

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & 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., Google Scholar,

Open J-Gate, India [link of the same is duly available at Infolibnet 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 5000 Cities in 187 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.	A STUDY ON THE JOB SATISFACTION OF THE EMPLOYEES OF BPO SECTOR <i>V. SAVITHA & DR. E. VIJILA</i>	1
2.	A PRODUCTIVE ANALYSIS OF REGIONAL INEQUALITY IN AGRICULTURAL DEVELOPMENT: STUDY OF HARYANA INTER-DISTRICT EMPIRIC <i>DR. INDERJIT</i>	5
3.	THE STUDY OF KEY SUCCESS FACTORS IN NEW PRODUCT DEVELOPMENT PROCESS IN TEXTILE INDUSTRY WITH SPECIAL REFERENCE TO SURAT REGION <i>RASHVIN TAILOR & DR. MANISHA PANWALA</i>	9
4.	AN EMPIRICAL STUDY ON MARKETING INFORMATION SYSTEM <i>DEEPAK S & DR. S. J. MANJUNATH</i>	12
5.	MOMPREENURSHIP: A NEW TREND OF ENTREPRENEURSHIP <i>B. N. LALITHCHANDRA & T. LAVANYA KUMARI</i>	16
6.	RELATIONSHIP BETWEEN JOB SATISFACTION AND OTHER PSYCHOSOCIAL VARIABLES: A COMPARATIVE STUDY OF MALE AND FEMALE EMPLOYEES OF BUSINESS PROCESSING OUTSOURCING (BPO) SECTOR <i>PRIYANKAR SINGHA & DR. SOUVIK RAYCHAUDHURI</i>	20
7.	YOGA AND MEDICAL SCIENCE <i>PRADEEP H. TAWADE</i>	24
8.	A STUDY ON AN ANALYSIS OF SHORT-TERM LIQUIDITY POSITION OF TATA STEEL LIMITED <i>R. SATHISHKUMAR</i>	26
9.	RULES AND VALUES OF CO-OPERATIVE BANKS <i>DR. SAKSHI TEWARI</i>	30
10.	CUSTOMERS BUYING BEHAVIOUR IN ASHOK LEYLAND, CHENNAI <i>DR. R. AMUDHA & K. SRILAKSHMI</i>	34
11.	IMPACT OF ENGLISH INVASION ON INDIAN CULTURE <i>SANGEETHA. J</i>	39
12.	BEST PRACTICES FOR ENHANCING USE OF LIBRARY COLLECTION AND OTHER LIBRARY SERVICES <i>AJIT VASANTRAO JANUGADE</i>	41
13.	ENTREPRENEURSHIP DEVELOPMENT EFFORTS AND THE CHALLENGE OF QUALITY EDUCATION AND HUMAN RESOURCE DEVELOPMENT IN NIGERIA <i>DR. S.O. ONIMOLE</i>	44
14.	FACTORS INFLUENCING THE DECISION OF ADOPTING COMPUTERIZED ACCOUNTING SYSTEM (CAS) BY SMALL AND MEDIUM ENTERPRISES (SMEs) IN KURUNEGALA URBAN AREA IN SRI LANKA <i>PATHMINI MGS & KARUNADASA MKGPSK</i>	49
15.	ASSESSMENT OF CUSTOMERS' ATTITUDE AND BANKS' GROWTH TOWARDS E- BANKING IN NIGERIA <i>FAITH ERINMA ONYEBUENYI</i>	55
16.	IMPLEMENTATION MECHANISM OF MGNREGA IN HIMACHAL PRADESH <i>KHEM RAJ</i>	60
17.	EFFECTS OF FDI IN RETAIL SECTOR IN INDIA <i>NAZEEFA BEGUM MAKANDAR</i>	67
18.	AN ANALYSIS OF SERVQUAL AND SERVPERF IN INDIAN BANKING CONTEXT <i>SUDESHNA DUTTA</i>	72
19.	EFFECT OF MOBILE PHONES ON HUMAN BODY <i>SUNIL KUMAR TRIVEDI</i>	78
20.	SELF EFFICACY AND OTHER PERSONAL RESOURCES AS ANTECEDENTS OF EMPLOYEE ENGAGEMENT: A CRITICAL LITERATURE REVIEW <i>HARSH VARDHAN KOTHARI</i>	82
	REQUEST FOR FEEDBACK & DISCLAIMER	88

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

FORMER CO-ORDINATOR**DR. S. GARG**

Faculty, Shree Ram Institute of Business & Management, Urjani

ADVISORS**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. BHAVET**

Faculty, Shree Ram Institute of Engineering & Technology, Urjani

EDITORIAL ADVISORY BOARD**DR. RAJESH MODI**

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

PROF. SANJIV MITTAL

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

PROF. ANIL K. SAINI

Chairperson (CRC), Guru Gobind Singh I. P. University, Delhi

DR. SAMBHAVNA

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

DR. MOHENDER KUMAR GUPTA

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

DR. SHIVAKUMAR DEENE

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

ASSOCIATE EDITORS

PROF. NAWAB ALI KHAN

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

PROF. ABHAY BANSAL

Head, Department of I.T., Amity School of Engineering & Technology, Amity University, Noida

PROF. A. SURYANARAYANA

Department of Business Management, Osmania University, Hyderabad

PROF. V. SELVAM

SSL, VIT University, Vellore

DR. PARDEEP AHLAWAT

Associate Professor, Institute of Management Studies & Research, Maharshi Dayanand University, Rohtak

DR. S. TABASSUM SULTANA

Associate Professor, Department of Business Management, Matrusri Institute of P.G. Studies, Hyderabad

SURJEET SINGH

Asst. Professor, Department of Computer Science, G. M. N. (P.G.) College, Ambala Cantt.

FORMER TECHNICAL ADVISOR

AMITA

Faculty, Government M. S., Mohali

FINANCIAL ADVISORS

DICKIN GOYAL

Advocate & Tax Adviser, Panchkula

NEENA

Investment Consultant, Chambaghat, Solan, Himachal Pradesh

LEGAL ADVISORS

JITENDER S. CHAHAL

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

CHANDER BHUSHAN SHARMA

Advocate & 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 the 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 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/Mkt./HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)

DEAR SIR/MADAM

Please find my submission of manuscript titled ' _____ ' for likely publication in one of your journals.

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

I affirm that all the co-authors of this manuscript have seen the submitted version of the manuscript and have agreed to inclusion of their names as co-authors.

Also, if my/our manuscript is accepted, I agree to comply with the formalities as given on the website of the journal. The Journal has discretion to publish our contribution in any of its journals.

NAME OF CORRESPONDING AUTHOR

Designation/Post*

Institution/College/University with full address & Pin Code

Residential address with Pin Code

Mobile Number (s) with country ISD code

Is WhatsApp or Viber active on your above noted Mobile Number (Yes/No)

Landline Number (s) with country ISD code

E-mail Address

Alternate E-mail Address

Nationality

* i.e. Alumnus (Male Alumni), Alumna (Female Alumni), Student, Research Scholar (M. Phil), Research Scholar (Ph. D.), JRF, Research Assistant, Assistant Lecturer, Lecturer, Senior Lecturer, Junior Assistant Professor, Assistant Professor, Senior Assistant Professor, Co-ordinator, Reader, Associate Professor, Professor, Head, Vice-Principal, Dy. Director, Principal, Director, Dean, President, Vice Chancellor, Industry Designation etc. **The qualification of author is not acceptable for the purpose.**

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT

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

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

NOTES:

- a) The whole manuscript has to be in **ONE MS WORD FILE** only, which will start from the covering letter, inside the manuscript. **pdf. version is liable to be rejected without any consideration.**
 - b) The sender is required to mention the following in the **SUBJECT COLUMN of the mail:**
New Manuscript for Review in the area of (e.g. Finance/Marketing/HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)
 - c) There is no need to give any text in the body of the 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 expected to be below **1000 KB**.
 - e) Only the **Abstract 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 within twenty-four hours** and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of the manuscript, within two days of its submission, the corresponding author is required to demand for the same by sending a separate mail to the journal.
 - g) The author (s) name or details should not appear anywhere on the body of the manuscript, except on the covering letter and the cover page of the manuscript, in the manner as mentioned in the guidelines.
2. **MANUSCRIPT TITLE:** The title of the paper should be typed in **bold letters, centered and fully capitalised**.
 3. **AUTHOR NAME (S) & AFFILIATIONS:** Author (s) **name, designation, affiliation (s), address, mobile/landline number (s), and email/alternate email address** should be given underneath the title.
 4. **ACKNOWLEDGMENTS:** Acknowledgements can be given to reviewers, guides, funding institutions, etc., if any.
 5. **ABSTRACT:** Abstract should be in **fully italic printing**, ranging between **150 to 300 words**. The abstract must be informative and elucidating the background, aims, methods, results & conclusion in a **SINGLE PARA. Abbreviations must be mentioned in full.**
 6. **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 stop at the end. All words of the keywords, including the first one should be in small letters, except special words e.g. name of the Countries, abbreviations etc.
 7. **JEL CODE:** Provide the appropriate Journal of Economic Literature Classification System code (s). JEL codes are available at www.aea-web.org/econlit/jelCodes.php. However, mentioning of JEL Code is not mandatory.
 8. **MANUSCRIPT:** Manuscript must be in **BRITISH ENGLISH** prepared on a standard A4 size **PORTRAIT SETTING PAPER. It should be free from any errors i.e. grammatical, spelling or punctuation. It must be thoroughly edited at your end.**
 9. **HEADINGS:** All the headings must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.
 10. **SUB-HEADINGS:** All the sub-headings must be bold-faced, aligned left and fully capitalised.
 11. **MAIN TEXT:**

THE MAIN TEXT SHOULD FOLLOW THE FOLLOWING SEQUENCE:**INTRODUCTION****REVIEW OF LITERATURE****NEED/IMPORTANCE OF THE STUDY****STATEMENT OF THE PROBLEM****OBJECTIVES****HYPOTHESIS (ES)****RESEARCH METHODOLOGY****RESULTS & DISCUSSION****FINDINGS****RECOMMENDATIONS/SUGGESTIONS****CONCLUSIONS****LIMITATIONS****SCOPE FOR FURTHER RESEARCH****REFERENCES****APPENDIX/ANNEXURE****The manuscript should preferably be in 2000 to 5000 WORDS, But the limits can vary depending on the nature of the manuscript.**

12. **FIGURES & TABLES:** These should be simple, crystal **CLEAR, centered, separately numbered** & self-explained, and the **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.**
13. **EQUATIONS/FORMULAE:** These should be consecutively numbered in parenthesis, left aligned with equation/formulae number placed at the right. The equation editor provided with standard versions of Microsoft Word may be utilised. If any other equation editor is utilised, author must confirm that these equations may be viewed and edited in versions of Microsoft Office that does not have the editor.
14. **ACRONYMS:** These should not be used in the abstract. The use of acronyms is elsewhere is acceptable. Acronyms should be defined on its first use in each section e.g. Reserve Bank of India (RBI). Acronyms should be redefined on first use in subsequent sections.
15. **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 may follow Harvard Style of Referencing. **Also check to ensure that everything that you are including in the reference section is duly cited in the paper.** 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 italic printing. 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 parenthesis.
 - **Headers, footers, endnotes and footnotes should not be used in the document.** However, **you can mention short notes to elucidate some specific point**, which may be placed in number orders before the references.

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, 19-23

UNPUBLISHED DISSERTATIONS

- 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 Gas Policy, Political Weekly, Viewed on January 01, 2012 <http://epw.in/user/viewabstract.jsp>

A PRODUCTIVE ANALYSIS OF REGIONAL INEQUALITY IN AGRICULTURAL DEVELOPMENT: STUDY OF HARYANA INTER-DISTRICT EMPIRIC

**DR. INDERJIT
PRINCIPAL
GOVERNMENT COLLEGE OF WOMEN
REWARI**

ABSTRACT

Agriculture is the most important sector of Indian economy, the pace of economic growth and wellbeing of general masses are still significantly influenced by the pace of agricultural development. But, like other sectors of Indian economy agricultural development is also marred by huge regional inequalities. Inequality in agriculture is not only present in between states but inequality is also a matter of serious concern with in state. Haryana which is considered as 'Super-Power' in terms of agricultural development is also not an exception of above mentioned trends. Present study attempts to reveals the present scenario of agricultural development in Haryana; while attempting to study the trends of regional disparities in one of most agriculturally developed state of India in selected time periods, study also test the applicability of certain developmental hypotheses in the case of agricultural development of Haryana. This paper has been divided into three different but cohesive sections. Section I deals with the issues and literature related to regional inequalities. Section II focuses on core characteristics of study-area and methodology of the present study. And the last section briefly analyse the levels of agricultural development of Haryana over three specific time periods (i.e. 1990-92, 2000-2002 and 2007-09) by employing deprivation index.

KEYWORDS

agricultural development, deprivation index, ranking method, triennial averages, convergence and divergence of development.

INTRODUCTION

Development is a process of changing and aiming the socio-economic transformation of a traditional society into a modern society. The concept of development has been interpreted in many ways by Politicians, economists, planners and researchers depending on their perception and objectives. But all of them agree with the idea that development means improvement in the standard of living of people (World Bank, 1975). World over, different economies drive their economic growth and development through different sectors. Some economies are dependent on agriculture, while some are known as industrial economies and some are knowledge based economies. And all these economies have the supreme goal of economic growth, development and general equity in society. But as many researchers and economists (i.e. Myrdal (1957); Hirschman (1961), have proved many times that development is not a location neutral phenomenon, it tends to differ from one location to other in its intensity and in its characteristics. Owing to some historical, natural, economical, geographical and even because of political factors development tends to 'Diverge' at least in the initial stages in all the countries.

Inequalities in development have always remained the core issue in all development related studies. Studies by Myrdal (1957), Hirschman (1961), and many others have proved that development do not take place with the same intensity on all the locations. And in development due to 'Backwash Effect' all economic activities tend to concentrate at some points and leading to the formulation of development of 'Growth Foci'. Although this trend gets reversed once 'Spread effect' get starts in long run. In counties like India, where the process of development is relatively new or has just began divergence of inequalities are more evident. This shows that, in the initial stages of development regional inequalities in various sectors of economy will be on the high (Kumar, 2009).

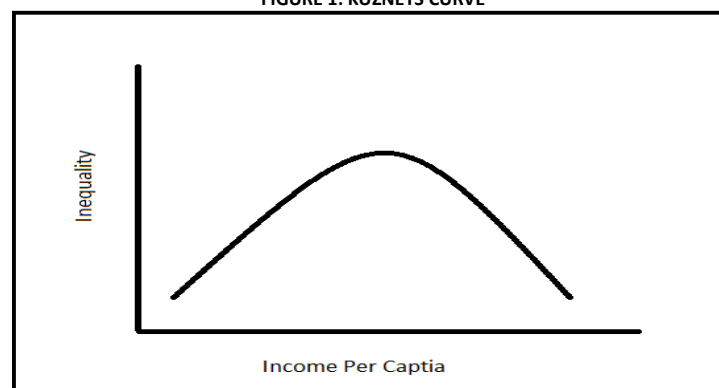
In Indian case, inequalities in the levels of development between different regions have been an integral feature of the history of economic development. Uneven development is quite evident in all the sectors of the economy where co-existence of developed and backward regions has led to dichotomous situation. Questions regarding the regional disparities are not new in development related literature and it has been recognised in policy papers and in implementation. The approach paper of 11th five-year plan adopted in 2006, forcefully articulates the urgency in the 'Convergence of Development' as:

*"The strategy of inclusive growth proposed in this paper can command broad based support only if growth is seen to demonstrably bridge divides and avoid exclusion or marginalisation of large segments of our population. These divides manifest themselves in various forms between the have and have-nots; between rural and urban areas; between the employed and under-employed; between different states, districts and communities and finally between genders."*¹

The discussion related to regional disparities in development came into lime light after the publication of Kuznets (1955) study. This study presented a diagrammatic representation of relationship between development and inequalities by what is known today as 'Kuznets Curve' (Figure 1). This curve relates economic development with regional inequalities predicting that during the initial stages of development, inequalities in all the sectors will increase, which is also confirmed by Indian development history. In development related studies this curve is also known as 'Invert U Curve' (Dubey, 2009).

When it comes to agricultural sector of Indian economy which provides 17.5 % of GDP and 60-70% direct and indirect employment to Indian masses is also not an exception to regional inequalities. In agriculture sector also disparities in and among states is alarmingly high. Many studies (i.e. Dubey, 2009; Kumar, 2009; Kumar, 2009a) have highlighted that as regional disparities are prevalent in agricultural development also as they are present in other sectors of Indian economy. In case of Haryana, which is agriculturally most developed state of India, is also marred by severe inequalities in development especially in terms of agricultural development. Present paper is an attempt to assess how agricultural disparities in Haryana have behaved over selected time period (i.e. 1990-92, 2000-2002 and 2007-09). This study is also throws light on how regional disparities have moved with the implementation of new economic reforms and thereafter.

FIGURE 1: KUZNETS CURVE



Source: Dubey (2009)

HYPOTHESES RELATED TO DISPARITIES IN DEVELOPMENT

Given the long history of economic planning, awareness related to regional disparities was very high among researchers. During process of development the forces of convergence and divergence act together and the ultimate result depends on the relative strength of these opposite forces (Swanin et al., 2009). The convergence forces are cherished as spread (Myrdal, 1957) and trickling down (Hirschman, 1961) effects of development efforts that help reducing disparities. The divergence factors that widen regional disparity are termed as backwash (Myrdal, 1958) and Polarisation effects (Hirschman, 1961). A close scrutiny of existing literature on regional disparity reveals that there are at least three different hypotheses with differing emphasis given to the relative importance over time of the forces of convergence and of divergence.

Huges (1961) proposed that the forces of divergence dominate over those of convergence and as a result, inter-regional differences in the levels of economic development keep on widening over time. In second view, Hanna (1959) viewed that the rate of economic growth is inversely related to the level of per capita income and hence given identical technologies, preferences and rate of population growth, difference in per capita incomes between any two regions will be short-lived. Third hypothesis, which can be seen as the optimal combination of above two was given by Williamson (1963) pointed out that inter-regional disparities, diverge initially to converge later on and thus, trace out the famous 'Kuznetsian Invert U Curve' over time in the process of national economic development (Nair, 2003).

In the light of above hypotheses, the study attempts to analyse the process of regional disparities in the levels of agricultural development in Haryana over a specific time period covering reform and post-liberalisation period. Study attempts to examine whether disparities are converging or diverging under market forces.

REVIEW OF LITERATURE

Since the problem of regional manifestation of development of an economy is not new, interest in the thoughts and patterns of regional disparities are also not new. The general idea about the process of development and its relation with disparities was given by Thunen (1826), Webber (1909) and Losh (1940) through their various location models. But, the real theory formation concerning regional disparities started by the works of Myrdal (1957) and Hirschman (1961) as they gave 'Spread effect and Backwash effect' and 'Trickling down of Polarisation effects' respectively.

In studies concerning India and Indian states, pioneering work has been done by M.N Pal (1968), Kundu (1980), and many others. Their work has shown and proved that how regional disparities behave under different socio-economic conditions of different states. In terms of disparities in agricultural development of India earliest work is of Sharma (1958) who did pioneering work in identifying levels of agricultural development by using general survey from 1947-1957. Apart from him Mathur (1983); Manjit and Mitra (1996); Dasgupta et al. (1997); Ghose et al. (1998); Mukherjee (2004); Ruksana (2009) have also highlighted the issues related to regional disparities in various sectors of Indian economy.

The review of literature reveals that regional disparities are very important in development studies and can provide deep insight for future course of development. Present study is an attempt to identify regional disparities in agricultural of Haryana over selected time period so that regional harmonious development can be achieved which is also over developmental goal.

CONCEPT OF AGRICULTURAL DEVELOPMENT

In last few decades there have been numerous studies on agricultural development all over the country in various academic disciplines. But most studies skip any pin-pointed definition of agricultural development. Nath (1960), Bhalla and Tyagi (1989) all of them have equated agricultural development with productivity of agriculture. Raza (1978) took most comprehensive view of agricultural development by recognising four dimensions i.e. Productivity, Production conditions, Agrarian relations and Agricultural change. Many others (i.e. Krishan, 1980) believe that agricultural development may be envisaged as the agricultural performance of an area in terms of economic gains of yield, social justice it delivers. For a common frame of references in present study agricultural development connotes 'qualitative and quantitative' upward shift in the performance of agriculture and leading to general well-being among farming community. For analysing these qualitative and quantitative changes over time, 10 Indicators of agricultural development have been selected for analysis.

OBJECTIVES OF THE STUDY

Main objectives of present study are:

1. To test various development hypotheses in case of agricultural development in Haryana.
2. To measure the extent of regional disparities in agricultural development of Haryana.
3. To explain how agricultural disparities have behaved over time.
4. To explain that how regional disparities have behaved under market force after liberalisation of Indian economy.

DATABASE AND METHODOLOGY

STUDY AREA

Haryana with its favourable climatic and topographical characteristics is agriculturally most developed state of India. Haryana lies between 27° 39' and 30° 55' North latitude and 74° 27' and 77° 36' East longitude, with a geographical area of 44212 Sq Km. Given the rich fertile soil, proper irrigation facilities and location near a huge market are primary factors that have led to well-developed agriculture in Haryana. Agriculture plays an important role in socio-economic development of the state. Statistics reveals that around 80% of states geographical area is under cultivation Haryana occupies prominent place among the top producers of wheat, rice and other agricultural products. Soon after the formation of Haryana in 1966, government of Haryana gave emphasis on the development of agriculture and as a result Haryana has achieved pioneering position in India especially in terms of agricultural development. But, as most hypotheses accept this development was not equal for all the districts with in Haryana. There is marked difference between the districts of northern Haryana and southern districts of Haryana. Apart from marked difference in physical climate north and southern districts of Haryana also differs in terms of agricultural development. Districts of north Haryana are technologically highly developed and are more market oriented. Whereas southern districts are still poorly equipped with technology and are still backward in comparison of other districts of Haryana (Kumar, 2009). Moreover, after adaptation of New Economic Policies of liberalisation in 1991, Haryana's economy is exposed to new and diverse challenges from market forces. Therefore, in present study regional disparities in agriculture are studied to bring out regional manifestation of development under market forces.

METHOD

Present study is based on secondary data collected from varied data sources. Statistical Abstract of Haryana for various years, issued by Department of Economics and Statistical Analysis, Government of Haryana has served as chief data source. As development is not a single entity, it is a multi-dimensional phenomenon which is combined effect of many things. In present study agricultural development is assessed by taking into account of 10 development indicators which are directly related to input or output part of agriculture. The levels of agricultural development have been derived by composite **Development Index²** of all variables and mathematically Development index can be written as:

$$Z_{ij} = \frac{(\text{Actual } X_{ij} \text{ Value}) - (\text{Minimum } X_{ij} \text{ value})}{(\text{Maximum } X_{ij} \text{ value}) - (\text{Minimum } X_{ij} \text{ value})}$$

Here,

Z_{ij}	=	Composite Deprivation Index
Actual X_{ij}	=	Actual Value for Variable
Maximum X_{ij}	=	Maximum Value for variable
Minimum X_{ij}	=	Minimum Value for variable

The value of the index ranges from 0 to 1. Best performing district would get '1' and worse would get the index value of '0'. Moreover, for measuring the magnitude of regional imbalances in the case of agricultural development across the districts has been calculated by using *Coefficient of Variation*. To depict district wise agricultural development composite agricultural development has been constructed by using following ten indicators.

X ₁	Percentage of area under HYV seeds to gross cropped area;
X ₂	Consumption of fertilizers (Kgs/Hectares);
X ₃	Consumption of Pesticides (kgs/Hectare);
X ₄	Percentage of gross irrigated area under gross cropped area;
X ₅	Number of tractors to per hectare of gross cropped area;
X ₆	Average size of land holding;
X ₇	Percentage of Gross Cropped Area Under Commercial crops to total cropped area;
X ₈	Per hectare gross value of agricultural output in rupees (base year price);
X ₉	Percentage of area sown more than once to net area sown;
X ₁₀	Intensity of Cropping;

Agriculture is a highly dynamic phenomenon; it tends to vary year after year based on climate and many other factors. And in order to tap changing nature of agriculture, three years' triennial average has been taken for analysis. Furthermore, for presenting data tables and diagrams have been used and for showing spatial pattern of agricultural development is shown through various choropleth maps.

This paper has been divided into three different but cohesive sections. Section I deals with the issues and literature related to regional disparities. Section II focuses on core characteristics of study-area and methodology of the present study. And the last section briefly analyse the levels of agricultural development of Haryana over three specific time periods (i.e. 1990-92, 2000-2002 and 2007-09)

RESULTS AND DISCUSSIONS

After employing deprivation index on selected indicators to obtained composite agricultural development index for all the districts; it is evident (table 1) that there exists huge inter-regional as well as inter-district disparities in agricultural development of Haryana. The calculated value of composite indices reveals significant inter-district variations in the levels of development for 1990-92 the value of Coefficient of variation (in %) which was 66.66 % but after the implementation of new economic policies the regional disparities in agricultural development have narrowed down significantly (Coefficient of variation 45.45%). Interestingly contrary to developmental hypotheses disparities started diverging again here for 2007-09, Coefficient of variation stands at 63.82%.

In 1990-92, only 2 districts were under highly developed category those were Karnal and Kurukshetra; medium developed category constitutes 7 districts (around 43.75%) and most of districts of this category are from northern Haryana. But, under low and very low developed categories, interestingly districts of southern and central Haryana falls. This north-south division is a by product of green revolution which started in northern Haryana, and failed to percolate in southern parts (Bishnoi et al., 2008)

For 2000-02, picture was still almost the same here also districts of northern Haryana constitutes high and medium developed category, whereas southern and central districts occupy low and very low category (Map. 2). But in the index for 2007-09, agricultural development has shown a relatively different picture. In 2007-09, index developed category is still occupied by northern districts of Kaithal, Karnal, Panipat and Kurukshetra; but under medium category some new districts have occupied new places which were earlier by Jind and Faridabad; moreover, in this index surprisingly Ambala has slipped to very low category (Map. 3). Index for 2007-09, shows that now with the passage of time agricultural development is trickling down to backward districts of southern Haryana but with snail pace.

After through study of spatial spread of regional disparities in agricultural development, this can be easily concluded that core area for the agricultural development lies in northern districts, whereas southern districts are still lagging behind. Study of related literature shows that this north-south divide of Haryana is partly because of two prime causes. One is the green revolution and other is irrigation facilities. It is well known fact that northern districts of Haryana have served as the focal point for the green revolution and primarily because the initial push from green revolution districts like Karnal, Panipat, Kurukshetra, Kaithal has higher awareness about modern technology and as a result agricultural development is relatively higher here. Secondly the intensity of irrigation facility in north is high. And in states like Haryana with semi-arid climate irrigation facilities holds the key for prosperity. And at the same time spread of technological know-how in technological poor districts of southern Haryana is key to alter the developmental focus from north to southern districts of Haryana

KEY FINDINGS

On the bases of above analyse following key findings can be concluded:

1. The notion that regional disparities decrease with the development is wrong, in the case of agricultural development of Haryana. It seems, as if regional disparities converge or diverge owing to many other factors, other than SIMPLY time taken in development.
2. In terms of agricultural development there is a clear north south division exists. Where northern districts are way ahead as compare to their southern counterparts.
3. It seems as, Green revolution and irrigation facilities are to chief responsive factors in inequalities in agricultural development.

CONCLUSION

The foregoing analysis proves that agricultural development in India's agriculturally most developed state is not inclusive. There is marked inter-district regional disparities between districts of northern and southern Haryana. Green revolution of 1967-68, gave initial thrust to agricultural development in northern districts that's why they are still dominating development scenario in Haryana. Apart from green revolution expansion availability of irrigation has played important role in causing regional disparities. This analyses helps in rejecting a popular hypothesis that regional disparities tend to converge after initial divergence. As this study shows that in Haryana regional disparities in agricultural development have converged from 1990-92 to 2000-02, but after this convergence in 2007-09 divergence have started again. In general, now this can be accepted that no doubt Haryana has achieved high growth rate of economic development but in this there are certain areas to which development process has bypassed. Now need of hour is to harmonise the development by making it more inclusive. Special problem oriented planning should be initiated to expand development to all the horizons. Expansion of irrigation facilities to southern and backward districts is most important in them.

TABLE 1: HARYANA: AGRICULTURAL DEVELOPMENT INDEX (ADI)

Districts	1990-92	2000-02	2007-09
Ambala	0.56	0.36	0.24
Bhiwani	0.20	0.00	0.14
Faridabad	0.48	0.48	0.58
Fatehabad	**	0.62	0.53
Gurgaon	0.30	0.39	0.25
Hisar	0.48	0.55	0.34
Jhajjar	**	0.40	0.00
Jind	0.50	0.50	0.57
Kaithal	0.55	0.58	0.79
Karnal	1.00	1.00	1.00
Kurukshetra	0.82	0.70	0.97
Mahendergarh	0.34	0.31	0.23
Panchkula	**	0.45	0.41
Panipat	0.60	0.68	0.94
Rewari	0.32	0.31	0.26
Rohtak	0.00	0.35	0.19
Sirsa	0.56	0.51	0.49
Sonapat	0.52	0.60	0.68
Yamunanagar	0.60	0.58	0.74
Mean	0.48	0.44	0.49
S.D.	0.32	0.20	0.30
C.V. (In %)	66.66	45.45	60.96

Source: Data is calculated by researcher from Statistical Abstract of Haryana for various years, issued by Department of Economics and Statistical Analysis, Government of Haryana.

Note: **Districts were not in existence.

NOTE

1. Towards Faster and more Inclusive growth: An approach to the Eleventh Five-year plan, Planning Commission, Government of India, 2006, Chapter 5.
2. There are numerous methods for calculating a composite index i.e. summation of ranks, division of mean and so on. The method for calculating the composite index for development by summing the ranks of various indicators has been quite popular among research scholars. The ranking method has two major drawbacks. Firstly, it does not consider the magnitude of difference in values of indicators. Secondly, in this method all the indicators are given equal weights. Analysis based on such considerations may be limited use. Therefore, in present study **Development Index** is used. (Which is widely used in **Human Development Index (HDI)**).

REFERENCES

1. Bishnoi, N. K. and Aneja, R. (2008): "Regional Variations of Socio-Economic Development in Haryana: A District Level Analysis", *Indian Journal of Regional Science*, Vol. XXXX, No. 2, PP. 26-40.
2. Chakraborty, A. (2009): "Some Normative Relevant Aspects of Inter-State and Intra-State Disparities", *Economic and Political Weekly*, Vol. XLIV, Nos. 26 & 27, PP. 179-184.
3. Dubey, A. (2009): "Intra-State Disparities in Gujarat, Haryana, Kerala, Orissa and Punjab", *Economic and Political Weekly*, Vol. XLIV, Nos. 26 & 27, PP. 224-230.
4. Hanna, F.A. (1959): *State Income Differentials, 1919-1954*, Durham: Duke University Press.
5. Hirschman, A.O. (1961): *The Strategy of Economic Development*, New Haven, Yale University Press.
6. Hughes, R. B. (1961): "Inter-regional Income Differences self-Perpetuation", *Southern Economic Journal*, Vol. 28, No. 1, PP. 41-45.
7. Kumar, S. (2009a): "Inter-Regional and Inter-District Disparities in Agricultural Development: A Study of Uttar Pradesh", *Indian Journal of Regional Science*, Vol. XXXXI, No. 1, PP. 22-36.
8. Kumar, Vinod (2009): "*Levels of Agricultural Development in Haryana: A Geographical Perspectives*", Unpublished Dissertation, Submitted to Maharshi Dayanand University.
9. Kumari, P. (2008): "Dilemmas of Development in Haryana", *IASSI Quarterly*, Vol. 27, Nos. 1 & 2, PP. 49-74.
10. Mathur, A (1983): "Regional Development and Income disparities in India: A sectoral Analysis", *Economic Development and Cultural Change*, Vol. 31, No. 2, PP. 475-505.
11. Nair, K.R.G. (2004): *Economic Reforms and Regional Disparities in Economic and Social Development in India*, Report of Research Project, SER division of Planning Commission.
12. Nayak, L.T. and Narayankar, D.S. (2009): "Identification of Regional Disparities in Levels of Development in Bellary District- Karnataka", *Indian Journal of Regional Science*, Vol. XXXXI, No. 1, PP. 37-47.
13. Rukhsana (2009): "Regional Imbalances in the Dimensions of Rural Development", *Indian Journal of Regional Science*, Vol. XXXXI, No. 2, PP. 135-148.
14. Sharma, A. (1958): "Regional Disparities in Agricultural Development in Madhya Pradesh", *Indian Journal of Regional Sciences*, Vol. 15, No 2, pp. 55-60.
15. Swain, M., Mrutyunjay Swain, and D. K. Das (2009): "Regional Disparity in Agricultural Development in Orissa in the pre and post-reform period", *Social Change*, Vol. 39, No. 2, PP.193-215.
16. Williamson, J.G. (1963): "Regional Inequalities and the process of national Development", *Economic and Cultural Change*, Vol. 13, No. 4, PP. 11-21.

REQUEST FOR FEEDBACK

Dear Readers

At the very outset, International Journal of Research in Commerce, IT & 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 infoijrcm@gmail.com 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.

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

Looking forward to an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-

Co-ordinator

DISCLAIMER

The information and opinions presented in the Journal reflect the views of the authors and not of the Journal or its Editorial Board or the Publishers/Editors. Publication does not constitute endorsement by the journal. Neither the Journal nor its publishers/Editors/Editorial Board nor anyone else involved in creating, producing or delivering the journal or the materials contained therein, assumes any liability or responsibility for the accuracy, completeness, or usefulness of any information provided in the journal, nor shall they be liable for any direct, indirect, incidental, special, consequential or punitive damages arising out of the use of information/material contained in the journal. The journal, neither its publishers/Editors/ Editorial Board, nor any other party involved in the preparation of material contained in the journal represents or warrants that the information contained herein is in every respect accurate or complete, and they are not responsible for any errors or omissions or for the results obtained from the use of such material. Readers are encouraged to confirm the information contained herein with other sources. The responsibility of the contents and the opinions expressed in this journal are exclusively of the author (s) concerned.

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

