caused due to burning of fire wood, industrialization, agriculture, and deforestation. Water pollution is the addition of some substances or factors which degrades the quality of water so it becomes unfit for use. Water pollution is caused due to domestic wastes, industrial effluents, fertilizers and pesticides etc., Other types of pollution are noise pollution, soil pollution, solid waste pollution, and thermal pollution.

## 4. DEGRADATION

Growing population, high degree of mechanization, an ruthless exploitation of natural resources are degrading our physical environment. Land, soil and forests get degraded. Forests are the conserved. Many economists suggested the mankind to utilize the environment and its components in a judicious way.

## 5. NEED FOR PROTECTION OF ENVIRONMENT

The world has recognized the facts that effluents reduce affluence. The three factors influencing and deteriorating the quality of environment are population, per capita production, and pollution per unit of economic goods which form the source of vicious circle of environment. The gross effect of this vicious circle is global warming, changing climatic conditions and concentration of green house gases. There is a decline in the agricultural productivity, soil fertility is reduced, per capita availability of clean water and air is declining, ozone layer is depleted, polar ice caps are melting down, rainfall is becoming deficient, aqua life is deteriorating, and the natural color of crops, plants, flowers and birds re changing. Several organizations, and government have been putting their efforts to conserve the quality of our environment.

## 6. SUSTAINABILITY

The only solution to all the above mentioned problems is sustainability. The world has now recognized that mere growth is not sufficient for enhancing the human well – being. Countries today are progressing towards development which includes economic and non – economic influencing factors. Among non – economic factors, environment and its quality are given vital role. Human beings have realized that a balance between the use of resources and their regeneration sustains the process of development.

The concept of sustainability dates back to the 18<sup>th</sup> and 19<sup>th</sup> centuries given by European foresters. They have resorted to sustainable forest development and began to replace the trees cut down by planting trees so that wood is available for future generations.

### 6.1. COMPONENTS OF SUSTAINABILITY

The three basic components of sustainability are economic, social and environmental components. These three components are inter – dependent. A balance is achieved among these three components. These aspects of sustainable development indicate that: (i) the next generation should inherit both man – made and environmental assets, (ii) the stock of environmental assets to be inherited by the next generation should not be less than the assets inherited by the present generation, and (iii) the inherited stock must consist of man – made, natural and human assets. Thus, social, economic and environmental assets together must be employed in such a way that well – being sustains in future also. This is the philosophy of sustainable development.

### 6.2. SUSTAINABLE DEVELOPMENT

To ensure sustainable development, economic activities must consider their environmental impacts. Environmental education must be given more importance. The UN has declared the year 2005 – 2015 as the decade of education for sustainable development. Students must be imparted with the art of living associated with environmental sustainability and with practical skills needed to help solve the local environmental issues.

## 7. CONCLUSION

Sustainable development reminds us that various measures to control pollution have to be adopted some of which are presented below.

1. We should not deplete the Earth of its physical, chemical and biological capital. If we do, we lose our life supporting capital.
2. We must understand that earth is not only for us but also for other living organisms.
3. We must respect the Earth and cooperate with it by respecting all forms of life and also all non living things.
4. We must use our environment in such a way that we do not pass any negative effects to other species.
5. We must recognize that every species has equal right to live as we have.
6. No species should become extinct because of our activities.
7. Do little things based on “think globally and act locally”.
8. Work with others to help sustain and heal the Earth.
9. Enjoy the nature, beauty, friendship and love.

## 8. REFERENCES

1. Anil Markendeya et. al. (2004): Environmental Economics for Sustainable Growth.
2. Anjaneyulu. Y (2005): Introduction to Environmental Science, B. S. Publications, Hyderabad.
3. Arvind Kumar (2004): A Text book of Environmental Science, APH Publishing Corporation, New Delhi.
4. Asthana D, and Meera Asthana (2003): Environment: Problems and Solutions, S. Chand and Company, New Delhi.
5. Benny Joseph (2006): Environmental Studies, McGraw Hill Companies.
6. Bhatt J. L. Bandhu, D (1994): Bio diversity for Sustainable Development: India Environmental Society.
7. Centre for Environmental Education (1995): Core Concepts of Biodiversity Conservation, Ahmedabad.
8. Chandrasekhar M, Shankar Rao E. (2004): Environmental Science, The Hitech Publishers, Hyderabad.
9. Charles D. Kolstad (2003): Environmental Economics, Oxford, Newyork.
10. Daniel Bromley (Ed): The Hand Book of Environmental Economics, Blackwell Hand Books in Economics.
11. Dr. K. V. S. G. Muralikrishna (2006): Glimpses of Environment, VGS Book Links, Vijayawada.
12. Dr. Sankaran, S. (1994): Environmental Economics, Margham Publications, Chennai.
13. Environment Conservation, Vol 55, No. 2, December
14. Erach Barucha (2005): Textbook of Environmental Studies, UGC, University Press, Orient Longman Private Limited, Hyderabad.



15. Karpagam, M (1991): Environmental Economics, Sterling Publishers Private Limited, New Delhi.
16. Kaushik A, Kaushik C. P. (2007): Environmental Studies, New Age India (P) Limited, Publishers, New Delhi.
17. Kiran B. Chhokar, Mamata Pandey, Meena Raghunathan (Ed) (2004): Understanding Environment, Sage Publications, New Delhi.
18. Kurukshetra (2009)(English Journal): Climate Change and Rural India, Vol 57, No. 9. July (2006).
19. The Hindu: Survey of the Environment 2006, 2007, 2008.
20. The World Bank (1992): Development and Environment, World Development Report – 1992, Oxford.



## **REQUEST FOR FEEDBACK**

**Dear Readers**

At the very outset, International Journal of Research in Commerce, Economics and Management (IJRCM) acknowledges & appreciates your efforts in showing interest in our present issue under your kind perusal.

I would like to request you to supply your critical comments and suggestions about the material published in this issue as well as on the journal as a whole, on our E-mail **info@ijrcm.org.in** for further improvements in the interest of research.

If you have any queries please feel free to contact us on our E-mail [infoijrcm@gmail.com](mailto:infoijrcm@gmail.com).

I am sure that your feedback and deliberations would make future issues better – a result of our joint effort.

Looking forward an appropriate consideration.

With sincere regards

Thanking you profoundly

**Academically yours**

Sd/-

**Co-ordinator**

## ABOUT THE JOURNAL

In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived with this noble intention in view. This journal has been introduced to give an opportunity for expressing refined and innovative ideas in this field. It is our humble endeavour to provide a springboard to the upcoming specialists and give a chance to know about the latest in the sphere of research and knowledge. We have taken a small step and we hope that with the active co-operation of like-minded scholars, we shall be able to serve the society with our humble efforts.

## *Our Other Journals*

