

# INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT

IJRCM



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 Inlibnet of University Grants Commission (U.G.C.)).

The American Economic Association's electronic bibliography, EconLit, U.S.A.,

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 4767 Cities in 180 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.	ROLE OF SELF-AWARENESS IN STRATEGY FORMULATION PROCESS <i>KURIAN MATHEW</i>	1
2.	CHALLENGES OF HUMAN RESOURCE MANAGEMENT IN PUBLIC SECTOR BANKS IN INDIA <i>DR. AMIT KUMAR BANSAL &amp; SARITA BANSAL</i>	5
3.	PRODUCTIVITY OF AGRICULTURAL EXTENSION PACKAGE (CASE OF WOLAITA ZONE) <i>TADELE TAFESE HABTIE</i>	9
4.	PATTERN OF POPULATION GROWTH DURING 1901 TO 2011 IN THE INDIAN HIMALAYAN REGION <i>DR. B. R. PANT</i>	13
5.	A STUDY ON RURAL CONSUMER AWARENESS AND BRAND PREFERENCE OF INSTANT FOOD PRODUCTS (WITH SPECIAL REFERENCE TO VADAKARAPATHY PANCHAYATH) <i>DR. P. S. CHANDNI &amp; JENIFERSARA.D</i>	27
6.	ROLE OF MICRO-FINANCE INSTITUTIONS IN DEVELOPMENT FOR UNDERPRIVILEGED IN HARYANA STATE AMONGST WOMEN: AN EMPIRICAL STUDY <i>RAVI DUTT &amp; DR. R. K. SHARMA</i>	32
7.	IMPACT OF TOURISM ON INDIAN ECONOMY <i>DR. JASJEET GILL</i>	37
8.	FACTORS DETERMINING WOMEN SHOPPING BEHAVIOUR <i>SHILPA BAGDARE</i>	40
9.	REVIEW OF CHANGES IN AGRICULTURE SECTOR IN PUNJAB <i>DALVIR SINGH</i>	44
10.	EFFECT OF BANK CREDIT ON FINANCIAL PERFORMANCE OF FIRMS IN INDIA <i>DR. NEELAKANTA N. T.</i>	52
11.	FACTORS INFLUENCING PASSENGERS' SATISFACTION TOWARDS SERVICES PROVIDED BY KADAMBA TRANSPORT CORPORATION WITH REGARD TO SHUTTLE SERVICES IN GOA <i>GOURI K. MANERKAR</i>	55
12.	A DESCRIPTIVE STUDY ON THE CHALLENGES FACED BY THE MANAGEMENT IN PSEUDO-MODERN ERA <i>SAI JANANI &amp; A. ABIRAMI</i>	58
13.	COMPARATIVE ANALYSIS OF INDIAN Vs. GLOBAL SMARTPHONE MARKETING STRATEGY IN INDIAN MARKET <i>ASHISH KUMAR, VARUN KHARE &amp; DR. KOMAL CHOPRA</i>	60
14.	RECURRING FAILURES IN CORPORATE GOVERNANCE: A GLOBAL SYNDROME? <i>KRISHNA A KAPADIA</i>	66
15.	A REVIEW PAPER ON LEADERSHIP AND POLITICAL COMMITMENT TO GREEN ECONOMY: THE CASE OF ETHIOPIA <i>YESUNEH GIZAW CHERNET</i>	71
16.	ENGINEERING EDUCATION IN INDIA: YESTERDAY AND TODAY <i>SONY KURIAN</i>	76
17.	FINANCIAL REGULATORY ARCHITECTURE: A REVIEW OF LITERATURE <i>MANAS SHANKAR RAY</i>	79
18.	CASUAL WORKERS AND THEIR WAGES <i>MAMTA LAMBA</i>	83
19.	ISSUES AND PROSPECTS OF FDI IN RETAIL SECTOR IN INDIA <i>SADHANA SINGH</i>	90
20.	IMPACT OF FOREIGN DIRECT INVESTMENT (FDI) ON ECONOMIC GROWTH <i>CHIRANJEEV RANGA</i>	94
	REQUEST FOR FEEDBACK & DISCLAIMER	97

**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 &amp; 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 Engineering &amp; Technology, 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 &amp; Management, Kaithal

**PROF. S. L. MAHANDRU**

Principal (Retd.), Maharaja Agrasen College, Jagadhri

**EDITOR****PROF. R. K. SHARMA**

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

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

Faculty, Shree Ram Institute of Business &amp; 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 & 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 & 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, ChanderKalan, Tohana, Fatehabad

**DR. VIKAS CHOUDHARY**

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

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

**DEAR SIR/MADAM**

Please find my submission of manuscript entitled ' \_\_\_\_\_ ' for possible publication in one of 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 co-authors of this manuscript have seen the submitted version of the manuscript and have agreed to their inclusion of 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

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

:  
:  
:  
:  
:  
:  
:  
:  
:  
:

**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 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) **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 within twenty four hours** 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 a separate mail to the journal.
- g) The author (s) name or details should not appear anywhere on the body of the manuscript, except 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 **bold typed, 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 italicized text**, ranging between **150 to 300 words**. The abstract must be informative and explain 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.
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](http://www.aea-web.org/econlit/jelCodes.php), however, mentioning 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 range from 2000 to 5000 WORDS.**

12. **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.*
13. **EQUATIONS/FORMULAE:** These should be consecutively numbered in parenthesis, horizontally centered with equation/formulae number placed at the right. The equation editor provided with standard versions of Microsoft Word should 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: 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 are supposed to follow Harvard Style of Referencing. **Also check to make sure 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 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 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 after 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>



## ROLE OF SELF-AWARENESS IN STRATEGY FORMULATION PROCESS

KURIAN MATHEW  
DEAN (COORDINATION)

XAVIER INSTITUTE OF MANAGEMENT & ENTREPRENEURSHIP  
KALAMASSERY

## ABSTRACT

*Borrowing insights from self-awareness studies in computing systems and other self-awareness theories from psychology, the author establishes a parallel between a firm's mission and its self-awareness. A firm's mission is an idea – the idea of distinction – that separates it from its environment. And it is fundamentally non-dualistic in nature and, therefore, in principle, ineffable. According to the author, not all firms are self-aware, and there are varying degrees of self-awareness. Moreover, self-awareness is an emergent phenomenon, and it resides within the firm, distributed among a network of key stakeholders called 'nodes.' A key feature of a self-aware system is that it need not have to possess a global omniscient controller. For ordinary members of self-aware systems, it is sufficient to have knowledge of their relevant roles.*

## KEYWORDS

strategy, self-awareness, mission, SWOT, management.

## INTRODUCTION

The strategic management process has two aspects, thinking and acting. The former is known as strategy formulation, and the latter, strategy implementation. Strategy formulation involves a firm's 'mind,' whereas strategy implementation involves its 'body.' In this article, the author takes a closer look at the mental aspect of the strategy formulation process, and the role of self-awareness in it.

The strategic management process, as per theory, begins with the articulation of a firm's mission statement. Once the mission statement is articulated, the firm then proceeds to make an inventory of its inherent strengths and weaknesses. Here, the term 'strengths' refers to the firm's key resources, capabilities, and competencies that give it a competitive advantage in the industry in which it operates, and weaknesses are the lack of the same. Next, the firm makes a realistic assessment of its external environment, both the operating external environment and the remote external environment, which may reveal the opportunities and threats present there. After that begins the strategic analysis and choice process, which essentially boils down to finding a 'fit' between the firm's strengths and weakness and the opportunities and threats in the external environment. The process may reveal opportunities in the external environment that the firm could gainfully exploit using its strengths, or threats that could be effectively averted using those strengths. Alternatively, the process may reveal internal weaknesses that could make the firm vulnerable to potential threats from the external environment. There are many techniques for doing the strategic analysis and choice process, but the most popular is the SWOT analysis. It reveals to the firm a plethora of strategic alternatives, even if many of them may not be compatible with the firm's stated mission. According to theory, the firm chooses one or two alternatives, which are compatible with its stated mission, and then proceeds to implement them. In other words, the firm's mission statement acts as a filter, effectively eliminating strategic alternatives that are not compatible with it.

## THE PROBLEM

How exactly does a firm find a fit between its strengths and weaknesses and the opportunities and threats in the external environment? Is this a mechanical process, proceeding in a linear fashion, as the SWOT model seems to suggest, or, does it happen subliminally when a certain critical 'threshold' is reached? Does it involve complex mental processes of which we are not fully aware?

## THE HYPOTHESIS

In this article, the author makes the following hypotheses:

1. The term 'mission' refers to the *distinction* that separates a firm from its external environment. It is a non-dualistic kind of knowing, and is fundamentally ineffable.
2. To be mission-aware means to possess the firm's soul, which is analogous to self-awareness.
3. Verbal articulation of mission adds little value to the strategy formulation process; on the contrary, it may be misleading.
4. It is neither possible nor necessary for all members in a firm to possess mission-awareness.

## ORGANIZATIONAL SELF-AWARENESS

Self-awareness arises at the confluence of two domains of knowledge: one, knowledge relating to the entity itself (self); two, knowledge relating to the external environment (not self). However, if these two knowledge domains remain separately – as a duality – then self-awareness does not arise. Self-awareness arises only when these two knowledge domains merge into a non-dualistic whole, or *singularity*.

Not all firms are self-aware, and there are varying degrees of self-awareness. Here, the term 'firm' refers to a core group of people – the group of key stakeholders/decision-makers that has 'full' knowledge of the firm – full knowledge of its strengths and weaknesses. And self-awareness resides within the firm, distributed among this core group. Each individual member of this group is a 'node' in the distributed 'network.' Although these nodes have inner knowing of the firm's mission, they may not be able to articulate it verbally. In that sense, it may be construed as the firm's collective self or soul!

When inner knowledge and outer knowledge subliminally merge into one (non-duality), it assumes an abstract form, which is best described by the word "*what*." In fact, the word "*what*" is more than a mere word; it is at the very root of self-awareness and the source of it. Perhaps, it is this abstract concept Peter Drucker succinctly puts as, "*What is our business.*" In his book "Management: Tasks, Responsibilities, Practices" Drucker says, "*Nothing may seem simpler or more obvious than to know what a company's business is. A steel mill makes steel, railroad runs trains to carry freight and passengers, an insurance company underwrites fire risks, a bank lends money. Actually, "What is our business" is almost always a difficult question and the right answer is usually anything but obvious.*"<sup>1</sup> In other words, to Drucker, the question, "What is our business" epitomizes a firm's mission.

The question "What is our business" essentially boils down to "what makes us who we are" or "what makes us distinct." The answer becomes intuitively clear when one becomes mission-aware, when one becomes (aware of) the 'form' or boundary that separates the firm from its environment. In other words, one possesses the firm's soul!

This direct relationship between *form* and self-awareness opens up possibilities for an epistemological study of the strategic management process.

## LAWS OF FORM

In his seminal book "Laws of Form"<sup>2</sup> G. Spencer Brown introduces a new approach to mathematics and epistemology that begins and ends with the notion of form or distinction. According to him, nothing could be simpler: a distinction appears to *cleave* a domain. The usage of the word 'cleave' in the above statement is noteworthy. The word 'cleave' exhibits the property of *merism*, which, in rhetoric, is the combination of two contrasting words that refer to a whole. Here, the word 'cleave' has contrasting meanings – it means "to separate" as well as "to adhere closely."



The core tenet of Spencer Brown's formalism is this: "We take as given the idea of distinction and the idea of indication, and that we cannot make an indication without drawing a distinction. We, take, therefore, the form of distinction for the form" (Brown, 1977, p.1). Louis H. Kauffman, the American mathematician, topologist, and professor of Mathematics in the Department of Mathematics, Statistics, and Computer science at the University of Illinois at Chicago comments: "There is circularity in bringing into words what is quite clear without them. And yet it is in this bringing forth into formalisms that mathematics is articulated and universes of discourse come into being. The elusive beginning, before there was a difference, is the eye of the storm, the calm center from which these musings spring."<sup>3</sup>

Form is another word for 'distinction.' The form of a firm is neither the company profile (inside) nor its external environment (outside); it is both; it is neither. It is really the distinction or the boundary that separates the firm from its external environment. And that distinction is non-dualistic in its essence. It is, in a sense, the soul of the firm!

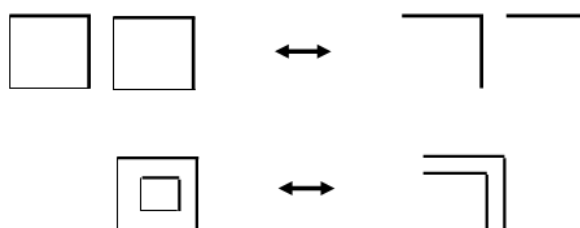
From a strategic management perspective, the notion of the *idea of distinction* is the question, "what is our business." In other words, it refers to firm's mission. Strategic alternatives (in Kauffman's words 'musings') emanate from this source. In sharp contrast, the expression "*idea of indication*" refers to the two disparate domains of knowledge, which the distinction has 'cleaved.' In other words, 'indication' refers to the effable aspects, such as a firm's strengths and weaknesses as well as the opportunities and threats in the external environment. Those who are not mission-aware possess only the idea of indication. Only those who are "mission-aware" – those who possess the firm's soul - have the idea of distinction. And it is this latter group that is eminently suited to lead the strategy formulation exercise.

According to Spencer Brown "*Distinction is perfect continence*" (Brown, 1977, p.1). The term 'continence' literally means "temperance," or "self-control." A distinction is drawn by arranging a boundary with separate sides so that a point on one side cannot reach the other side without crossing the boundary. For example, in a plane space a circle draws a distinction. Once a distinction is drawn, the spaces, states, or contents on each side of the boundary, being distinct, can be 'indicated.'

Spencer Brown gives a topological notation for distinction, the *mark*. The symbol is set to represent a distinction between its inside, which, in our case, represents the firm, and its outside, which represents the external environment.

The mark is to be regarded as a shorthand for a rectangle drawn in the plane and dividing the plane into the regions inside and outside the rectangle. Spencer Brown's mathematical system made just this beginning. In his formalism, the idea of a distinction is instantiated in the distinction that the mark appears to make in the plane.

In an expression, we can say of any two marks that one is or is not inside the other. The relationship between two marks is either one is inside the other, or that neither is inside the other. These two conditions correspond to the two elementary expressions shown below:



The mathematics in Spencer Brown's Laws of Form begins with two laws of transformation. They are the *law of calling* and the *law of crossing*, the symbolic representation of which is given below,

Law of calling:



Law of crossing:



A calculus is born of these two equations and, thus, Spencer Brown's new mathematics begins. However, the purpose of this article is not to go into the topological aspects of the strategy formulation process. The focus here, on the contrary, is on distinction itself – the source of self-awareness. Therefore, we shall examine the psychology of self-awareness.

## PSYCHOLOGY OF SELF-AWARENESS

Self-awareness theories from psychology are opening up new vistas in the design and engineering of complex systems. In an article published in the Awareness Magazine, titled "An Outlook for self-awareness in computing systems", the authors Peter Lewis, Marco Platzner, and Xin Yao states, "As computing systems continue to advance, they are increasingly comprised of large numbers of different types of subsystems, each with their own local perspectives and goals and connected in changing network topologies. As a result, having humans understand and manage these systems is becoming increasingly infeasible. Future computing systems, from robots to personal music devices to web services, should be able to achieve advanced levels of autonomous behavior to adapt themselves at runtime and learn behaviors appropriate to changing conditions. Nevertheless, users engaging with different parts of the system still expect high performance, reliability, security, and other qualities.

Such systems will be faced with the challenge of managing trade-offs between these conflicting goals at runtime, both at the global and at the local level, in response to changing conditions. For a system to adapt itself effectively, it is important that it has the ability to be self-aware. Self-awareness is connected with the availability, collection and representation of knowledge about something, by that something. A self-aware node has knowledge of itself, permitting reasoning and intelligent decision-making to support autonomous adaptive behavior...

The first of these concepts is the distinction between public and private self-awareness classes, which are concerned with knowledge of phenomena external and internal to the individual, respectively..."<sup>4</sup>

In this article, taking the insights from the study by Peter Lewis et al., and self-awareness theories from psychology, we take a closer look at how an entity becomes self-aware, which might provide useful clues as to how a firm becomes self-aware.

The term self-awareness was first introduced around the start of the 20<sup>th</sup> century, and it is still an emerging field within Psychology. Morin (2006)<sup>5</sup> defines self-awareness as "the capacity to become the object of one's own attention."

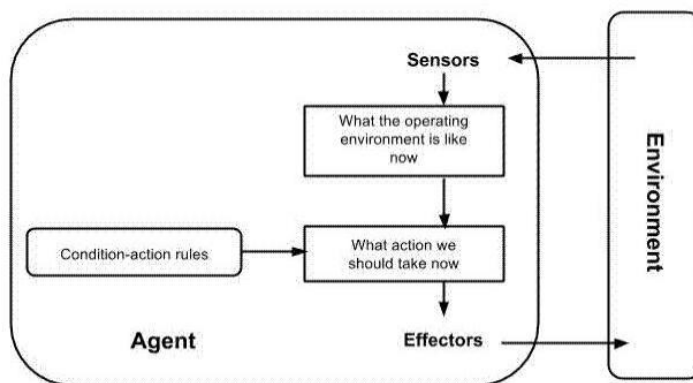
There are three key concepts relating to self-awareness. They are 1) Public and private awareness 2) Levels of self-awareness and 3) Emergence of self-awareness.

## PRIVATE AND PUBLIC SELF-AWARENESS<sup>6</sup>

The term *private self-awareness* refers to the knowledge of, and based on, phenomena internal to oneself. It is internal, such as, for example, my knowledge that I am hungry. And it may include values, goals, or behavior.

On the other hand, *public self-awareness* refers to the knowledge of, and based on, phenomena external to oneself. It is one's perspective of the environment. It is the awareness of one's relationship to others, effects of one's behavior, and how others perceive it. It is subjective knowledge.

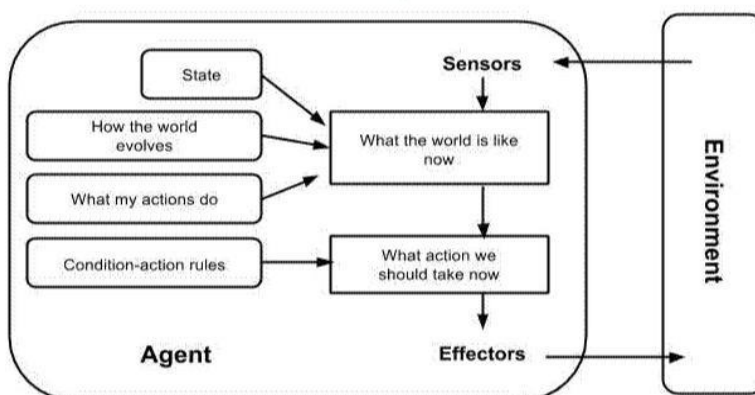
Fig:1 Ecological Self ->Stimulus Response Awareness



Source: EPICs, Birmingham University

There are several levels of self-awareness. At the lowest rung of the ladder of self-awareness is the *Ecological Self* (Fig.1), which has a stimulus-response kind of self-awareness such as that of lower animals. In other words, it is merely the absence of unconsciousness. The ecological self has knowledge of the stimuli, which enables it to respond to events, but it is not able to identify the reasons for the stimuli. It has neither memory of past stimuli nor can it anticipate future stimuli. Therefore, the entity exists in a reactive mode, responding to stimuli as and when they occur. The self-awareness of ecological self can be private, public or both. At the next higher level is the *Interpersonal Self*, which is the simple awareness of interactions with others. The interpersonal self allows simple adaptive working. It knows that stimuli and one's own actions form part of the interaction with the social and physical environment. The interpersonal self has the ability to distinguish between nodes and environments. It is aware that actions can provoke, generate or cause specific reactions through feedback loops. Simple interaction-awareness enables it to reason about individual interactions. More advanced versions of interpersonal self may involve knowledge of social structures such as communities and networks. Essentially, this is a form of public self-awareness.

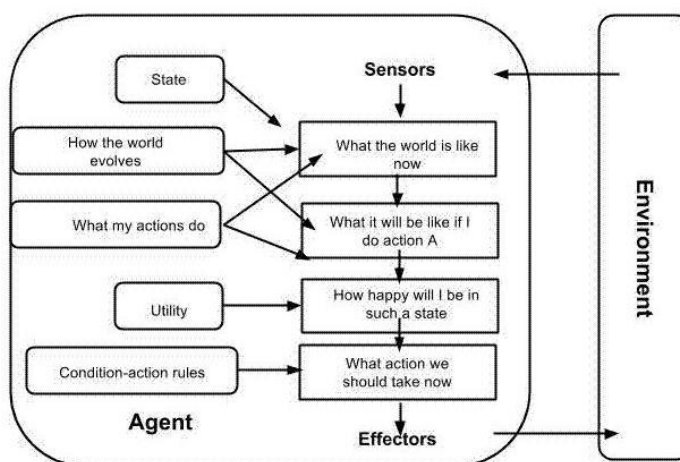
Fig:2 Extended Self → Time-Awareness



Source: EPICs, Birmingham University

Above interpersonal self is the *Extended Self* (Fig.2), which is capable of reflecting over time and is aware of the existence of past and future interactions. This type of self-awareness may involve explicit memory and/or anticipation. And it can be private, public or both.

Fig: 3 Private Self ⇔ Goal-Awareness



Source: EpiCS Birmingham University

Still above the extended self is the *Private Self* (Fig.3), which is capable of processing self-information such as thoughts, feelings, and intentions. It has knowledge of current goals (e.g. goal states, utility etc.), and has knowledge of preferences and constraints. It permits the private self to acknowledge and adapt to changes in goals. This type of self-awareness can be private, public or both.

At the pinnacle of the ladder of self-awareness is the *Conceptual Self*, which is the abstract representation of itself. It has knowledge of the node's own self-awareness capabilities. It may also include knowledge of which level(s) of self-awareness are present, and how they are realized. And Conceptual Self permits the ability to reason about the benefits and costs of maintaining certain levels of self-awareness, in terms of the node's goals. It also permits *meta-self-awareness*<sup>8</sup> – the faculty of knowing that one is self-aware. This is a form of private self-awareness.

Here is the short summary: the ecological self-possess only a stimulus-response level of self-awareness; interpersonal self is interaction-aware; extended self is time-aware; private self is goal-aware; and conceptual self is meta-self-aware.

### WORKING DEFINITION OF A SELF-AWARE NODE

To be self-aware a node should: 1) possess knowledge about its own internal state; 2) possess knowledge about its environment. Optionally, the entity might also possess knowledge of its interactions with the wider system (interaction-awareness); possess knowledge of time, e.g. of past or likely future phenomena or effects (time-awareness); possess knowledge of its goals, e.g. objectives, preferences and constraints (goal-awareness); select what is and is not relevant knowledge (meta-self-awareness).

### EMERGENCE OF SELF-AWARENESS: KEY CONCEPTS

In collective biological systems such as the brain, ant colonies, immune systems etc., the entire system can exhibit self-aware behavior. However, the constituent parts may not exhibit self-awareness themselves, and the global information is distributed, not present at a single point. In other words, a complex system may exhibit emergent behavior, which appears globally self-aware, even though no constituent part needs to possess information about the whole system<sup>9</sup>. And this has design implications. A self-aware system need not have to possess a global omniscient controller. And for individual members of the system, it is sufficient to have knowledge of their relevant roles.

### CONCLUSION

A firm's mission is the distinction that separates it from its environment. It is a notion, which is fundamentally non-dualistic in nature and therefore, in principle, ineffable. However, when one attempts to comprehend that notion dualistically as knowledge relating to the firm (company profile) and knowledge relating to the environment, it loses its essential vitality. Such verbal expressions of the mission add little value to strategy formulation process and, perhaps, may even be misleading. A firm's mission is analogous to its self-awareness. To be mission-aware means to possess the firm's soul, as it were. And that awareness is an emergent phenomenon – a collective consciousness - distributed among key stakeholders (nodes) within the system who are mission-aware and have a sense of ownership about the firm. These individuals are better suited to lead the firm's strategy formulation exercises.

### REFERENCES

1. Peter F. Drucker, *Management: Tasks, Responsibilities, Practices* (1993), p.77, Harper Business.
2. G. Spencer Brown, *Laws of Form* (1977), New York: The Julian Press, Inc.
3. Louis H. Kauffman, *Laws of Form – An Exploration in Mathematics and Foundations* Retrieved from <http://www.homepages.math.uic.edu/~kauffman/Laws.pdf>
4. P. Lewis, M. Platzner, and X. Yao, *An outlook for self-awareness in computing systems*, Awareness Magazine, Mar. 2012
5. A. Morin, *Levels of consciousness and self-awareness: A comparison and integration of various neurocognitive views*, Consciousness and Cognition 15 (2), pp.358-371, 2006.
6. C. Goukens, S. Dewitte, and L. Warlop, *Me, myself, and my choices: The influence of private self-awareness on preference-behavior consistency*. Tech. Rep., Katholieke Universiteit Leuven, 2007.
7. U. Neisser, *The roots of self-knowledge: perceiving self, it, and thou*, Ann. N.Y. Acad. Sci. 818, pp.19-33, 1997.
8. A. Morin and J. Everett, *Conscience de soi et langage interieur: Quelques speculations*. [*Self-awareness and inner speech: Some speculations*], Philosophiques XVII (2), pp.169-188, 1990.
9. M. Mitchell, *Self-awareness and control in decentralized systems*, Working Papers AAAI 2005 Spring Symp. Metacognition in Computation, pp.83-85, AAAI Press, 2005.
10. <http://www.epics-project.eu> Engineering Proprioception in Computing Systems (EPiCS) project.

**CHALLENGES OF HUMAN RESOURCE MANAGEMENT IN PUBLIC SECTOR BANKS IN INDIA**

**DR. AMIT KUMAR BANSAL**  
**PRINCIPAL**  
**HIMACHAL INSTITUTE OF TECHNOLOGY**  
**PAONTA SAHIB**

**SARITA BANSAL**  
**ASST. PROFESSOR**  
**HIMACHAL INSTITUTE OF TECHNOLOGY**  
**PAONTA SAHIB**


**ABSTRACT**

*In the contemporary context, the Indian management mindscape continues to be influenced by the residual traces of ancient wisdom as it faces the complexities of global realities. One stream of holistic wisdom, identified as the Vedantic philosophy, pervades managerial behavior at all levels of work organizations. Human Resource Management has evolved considerably over the past century, and experienced a major transformation in form and function primarily within the past two decades. Driven by a number of significant internal and external environmental forces, HRM has progressed from a largely maintenance function, to what many scholars and practitioners today regard as the source of sustained competitive advantage for organizations operating in a global economy. In this article, we would be discussing the various Issues that HR is facing in today's corporate scenario. A few challenges they have been able to overcome successfully but a lot of issues still need to be dealt with. We would be discussing issues HR is facing in the present and some strategies which, if adopted, can help the HRM to sustain better in the challenging and dynamic scenario.*

**KEYWORDS**

HRM, public sector banks.

**1. INTRODUCTION**

 *R should not be defined by what it does but by what it delivers results that enrich the organization's value to customers, investors and employees".*  
 – David Ulrich

HR has been at the proverbial crossroads for far too long. Walking the fine line between demonstrating strategic value and providing traditional HR services, the industry remains stuck, as the business environment around it grows increasingly global and complex. It's a known fact that the pressure on organizations to excel, has resulted in organizational introspection to identify the keys to excellence and developing HR is one such key. The emergence of the global economy, overcapacity in many industries, monumental improvements in the power of computers and telecommunication tools, and the emergence of the knowledge economy are among the forces that are resulting in fundamental change in the design of HR arena of activities.

A whole constellation of organizational features – vertical integration, managerial control, Indian public sector banks have been facing a number of challenges ever since the industry was opened up for private and international players. Social banking practices followed by public sector banks consequent to nationalization have resulted in increased nonperforming assets, decreased profitability and operational efficiency. Privatization of banking sector forced public sector banks to take up serious measures for improving profitability and efficiency of operations. Human resource management is the area where many initiatives were implemented for streamlining banking operations. In this paper HRM challenges faced by public sector banks are analyzed and suggestions made by the experts in the field are summarized.

**HRM CHALLENGES IN PUBLIC SECTOR BANKS**

According to many experts from the banking sector, human resource management is the main area of focus for transformation of public sector banks. Narasimham committee (1991) on financial reforms has enumerated a number of problems relating to HRM in banking such as over manning, low man power productivity, indiscipline, restrictive practices, lack of management commitment to training etc. Some views of the experts and senior level managers from the banking industry in this regard are given below.

**RECRUITMENT AND SELECTION**

Mohan Deshmukh (2004), Manager-costing, United Western Bank Ltd stated that "In Indian banks, job descriptions are still not drawn up in greater detail so as to cover individual posts in a branch or departments of branch and controlling offices. Job profiles and job requirements are not defined."

Krishnamurthy, K.V. (2004), Chairman and Managing Director, Bank of India said that "the entire gamut of public sector rules like reservations in recruitments, promotions and unionization have left us with lots of "Humans" but not adequate 'Resources m. Janmejy Patnaik (2004), Chief Manager (HRD), Central Bank of India opines that "recruitment policy should go beyond writing eligibility criteria. Man power planning and recruitment policies should be reviewed and institutionalized."

"The average officer/employee age, recruitment norms, succession planning, compensation in PSBs in comparison with private sector banks is not favorable. Currently, the recruitment is based on general examination and formal process. Salary is uniform and there is no lateral hiring"- Dr. Janmejaya K Sinha (2004), Vice President and Director, Boston Consulting Group. Anil, K. Khandelwal (2005), CMD, Bank of Baroda, also felt that "recruitment is not in tune with requirement". Janmejy Patnaik (2004), Chief Manager (HRD), Central Bank of India opines that "recruitment policy should go beyond writing eligibility criteria. Man power planning and recruitment policies should be reviewed and institutionalized." "The average officer/employee age, recruitment norms, succession planning, compensation in PSBs in comparison with private sector banks is not favorable. Currently, the recruitment is based on general examination and formal process. Salary is uniform and there is no lateral hiring"- Dr. Janmejaya K Sinha (2004),

Vice President and Director, Boston Consulting Group. Anil, K. Khandelwal (2005), CMD, Bank of Baroda, also felt that "recruitment is not in tune with requirement". Training and development

Dr. Bimal Jalan (2004), Ex-Governor, Reserve Bank of India stated that "a major challenge for many banks will be to develop the special competencies and skills for credit appraisal and risk management in an environment of deregulation and openness".

K.V. Krishnamurthy (2004) said that "New ways of banking requires new competencies. The existing skills are hopelessly outdated. Basic skills like posting ledgers, balancing books, writing statements etc. are redundant with introduction of technology. We need now to unlearn old habits and breed new ones".

**PERFORMANCE APPRAISAL**

According to Mohan Deshmukh, (2004) "a system for objective measurement of individual performance is not established. Hence, the performance evaluation of each individual on objective basis is not possible. Linkages of performance and rewards/incentives are not established.

Anil, K. Khandelwal (2005), observed; "though the system of employee appraisal has been in vogue in banks, it has not helped in developing an organization wide performance culture in PSBs. The system often fails to differentiate performers from non performers, average performers from high performers. Reforming the performance appraisal system by making it more objective and linked to corporate business objectives is the need of the hour. Key performance indicators need to be scientifically assessed and objectively linked with organizational goals so that the performance of the employees can be assessed on critical parameters".

**PROMOTION**

Prof. Swain, B.K. (2004), Institute of Business (AT&T) said; "any organization to be successful, there should be recognition of key performers and motivation through job enrichment. Rewards like promotions should be based only on performance and merit. Rigidity in the system of rewards prevails in the banks and promotions have no linkages with performance".

**COMPENSATION**

K.V. Krishnamurthy (2004) highlighted the deficiencies in compensation policies as follows. ".....In the process, we are paying same compensation to the performers and non-performers, the talented and the menials, often unable or unwilling to make the distinction, creating a disastrous situation where those with talent look for exit options like VRS."

According to Mohan Deshmukh (2004) "linkages of performance with rewards/punishments are not established. Productivity norms are not worked out on some rational and generally acceptable basis". J & nmejoy Patnaik (2004) opined that "compensation in most of the banks now follow low wages high employment model. The emerging model of banking would lead to some of the major paradigm shifts in core values....man power planning, recruitment, training and development, talent retention, succession planning, performance compensation, reward and punishment mechanisms are to be reviewed/institutionalized." DrJanmejaya K Sinha (2004) stated that as for incentive, the present status is tenure based fixed compensation and poor measurement. Anil, K. Khandelwal (2005) argues; "PSBs need to develop such compensation standards, which can provide a linkage between risk and reward, performance and payment. Though the current system of industry level wage settlement provides lesser leeway, slowly and surely the compensation system would have to be repositioned to take care of specific organizational needs".

**WORK CULTURE**

A. K. Purwar (2004), Chairman, State bank of India stressed on customer focus. "Greater customer centric focus calls for greater employee involvement and motivation and change in mindset. Long used to working in a protected environment, staff in public sector banks is widely perceived to have low motivation and low involvement, and the lack of distinction between high performers and poor performers with no reward and punishment system has only added to the lethargy. Banks need to build a service culture using technology in a customer friendly manner. This requires reorienting HRD strategies in banks on an urgent basis and banks need to emphasize right size, right skills and right attitude". Other challenges in HRM are as per following:

1. Over manning
2. Low man power productivity
3. Employee unions

**OVER MANNING**

According to Anil, K. Khandelwal (2005), "PSBs have a bloated size and aging manpower. Raghavan, R. S. (2004), Senior Manager, Vijaya Bank stated that though VRS has been implemented successfully by the banks but it resulted in certain imbalance and shortage in staff necessitating redeployment".

**LOW MAN POWER PRODUCTIVITY**

"In the banking industry the factor of non performers being let free should be properly addressed" - R. S Raghavan (2004)

According to Krishnamurthy, K.Y. (2004), "The entire gamut of public sector rules like reservations in recruitments, promotions and unionization have left us with lots of "Humans" but not adequate 'Resources'."

A.K. Purwar (2004) stated, "Long used to working in a protected environment, staffs in public sector banks are widely perceived to have low motivation and low involvement, and the lack of distinction between high performers and poor performers with no reward and punishment system has only added to the lethargy".

**EMPLOYEE UNIONS**

According to G. S. Bhaskara Rao (2004), Management Specialist, Central Bank of India "HRM practices and policies in Indian banks have been evolved primarily through reactive processes, and were the matters of bilateral agreements between the managements and the representative Unions. The post-nationalization period had witnessed a phenomenal growth in the number of trade unions, encouraged by the management's continued patronage by way of leaving all matters. Relating to HR to the prudence of unions. Till the advent of financial sector reforms, the concept of "human" as an "asset" was not assigned much importance and the role of HRM was mainly focused towards maintenance of personnel, and thus was not attuned to the emerging business priorities".

**THE COMMON CHALLENGES AND PITFALLS ALONG THE WAY**

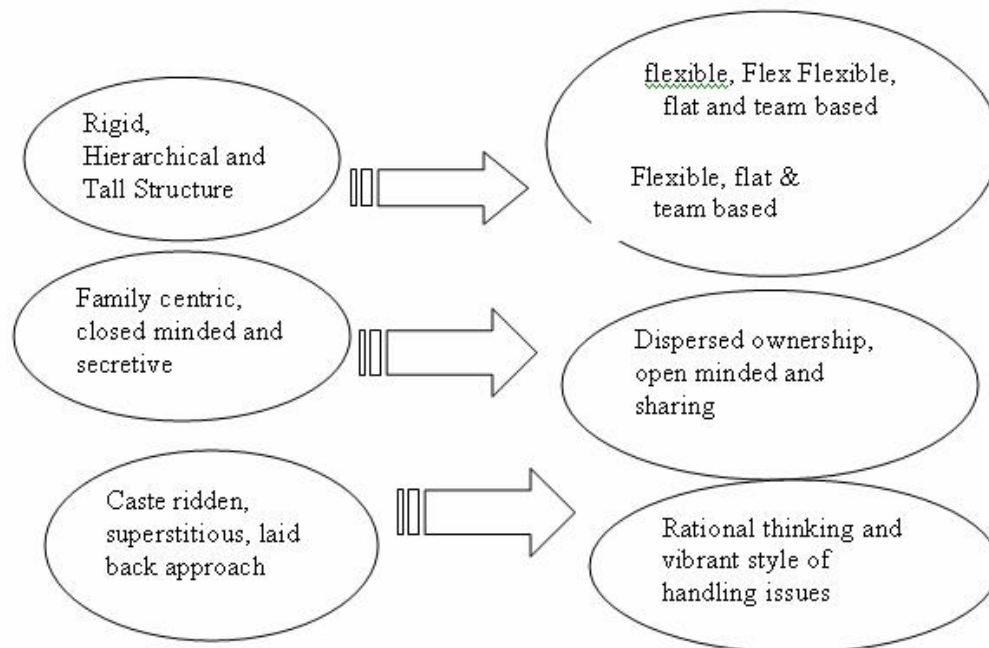
Forging leaner and higher capability HR functions and practices will not be easy in many organizations, Lambert. predicts. Firstly, it is clearly desirable that the key decision makers share an understanding of what they really want, and thence understand the realities of delivering real change in terms of resources and time – they will have a part to play, he says. Secondly, there may be generational issues at work, he adds. For example, is the HR leader sufficiently forward looking and change oriented to lead transformation? Is he or she sufficiently dispassionate about people and processes to effect real transformation, while still recognizing what is sensible to keep? Another common challenge is the paucity of business centered and transformation oriented talent available to fill the more demanding posts of the leaner, meaner functions of the future.

"HR leaders' need both to inspire high achievers with rounded experience to join, while ensuring the skill and knowledge is sufficiently high, and longer term career prospects look rosy, "Another challenge is to strengthen the will and ability of line managers to become more effective people leaders, and to require less hand holding by HR executives, at whatever level, he adds. Achieving this shift starts with HR's exertion of influence on leadership role models. "Of course, the context is potentially dizzying market and organizational change. HR needs to have the strength both to steer this and to effect more personal transformation – its own key executives need to be role models in their own right. "The crucial challenge for HR is to understand that change is endemic to society – and that business must accept the need for continuous renewal, Haffenden says. Understanding this enables HR to advance an organization's change agendas focused on the business context and how to create the type of organization where people flourish. Here, organizational development gets the context right and develops a flexible organization model while HR drives the people strategy. "The irony is that success in organizational renewal often leads to ossification and preserving the status quo because of complacency. This is the biggest danger that even good HR functions face. In addition, all functions face the challenge of using technology and its HR applications," Haffenden says If we look at the same situation in the Indian context, a project report on "Challenges in Modern Human Resource Management" (Vineet Kumar Sarawagi, 2010) explored HRM issues at companies like TCS, Godfrey Philips, Birlasoft and Indian Tobacco Company and found certain challenges faced by various companies, such as, maintaining workforce diversity, motivating employees (at TCS) communication, performance management, competency



development, compensation, career development (Birla soft), attrition, recruitment and training, retention (Indian Tobacco Company). These Indian firms are compelled to think globally which is difficult for managers who were accustomed to operate in vast sheltered markets with minimum competition from the domestic or foreign firms. Indian firms need to move from one end of the continuum to the other end as can be seen below:

FIGURE 1: THE COMMON CHALLENGES AND PITFALLS ALONG THE WAY



### THE HR PROFESSIONAL OF THE FUTURE

HR professionals will need to take a number of steps – both internally and externally – to ensure that the credible future of the function is ensured. “Perhaps the most important requirement is a combination of persistence, courage and influencing skills,” says Lambert. “This, combined with the knowledge of what are the right things to do, makes for a winning combination, as described to us, for example, by CEOs of HR leaders that they admire. “There are also some important skill areas that HR has been slow to address, and which are only recently starting to get the focus they deserve. “I would pick out firstly organizational design, which starts with jobs and roles and must incorporate a high level understanding of organizational economics, working processes and corporate identity,” Lambert says. Another much observed gap is knowledge of how to use and deploy technology – both for HR’s own use and to ensure that people issues are at the heart of technology decisions, investment and implementation. The third area for improvement is project management, Lambert says. There are disciplines and standards to be learnt that are still foreign to many personnel generalists. At the same time, the prevalence of change initiatives does mean that this is an area where HR has to learn the necessary tools and techniques. Focusing on this consciously as part of an HR skills program helps to make this a less painful journey, according to Lambert. Finally, there is the field of evaluation and measurement. So often the lyrics are along the lines of ‘it’s too hard to measure’ or ‘we’re working on it’ or ‘really, it’s an act of faith’, Lambert says. “This is changing – the methods and skills are clearly observable at work in the best managed organizations, which drastically reduces the tendency to adopt fashions without establishing a business case, and allowing bad behaviour to persist in parts of organizations like rotten apples that queer the barrel. However, for most in HR this still remains a steep hill to climb. “Haffenden echoes Lambert’s comments, and says there are a number of factors which define a HR professional of the future: · Demonstrable expertise in areas like OD, reward, learning and talent management. Becoming more business aware – understanding not just financial statements but, more importantly, globalization, competitiveness and commercial realities. Proven integrity, honesty and loyalty – so HR professionals can act as an organization’s confidante. Powers of analysis and judgment for circumstances, events and people – the need here is to size up situations accurately and apply solution.

### SUGGESTIONS

While pointing out the problems relating to the human resource management in public sector banks, the experts and high level HR committee which has representations from Indian banker’s association, Government of India, State bank of India and other Public Sector Banks, have suggested several measures for overcoming deficiencies. A summarized account of the measures suggested by them is as given under.

### RECRUITMENT AND SELECTION

- Autonomy to recruit as per the requirements of the banks.
- Increasing the direct recruitment quota in clerical and officer cadres.
- Increasing minimum qualification required for recruitment in clerical and subordinate cadre.
- Recruitment of skilled man power directly from the market to be given urgent consideration.
- Raising the skill bar at the entry level itself would ensure that only people with requisite skills get into banks.
- Accommodating additional personnel with technical and professional skills would balance the otherwise high age profile of the banking personnel.
- HRD audit in vital areas like training, compensation, recruitment and promotion.

### PROMOTION

- Faster promotions for meritorious officers and reducing the span to reach top management level from 25 years to 20 years.
- Merit and performance based promotions by reducing minimum eligibility years for CAIIB candidates and those who have served in rural areas.
- Written test and performance based promotions up to Scale IV.
- Reducing the maximum age limit at entry level for the officers.
- Capping the age for internal promotions from subordinate to non subordinate and from non subordinate to officer cadre.
- Career management system to make employees aware about availability of various career streams.
- Recognition of employees performing well will send right signals and boost morale of the work force.

- There is an urgent need to bring down the waiting period in each scale. Suitable fast track promotion policies for skilled specialized officers and performing general officers should be evolved.

### COMPENSATION

- Performance based reward system should be developed.
- For retaining talent banks have to pay market rates for professionals with incentives like performance bonus and stock options.
- Performance linked reward system will weed out excessive manpower and attract fresh talent.
- There is a wide gap between the remuneration provided by PSBs and other private /foreign banks and the difference needs to be minimized.

### TRAINING AND DEVELOPMENT

- Identifying competencies on an organizational basis will provide a means for pinpointing the most critical competencies for the banks success.
- Training and retaining the existing and future man power to cope with the changes and challenges of future.
- Filling up existing skill gaps at middle level and higher level employees through skill enhancement programs.
- Keeping employee's skills updated to match present day requirements enhances productivity
- Training - There should be proactive steps in this regard and it should involve proper identification of training needs and post training placements. Training centers should introduce and initiate newer training programs in conformity with the changed scenario and demand from the customers.

### TRANSFER

- Movement of surplus staff in the clerical cadre from staff surplus banks to staff deficient banks so as to strike a balance and maintain establishment expenses at optimum level.
- Laying down clear cut recruitment, rotation and transfer policy.

### WORK CULTURE

- Focus on increasing employee productivity.
- Mapping and developing competency; identifying talent and proper grooming.
- Transforming staff from being "Transaction processors" to business professionals.
- Developing strong business orientation among employees through sales culture and customer centric approach.
- De-bureaucratization and creating a competitive work culture.
- Greater accountability and ownership.
- Managing transformational conflict and preparing people for change.
- Team building and Team work - Personnel policies of the bank should enable their employees imbibing strong sense of team work so as to reap rich and regular dividends.
- Job satisfaction - Ensuring job satisfaction would enable banks to retain their skilled employees.

### CONCLUSION

It is the prerogative of the HR professionals to remove these misconceptions by acting as a vital link between the strategic and operational functions in an organization. Thus, if an organization has chosen to invest in an HR department as part of its strategy to deal with the human issues of the enterprise, it should also make sure that the HR department has a "business plan" to achieve the same. This HR business plan sets out the vision, strategy, priorities, core capabilities, and required competencies of the HR department. Through appraisal of the plan the firms' executives can assess and measure whether or not they are getting an appropriate return from their investment in HR department. The HR business plan should certainly be supportive of the business human resources. The key word here is 'investment', not expenditure or cost.

### REFERENCES

1. Bhaskara Rao, G. S. (2004). "Changing Profile of Banking Impact on HRM policies and processes", in Nagarajan, N.(Ed), Human resource management, Vol.1.5, ICFAI University press, Hyderabad, pp. 115-131 (Paper presented at Bank Economists Conference, 2003)
2. Deshmukh, M. (2004) "Human Resource Management: need for a pragmatic approach, in Nagarajan N (Ed), Indian Banking- managing transformation, Vol 7, ICFAI University press, Hyderabad, pp 147- 159. (Paper presented at Bank Economists Conference, 2002) Padwal, S.M. (2004) "Management of Change" in Nagarajan N (Ed), Indian Banking- managing transformation, Vol 6, ICFAI University press, Hyderabad, pp 3-36. Vol 6 (Paper presented at Bank Economists Conference, 2002)
3. <http://www.articlesbase.com/humanresourcesarticles/emergingtrendsinhrm1282468.htm> accessed during May, 2011.
4. <http://www.humanresourcesmagazine.com.au/articles/c0/0c02cec0.asp>, accessed during May, 2011.
5. Khandelwal, A.K (2005). "Criticality of HR reforms for Public sector banks in the new era", Economic and political weekly, March 19, pp 1128-1131.
6. Krishnamurthy, K.V. (2004). "Human Resource Development in Indian Public Sector Banks" in Nagarajan N (Ed), Indian Banking- managing transformation, Vol 1, ICFAI University press, Hyderabad, pp.108-113 (Speech delivered at Bank Economists Conference, 2002)
7. Kumar, S. (2004), "Training Initiatives in banks - Areas of concern." in Nagarajan, N.(Ed), Human Resource Management, Vol.1.5, ICFAI University press, Hyderabad, pp 105-111 (Paper presented at Bank Economists Conference, 2003)
8. Kumar, S. (2004). "Developing Indian banks as learning organizations", in Nagarajan N (Ed), Indian Banking- managing transformation, Vol 7, ICFAI University press, Hyderabad, pp 123-135. (Paper presented at Bank Economists Conference, 2002)
9. Patnaik, J. (2004). "Preparing for cultural transformation", in Nagarajan, N.(Ed), Indian Banking- managing transformation, Vol. 6, ICFAI University press, Hyderabad, pp.62-72 (Paper presented at Bank Economists Conference, 2002)
10. Patnaik, J. (2004). "Structural changes in banks: HRM policies and procedures", in Nagarajan, N.(Ed), Human resource management, Vol.5, ICFAI University press, Hyderabad, pp.44-56 (Paper presented at Bank Economists Conference, 2003)
11. Purwar, A.K. (2004). "Harnessing Facilitators", in Nagarajan, N.(Ed), Indian Banking- managing transformation, Vol 1, ICFAI University press, Hyderabad, pp 61-68. (Paper presented at Bank Economists Conference, 2002)
12. Raghavan, R. S. (2004) "Preparation for cultural transformation" in Nagarajan, N.(Ed), Indian Banking- managing transformation, Vol 6, ICFAI University press, Hyderabad, pp 50-61 (Paper presented at Bank Economists Conference, 2002)
13. Sarawagi, V.K. (2010). "Challenges in Modern Human Resource Management" A Project report by a student of IMS, Ghaziabad. Institute Approved by AICTE, Govt. of India.
14. Sinha, L.K. (2004). "The challenges in HR and IT" in Nagarajan, N.(Ed), Indian Banking- managing transformation, Vol.1, ICFAI University press, Hyderabad, pp 207-209. (Keynote address at Bank Economists Conference, 2002)
15. [www.hewittassociates.com/Intl/AP/enAS/.../hr\\_issues.aspx](http://www.hewittassociates.com/Intl/AP/enAS/.../hr_issues.aspx), accessed during May, 2011.



## PRODUCTIVITY OF AGRICULTURAL EXTENSION PACKAGE (CASE OF WOLAITA ZONE)

**TADELE TAFESE HABTIE**  
**HEAD**  
**DEPARTMENT OF ECONOMICS**  
**WOLAITA SODO UNIVERSITY**  
**WOLAITA SODO TOWN**

**ABSTRACT**

*This study assessed the impact of extension package participation of the farm households on the productivity of crop production in Wolaita zone. It made use of survey data of 149 full package farmers and 151 partial package farmers. In order to measure the total factor productivity differentials, this study use the transitive version of Tornqvist index. To identify factors affecting farm level total factor productivity we used ordinary least square. Thus, results from the findings showed that partial package farmers are about 69% less in total factor productivity compared to full package farmers showing engaging in extension package fully has advantage in crop production. Results of the ordinary least square regression of total factor productivity showed that only non-farm income and distance to market have significant positive effect on total factor productivity differential. Finally, it was recommended that agricultural support services should direct their efforts to make farmers fully adopt agricultural extension packages.*

**KEYWORDS**

Wolaita Zone, TFP, full package farmers, partial package farmers, tornqvist index.

**INTRODUCTION**

It is known that Agriculture remained to be the mainstay of Ethiopian economy accounting about 41.6% of the total economy in 2010 (GTP, 2010). This implies that the development of the Ethiopian economy heavily depends upon the speed with which agricultural growth is achieved. In an effort to achieve agricultural growth, the Government of Ethiopia (GoE) has adopted different institutional support services that need to catalyze this growth. Wolaita Agricultural Development Unit (WADU) was one of such institutions providing support services in Wolaita zone starting from 1970.

Following the 1991 market liberalization, Agricultural Development Led Industrialization (ADLI), introduce Participatory Agricultural Demonstration Extension of Technology (PADETS) designed to take major role in increasing productivity and production of small holding farmers. This program involves establishment of farmer training centers (FTC) for farmers to receive information, training, demonstration and advice. PADETS also involves provision of inputs, credit and information on agricultural technology (Alemu et al, 2009). This paper attempts to examine the impact of agricultural extension packages on the crop productivity of farmers in the rural areas of Wolaita zone by using cross-sectional data.

**REVIEW OF LITERATURE**

At a basic level, productivity examines the relationship between input and output in a given production process (Coelli et al. 1996). Productivity is then expressed in an output versus input formula for measuring production activities. It does not merely define the volume of output, but output obtained in relation to the resources employed. Hence, the analytical framework that handles productivity is theory of production, which postulates a well-defined relationship between output and factor inputs.

Productivity can be conceptualized into two main components, partial factor productivity (PFP) and total factor productivity (TFP). PFP (average product) is defined as the rate of output to a specific input whereas TFP is a ratio of total outputs (measured in an index form) to total inputs (also measurement as an index). If the ratio of total outputs to total inputs is increasing, then the ratio can be interpreted as more outputs can be obtained for a given input level. Hence, total TFP captures the growth or changes in outputs not accounted for the growth or changes in factor inputs.

The advantage of the concept of TFP relies on its ability to explain productivity for the whole inputs used in the production process. That is, TFP approach is found to be suitable for cases where the complexity and diversity of production system is large (like case of smallholder farming in Ethiopia). Moreover, the superiority of the method of TFP over the PFP emerges from the fact that PFP is misleading if there is high substitutability between inputs (Gavian and Ehui, 1996 as cited in Gezahegn et. al., 2006). However, PFP measures are sometimes useful when the objectives of producers, or the constraints facing them, are either unknown or unconventional.

The growth of TFP overtime (across cross-section) can result from several factors. First, changes in efficiency: as change in skills in using the existing techniques of production changes productivity; second, when there is variation in scale or level of production overtime: as the output per unit of input varies with the scale of production; and third, technological change which pushes the production frontier upward. Technological change itself can result from quality improvement in input or quality improvements in the production process (like using improved farming practices of production such as ploughs, fertilizers, pesticides, improved seeds).

The most commonly used measures of growth in TFP are growth accounting, data envelopment analysis (DEA) and index number approaches. In growth accounting approach, we specify a production function that is both stable across time (cross section) and levels of aggregation. The selected aggregate production function is then used as the basis for decomposing economic growth into components attributed to growth in the various input factors. In this method, the growth accounting residual is an index number measure of TFP growth.

The Data Envelopment Analysis (DEA) is a special mathematical linear programming model. DEA approach to TFP growth measurement decomposes changes in TFP into a component that results from a move towards the efficiency frontier (technical efficiency change) and a second component resulting from a shift in the frontier (technological change).

The index number approach uses theory of index numbers. This method is similar to growth accounting approach but does not require specifying a production function. It needs a detailed information on outputs, inputs and prices indeed. It essentially measures TFP as a ration of the index of output to input, whereby a value larger than 1 is considered as resulting from growth in TFP. Laspeyres, Paasche, Fisher and Törnqvist indices are among the commonly used indices in the wide literature of index numbers. The major difficulty with the index number approach is to derive aggregate output and input measures that represents the numerous outputs and inputs involved in most production processes.

The Fisher and Törnqvist indices satisfy all axiomatic tests except for circularity (transitivity). These two indices are generally preferred for productivity measurement due, in part, to satisfying index number properties. In practice, the indices yield extremely similar values, especially if computed for periods (cross sections) that are not very far apart.

Moreover, Caves, Christensen, and Diewert (CCD) has converted non-transitive Törnqvist indices in to transitive Törnqvist. This property is especially important for cross-sectional data in which one makes pair-wise comparisons for all firms in s and t categories. Suppose we start with Törnqvist indices,  $Q_{st}^T$  for all pairs, s and t. Then, the transitive Törnqvist indices,  $Q_{st}^{TCD}$  is given by:

$$Q_{st}^{TCD} = \prod_{i=1}^M \left[ \frac{p_{sr}^T}{p_{rt}^T} \times \frac{p_{rt}^T}{p_{st}^T} \right]^{\frac{1}{2}}$$

.... Eq. (1)

The log change in this transitive Törnqvist indices is:

$$\ln Q_{st}^{CD} = \frac{1}{M} \sum_{r=1}^M \ln Q_{sr}^T - \ln Q_{rt}^T$$

$$= \frac{1}{2} \sum_{i=1}^N \left( \bar{\omega}_i \ln q_{it} - \ln \bar{q}_i \right) + \frac{1}{2} \sum_{i=1}^N \left( \bar{\omega}_i \ln q_{is} - \ln \bar{q}_i \right) \quad \dots \text{Eq. (2)}$$

$$\bar{\omega}_i = \frac{1}{M} \sum_{j=1}^M \omega_{ij}$$

Where  $\bar{\omega}_i$  is arithmetic mean of output (input) shares for each commodity i (each input i)

$$\bar{\ln q}_i = \frac{1}{M} \sum_{j=1}^M \ln q_{ij}$$

is arithmetic mean of each log output i (each log input i) over M

M = number of enterprises (like households, countries, companies etc.) or time periods.

Caves, Christensen, and Diewert show that under certain circumstances, the Törnqvist index (which is the discrete counterpart of the Divisia index) is equivalent to the geometric mean of two Malmquist output productivity indexes. Moreover, they show that the Törnqvist index is "exact" for technology that is trans-log (i.e., one can compute a nonparametric productivity index that is "exactly" consistent with the trans-log form). Furthermore, since the trans-log is flexible, the Törnqvist index is "superlative" in the terminology coined by W. Erwin Diewert (Diewert, 1976).

### IMPORTANCE OF THE STUDY

This research lend evidence to:

- Identify the contribution of agricultural extension packages to crop productivity
- Help decision makers how to formulate policy based on the research findings
- Recommend how to implement agricultural extension packages

### STATEMENT OF THE PROBLEM

The introduction of Participatory Agricultural Demonstration Extension of Technology (PADETS) since early 1990s has been taken as a major tool to transform agriculture in the Agricultural Development Led Industrialization (ADLI) program of the government of Ethiopia. PADETS which represents a significant public investment amounting for almost 2% of agricultural GDP per annum is found to have surprisingly several views regarding its impact (David J. Spielman, 2008). Some of the surveys suggest that despite this huge investment, production and efficiency has increased little. The extension system also does little to encourage and exploit the inherent resourcefulness of those who work closely with farmers (Gezehegn et al., 2006). Moreover, extension workers saw their role mostly as distributors of fertilizer and credit rather than technical advisors (Abate Bekele et al, 2006). However, other studies found such services contribute significantly to the agricultural productivity in Ethiopia (Alemu et al, 2009).

Despite of these studies on the impact of extension programs at national level, little is done to assess the impact of these extension program at zonal or/and Woreda level. Moreover, though agricultural extension program has long history in Wolaita (WADU, 1970), nothing is done to assess its recent development. Hence, this study will look in to the impact of the agricultural extension package on the crop productivity of farmers in Wolaita zone.

### OBJECTIVES

The general objective of the study is to assess the impact of the agricultural extension package on the productivity of farmers in Wolaita zone. Specifically, the study aims at:

1. To look in to productivity differentials between fully and partially participating extension farmers
2. To identify determinants of productivity differentials between fully and partially participating extension farmers

### HYPOTHESIS

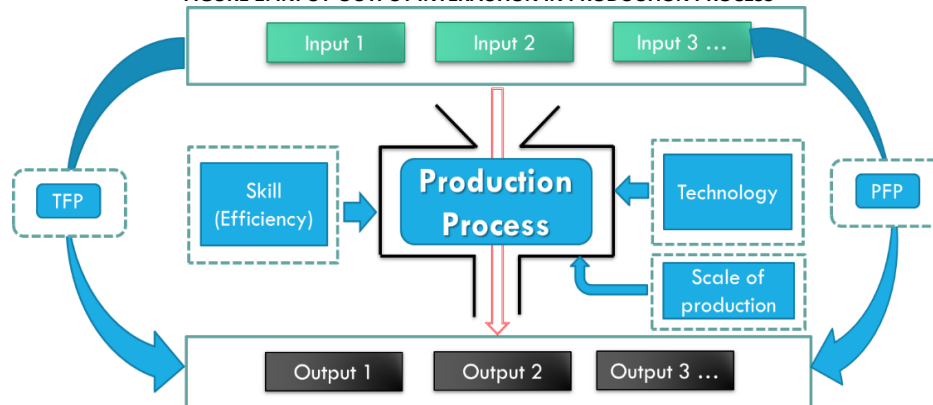
There is no significant contribution of agricultural extension packages to the crop productivity of farmers in rural Wolaita zone.

### RESEARCH METHODOLOGY

#### LOGICAL FRAMEWORK

In this study we assume the multi-input and multi-output in production process. Moreover, it is assumed that the production process is affected by skill of operators, technology available and scale of production like market expansion. Advancement in technology induces quality improvement in production process where as improvements in skill of operators brings change in efficiency of production process.

FIGURE 1: INPUT-OUTPUT INTERACTION IN PRODUCTION PROCESS



Likewise change in scale of production like expansion of market impacts the production process. When we deal with the productivity measures in such framework, Total factor productivity (TFP) explain productivity for the whole inputs used in the production process while Partial factor productivity (PFP) explains rate of

output to a specific input. Thus the productivity (TFP in our case) will be affected by skill, technology and scale of production in which agricultural extension packages are intended to bring.

#### MEASUREMENT OF TOTAL FACTOR PRODUCTIVITY DIFFERENTIALS

In this study the change in transitive Tornqvist indices (Caves, Christensen, and Diewert (1982a)) is used to calculate change in TFP between for full-package (t) and partial-package farmers (s):

$$\ln TFP_{st} = \left[ \frac{1}{2} \sum_{i=1}^N \left( \phi_{it} + \bar{\omega}_i \right) \ln Y_{it} - \ln \bar{Y}_i \right] - \left[ \frac{1}{2} \sum_{i=1}^N \left( \phi_{is} + \bar{\omega}_i \right) \ln Y_{is} - \ln \bar{Y}_i \right] \\ - \left[ \frac{1}{2} \sum_{i=1}^N \left( \phi_{it} + \bar{\nu}_i \right) \ln X_{it} - \ln \bar{X}_i \right] - \left[ \frac{1}{2} \sum_{i=1}^N \left( \phi_{is} + \bar{\nu}_i \right) \ln X_{is} - \ln \bar{X}_i \right] \quad \dots \text{Eq. (3)}$$

$$\bar{\omega}_i = \frac{1}{M} \sum_{j=1}^M \omega_{ij}$$

is arithmetic mean of output shares for each commodity (crop type) i

$$\bar{\nu}_i = \frac{1}{M} \sum_{j=1}^M \nu_{ij}$$

is arithmetic mean of input shares for each input i

$$\ln \bar{Y}_i = \frac{1}{M} \sum_{j=1}^M \ln Y_{ij}$$

is arithmetic mean of each log output i over M

$$\ln \bar{X}_i = \frac{1}{M} \sum_{j=1}^M \ln X_{ij}$$

is arithmetic mean of each log input i over M and M = number of households

The multiple regressions model is employed to identify the determinants of TFP as follows:

$$TFP_i = \alpha_i + \sum_{s=1}^{17} \alpha_s \psi_{si} + \eta_i \quad \dots \text{Eq. (4)}$$

Where: S: s<sup>th</sup> determinant; i: the i<sup>th</sup> household (HH);  $\psi_{si}$ : Land size (Timad), Labor power (Labor days), Draft power (Timad oxen days), Value of seed (Birr), Value of fertilizer, HH age, HH sex, HH farming experience, HH education, Dependency ratio, Distance from farmer training center (FTC), HH nonfarm income, Number of plots owned, Distance to local market (hours),  $\eta_{ik}$  Random error term for efficiency effect model;  $\alpha_s$  Parameters to be estimated.

#### DATA AND SAMPLING

Both primary and secondary data were employed to attain the objectives set. Primary data was collected from sample households through structured questionnaire and secondary data from concerned line offices such as agricultural offices and central statistical agency.

In this study two stage sampling procedure is adopted. First, we divide Wolaita zone in to eight clusters in way that encompasses agro-climatic conditions and farming system of the zone. Then, a sample of eight Kebeles are selected first from each cluster using simple random sampling. According to the sampling frame from these eight Kebeles 51% are found to be partial package farmers. Once these kebeles are identified, we select a sample of 147 full package farmers and 153 partial package farmers from selected kebeles proportionally using simple random sampling.

#### RESULTS AND DISCUSSIONS

Our estimate for Total Factor Productivity (TFP) based on the Tornqvist TFP Index outlined in Eq. (3) (Table – 1) reveals on average TFP falls from full package farmers to partial package farmers by 69 percent. The trend is that in majority of the matching cases there is a rise in productivity from partial package farmers to full package farmers. We can also see from Table -1 that in about 60 percent of the cases, TFP increases when we move from partial to full package farmers with the majority (57 percent) of these cases with an average of 113 percent increment in TFP ( $-2 < TFP \leq 0.95$ ). While no significant difference is observed in TFP between partial package and full package farmers for 5 percent of the cases. Moreover, in about 34 percent of the cases TFP increases when we move from full package to partial package farmers with the majority (71 percent) of these cases with an average of 141 percent increment in TFP ( $1.05 < TFP \leq 5$ ).

TABLE 1: SUMMARY OF ESTIMATED TOTAL FACTOR PRODUCTIVITY

TFP Category	Mean	SD	Frequency	Cumulative Frequency
$TFP \leq -6$	-7.59	0.64	2	2
$-6 < TFP \leq -4$	-4.72	0.55	11	13
$-4 < TFP \leq -2$	-2.84	0.68	13	26
$-2 < TFP \leq 0.95$	-0.13	0.76	34	60
About one*	1.00	0.03	5	65
$1.05 < TFP \leq 5$	2.41	1.07	24	89
$5 < TFP \leq 10$	6.49	1.40	8	97
$TFP > 10$	12.22	2.39	2	99
Mean : 0.31 SD: 3.66 Min: -8.04 Max: 13.91				

\*( $0.95 < TFP \leq 1.05$ )

Looking in to the determinants of TFP (Table - 2), only household nonfarm income and household distance to the local market are found to significantly affect TFP. Nonfarm income has expected positive sign assuming nonfarm income supports participation in agricultural extension packages while the unexpected positive sign of distance to the local market may be due to the fact that as farmers are near to market (mostly recreation center of rural areas), they devote more leisure time.

TABLE 2: DETERMINANTS OF TOTAL FACTOR PRODUCTIVITY (TFP)

Variable	Coefficient	t - value
Constant	-2.29	-1.09
Land size (Timad)	0.1883	1.18
Total labor power (labor days)	0.0006	0.07
Total draft power (oxen days)	0.0295	0.89
Total value of seed (Birr)	-0.0004	-0.74
Total value of fertilizer (Birr)	-0.0007	-1.14
Household age	0.0023	0.04
Household sex (1=male)	0.0706	0.06
Household farming experience	-0.0656	-1.02
Household Education(1=illiterate)	-1.0120	-1.03
Dependency ratio	0.5224	1.88
Distance from farmer training center (FTC)	0.0034	0.53
Household nonfarm income (Birr)	0.0002	2.08*
Number of plots owned	0.0229	0.04
Distance to local market (hours)	0.0159	2.36*
N = 99 R <sup>2</sup> = 0.2714 Prob > F = 0.0125		

\* Significant at  $\alpha=0.05$

## FINDINGS

The result that our estimate of the Total Factor Productivity for full package farmers has raised by about 69 percent compared to partial package farmers may imply participating in agricultural extension packages fully contribute more to crop productivity of farmers. Moreover, the positive significant effect of household nonfarm income on Total Factor Productivity differentials may imply that engaging in alternative nonfarm income can make farmers to fully participate in agricultural extension packages and raise their Total Factor Productivity in turn. Household distance to the local market is also found to significantly affect Total Factor Productivity differentials. This may also imply raise in Total Factor Productivity can be achieved through creating access to package inputs and to markets to sale production.

## RECOMMENDATIONS

- Agricultural extensions package implementers should strengthen their efforts to broaden full participation of farmers in agricultural extension packages.
- Agricultural extensions along with local government in the study area should design strategies for farmers to raise their nonfarm income in the off farm seasons and work to raise access of farmers to local markets.

## CONCLUSIONS

- Adopting technologies of agricultural extension package fully have brought about substantial difference in productivity between partial and full package farmers.
- Total Factor Productivity differential are only significantly affected by non-farm income and household distance to the local market.

## REFERENCES

1. Alemu, Bamlaku A., Nuppenau, E-A., & Boland, H. (2009). Technical Efficiency of Farming System across Agro-Ecological Zones in Ethiopia: An Application of Stochastic Frontier Analysis. (From <http://www.csae.ox.ac.uk/conferences/2009-EDiA/papers/030-Alemu.pdf>)
2. Coelli, T.J. (1996). A Guide to Frontier Version 4.1. A Computer Program for Stochastic Frontier and Cost Function Estimation, CEPA Working paper 96/07
3. David J. Spielman (2008): "Encouraging economic growth in Ethiopia: Perspectives on agricultural input markets, agricultural extension and advisory services, and agricultural education and training", Ministry of Finance and Economic Development, 2008, Amharic Version
4. Diewert, W. E. (1976): "Superlative Index Numbers and Consistency in Aggregation", *Econometrica* 46: 883-900.
5. Gezahegn Ayele, Mekonnen Bekele and Samia Zekeria (2006): "Productivity and Efficiency of Agricultural Extension Package in Ethiopia ", The Ethiopian Development Research Institute (EDRI), Research Report 5, Addis Ababa, 2006.

**PATTERN OF POPULATION GROWTH DURING 1901 TO 2011 IN THE INDIAN HIMALAYAN REGION****DR. B. R. PANT****HEAD****M. B. GOVERNMENT P.G. COLLEGE****HALDWANI****ABSTRACT**

*The level of socio- economic development of the Himalayan Region cannot be compared with the whole country even after independence number of schemes has been launched specially for the Himalayan Region of India. It is believed that any development plan prepared for wellbeing of the society in any specific region is more or less ineffective after a gap of ten years due to changes occurred in demographic structure and its associated set up. Therefore, census in regular interval of ten years is become mandatory and new planning will take place according to the needs of the society and demographic behavior. Therefore, it is necessary to analyze the present situation and underlying factors for comparatively low development. Based on these findings, the corrective measures and new feasible plans can be prepared and implemented. Demographic study of any region is also an important aspect for preparation of new plans and modification in previous scheme. An attempt has been made here to study the distribution of population and decadal growth since 1901 in the Indian Himalayan Region. The present investigation is based on the data released by the Census of India, 2011 and 2001.*

**KEYWORDS**

Indian Himalayan Region, population growth.

**INTRODUCTION**

Census of India 2011 is the fifteenth unbroken series since 1872 and seventh after independence. It is believed that any development plan prepared for wellbeing of the society in any specific region is more or less ineffective after a gap of ten years due to changes occurred in demographic structure and its associated set up. Therefore, census in regular interval of ten years is become mandatory and new planning will take place according to the needs of the society and demographic behavior.

The pattern of population growth in any geographical area is a combined result of socio-economic development, social awakening, historical and cultural activities. In the Indian Himalayan Region very limited area is suitable for human settlements and these areas are overcrowded in view of optimum living conditions. Keeping in mind the scarcity of suitable land for human dwellings, eco friendly and scientific use of available resources, institutional and infrastructural development can be increased in potential areas to bear the human burden. Any type of planning not only in the Himalaya but India as a whole since independence is primarily based on exploitation of resources has weakened its carrying capacity in one hand and rapid population growth has been triggering the problem on the other.

The Indian Himalayan Region like other mountains throughout the World is experiencing environmental degradation due to various biophysical and socio- economic factors. Demographic features of the Indian Himalaya are determined by the physical as well as cultural environmental conditions. These conditions are also played a pivotal role in the selection of human habitation and occupation in the Indian Himalayan Region. There are various regions with no population in Higher and Trans Himalaya to densely populated regions along the River Valleys, Tarai, Bhabar and Duns. The population growth and distribution pattern not only differs from remaining part of the country but greatly varies in one part to another part even one state to another and one district to another district of the Indian Himalayan Region. The relief controls not only the human dwellings but also decides the infrastructural development. More developed areas in view of infrastructural pull them from their comparatively less developed original habitations. The level of socio- economic development of the Himalayan Region cannot be compared with the whole country even after independence number of schemes has been launched specially for the Himalayan Region of India. The geologically sensitive and ecologically vulnerable Indian Himalaya has no such carrying capacity to meet the requirement of rapid growing human as well as livestock population.

Therefore, it is necessary to analyze the present situation and underlying factors for comparatively low development. It will also helpful to understand the growing ecological problems in the Indian Himalayan Region. Demographic study of any region is also an important aspect for preparation of new plans and modification in previous scheme. However demographic variables of the any region are assumed to be both as the determinants and the consequences of the development process.

Based on these findings, the corrective measures and new sustainable feasible plans can be prepared and implemented.

**OBJECTIVES**

An attempt has been made here to study the distribution pattern of population in 2011 and decadal growth pattern since 1901 in the Indian Himalayan Region.

**METHODOLOGY**

The present study is based on the data released by the Census of India which is available at state and district level from 1901 to 2011 were compiled to study the distribution pattern and decadal growth trends in the states and districts of Indian Himalayan Region.

**STUDY REGION**

The word 'Himalaya' is generally used for Himalaya lying in India, thereafter Indian Himalayan Region referred as Himalaya. The word Himalaya has been derived from two Sanskrit words *Hima* (snow) and *Alaya* (abode) i.e. the Abode of snow. The Himalaya constitutes one of the greatest and youngest folded mountain systems in the world rising from below 300 m to more than 8000 m from mean sea level. It makes the northern boundary of India extending from Nanga Parvat (8126 m) in west to Namcha Baruwat (7755 m) in the east, having a length of 2500 km and width about 160 to 400 km. Extending between 70° 47' and 97° 22' East longitudes and 21° 57' and 37° 15' North latitudes, the Indian Himalayan Region encompasses an area of about 533606 km<sup>2</sup> accounts 16.23% of the country's land area. In census 2011 the Himalaya consists of 4, 67, 90, 642 persons (Excl. 3 Sub-divisions of Senapati Distt. of Manipur) accounting of 3.77 % of total population of the country. Considering area expansion and share of country's population in the Indian Himalaya, a large area sparsely populated. The Indian Himalayan Region consists of ten whole states- Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, Arunachal Pradesh, Nagaland, Tripura, Manipur, Mizoram, Meghalaya, and two partial part which are termed as West Bengal Hills (Darjiling district) and Assam Hills (Karbi Anglong and Dima Hasao (formerly North Cachar Hills districts). According to Census 2001 there were 95 districts in the Indian Himalaya. In Census 2011 the number has increased to 109 districts on account of newly created districts, accounts 17% of the total 640 districts in the country. About twenty per cent districts of the Himalaya fall in the Jammu and Kashmir state. Geologically and Geographically Meghalaya and some part of North Eastern Region (Mizoram, Manipur, Nagaland, Assam Hills and Tripura) are similar with the Deccan Plateau. But due to physiographic similarities and adjacent location, these parts (Districts) and states are included in the Indian Himalayan Region for development planning point of view.

In the present study, the author has attempted to investigate the spatial pattern in the distribution in 2011 and growth of the total population during 1901 to 2011.

## REVIEW OF LITERATURE

The first credits go to G. S. Gosal as an Indian who completed his doctoral thesis on 'A Geographical Analysis of India's Population' in 1956 which included various significant attributes of population such as distribution pattern, growth, sex composition, migration, literacy, structure of occupation and trends of urbanization (1961, 1962, 1966 and 1979). The significant contributions in the field of Population Geography are made by the scholars of the Department of Geography Punjab University Chandigarh under the supervision of Professor G. S. Gosal (Mehta, 1967, Krishan, 1968, Chandna, 1970 and many more). Few case studies are also seen in the Indian Himalayan Region which may be included in the domain of Population Geography. Among them Kumar (1973), Sharma (1981 and 1992), Chand and Thakur (1991), Pant and Chand (2013) and Pant (1996a, 1996b, 2006, 2010, 2011a, 2011b, 2012, 2013 and 2015) are important.

## DISTRIBUTION OF HIMALAYAN POPULATION

The population distribution in the Himalayan Region is very uneven due to its undulating local relief with the influence of different regional climatic conditions. Mostly population of the Himalaya is concentrated in the plain area of Tarai, Bhabar, Duns and river valleys due to their life supportive favorable conditions such as warm climate, abundant water, fertile soil and more suitable area for low cost infrastructural development while having these adverse conditions, the mountainous part of the region is sparsely inhabited. According to Census 2011, the Himalaya is recorded 4, 67, 90, 642 persons accounting of 3.77 % of total population of the country. Among the Himalayan states Jammu and Kashmir is the biggest in the area and largest in the population having 26.8 % of the Himalaya and 1.04% of country's population in the Census 2011. Uttarakhand with a population of 1,00,86,292 persons accounting to 0.83% of the country's and 14.67 % of the Indian Himalayan Region's population is the second largest populated state in the Himalaya. Sikkim is the smallest state in the Indian Himalaya with a population of 6, 10, 577 persons accounting 0.05% of the total country's population. Mizoram is second smallest state has a population of 10, 97, 206 accounting for 0.09% of total population of the nation (Table 1).

District wise distribution of Himalayan population varies from minimum 0.02% in the Dibang Valley of Arunachal Pradesh to maximum 4.04 % in the Hardwar district of Uttarakhand state. Table 2 gives the spatial distribution of districts by different ranges and groups of population concentration of the Himalaya. The concentration of the Himalayan population has been grouped into eight groups i.e. below 0.50 %, 0.51 to 1.00 %, 1.01 to 1.50 %, 1.51 to 2.00 %, 2.01 to 2.50 %, 2.51 to 3.00 %, 3.01 to 3.50 % and more than 3.51 % respectively classified as extremely low concentrated zone, very low, low, medium, moderate, high, very high and extremely high concentrated zone (Table 2). Out of total 109 districts of the Himalaya 41.28% districts have less than 0.50% of Himalaya's population. These are Kishtwar, Dima Hasao, Tuensang, Mokokchung, Senapati (Excluding 3 Sub-Divisions), Ukhrul, Papum Pare, Wokha, Phek, Lunglei, Changlang, South Sikkim, Lohit, Chandel, South Garo Hills, Kargil, Zunheboto, Tamenglong, West Sikkim.

TABLE 1: DISTRIBUTION OF AREA AND POPULATION IN THE INDIAN HIMALAYAN REGION (I.H.R.), 2011

	Geographical Area				Total			% of total		Population	Number	% age of	
Sl. No.	State/Region	Area	% age of total		Population (Numbers)			Population		0-6 years	of	total District	
		(Km <sup>2</sup> )	I.H.R.	India	Persons	Males	Females	I.H.R.	India	% of total	District	I.H.R.	India
1	Jammu & Kashmir	222236	41.6	6.76	12541302	6640662	5900640	26.80	1.04	16.1	22	20.18	3.4
2	Himachal Pradesh	55673	10.4	1.69	6864602	3481873	3382729	14.67	0.57	11.3	12	11.0	1.9
3	Uttarakhand	53483	10.0	1.63	10086292	5137773	4948519	21.56	0.83	13.4	13	11.9	2.0
4	Sikkim	7096	1.3	0.22	610577	323070	287507	1.30	0.05	10.5	4	3.7	0.6
5	Arunachal Pradesh	83743	15.7	2.55	1383727	713912	669815	2.96	0.11	15.3	16	14.7	2.5
6	Nagaland	16579	3.1	0.50	1978502	1024649	953853	4.23	0.16	14.7	11	10.1	1.7
7	Manipur *	22327	4.2	0.68	2570390	1290171	1280219	5.49	0.21	13.2	9	8.3	1.4
8	Mizoram	21081	4.0	0.64	1097206	555339	541867	2.34	0.09	15.4	8	7.3	1.3
9	Tripura	10486	2.0	0.32	3673917	1874376	1799541	7.85	0.30	12.5	4	3.7	0.6
10	Meghalaya	22429	4.2	0.68	2966889	1491832	1475057	6.34	0.25	19.2	7	6.4	1.1
11	W.B. Hills	3149	0.6	0.10	1846823	937259	909564	3.95	0.15	10.5	1	0.9	0.2
12	Assam Hills	15324	2.9	0.47	1170415	600969	569446	2.50	0.10	15.7	2	1.8	0.3
Indian Himalayan Region**		533606	100.0	16.23	46790642	24071885	22718757	100.00	3.77	14.2	109	100.0	17.0
India**		3287260	-----	100.00	1210569573	623121843	587447730	-----	100.00	13.6	640	-----	100.0

Source: Census of India, 2011

Note: \* The population of Manipur State of Senapati district by sex includes the estimated population of Mao Maram, Paomata and Purul sub-divisions of Senapati district for 2001. Final population of Mao Maram, Paomata and Purul sub-divisions of Senapati district for 2011 has been released and now Manipur population is 2855749 persons, 1438586 males and 1417208 females.

\*\* Excl. 3 Sub-divisions of Senapati Distt. of Manipur

Leh (Ladakh), Champhai, Lawngtlai, West Siang, Tirap, East Siang, Peren, Kurung Kumey, Mamit, Kinnaur, Kolasib, West Kameng, Upper Subansiri, Lower Subansiri, East Kameng, Kiphire, Serchhip, Saiha, Lower Dibang Valley, Longleng, Tawang, North Sikkim, Upper Siang, Lahul & Spiti, Anjaw and Dibang Valley. About 27.52 % districts have 0.51 to 1.00 % population of the Himalaya. These are Imphal East, Hamirpur, Kullu, Kulgam, Thoubal, Doda, Aizawl, Jaintia Hills, Bandipore, Chamoli, West Khasi Hills, Bilaspur, Dimapur, Dhalai,



TABLE 2: DISTRIBUTION OF DISTRICTS BY RANGES OF PROPORTION OF COUNTRY'S POPULATION IN THE INDIAN HIMALAYAN REGION, 2011

Concentration Zone/Region	Ranges (%)	HIMALAYAN DISTRICTS		
		No.	% of total	Name
Extremely Low	Below 0.50	45	41.28	Kishtwar, Dima Hasao, Tuensang, Mokochung, Senapati (Excluding 3 Sub-Divisions), Ukhrul, Papum Pare, Wokha, Phek, Lunglei, Changlang, South Sikkim, Lohit, Chandel, South Garo Hills, Kargil, Zunheboto, Tamenglong, West Sikkim, Leh(Ladakh), Champhai, Lawngtlai, West Siang, Tirap, East Siang, Peren, Kurung Kumey, Mamit, Kinnaur, Kolasib, West Kameng, Upper Subansiri, Lower Subansiri, East Kameng, Kiphire, Serchhip, Saiha, Lower Dibang Valley, Longleng, Tawang, North Sikkim, Upper Siang, Lahul & Spiti, Anjaw and Dibang Valley.
Very Low	0.51-1.00	30	27.52	Imphal East, Hamirpur, Kullu, Kulgam, Thoubal, Doda, Aizawl, Jaintia Hills, Bandipore, Chamlai, West Khasi Hills, Bilaspur, Dimapur, Dhalai, Uttarkashi, Samba, East Garo Hills, Reasi, Ganderbal, Ramban, East Sikkim, Churachandpur, Kohima, Shupian, Bageshwar, Champawat, Ribhoi, Mon, Rudrapur and Bishnupur.
Low	1.01-1.50	16	14.68	North Tripura, Garhwal, West Garo Hills, Rajouri, Almora, Tehri Garhwal, Kathua, Solan, Pulwama, Udhampur, Sirmour, Una, Chamba, Imphal West, Pithoragarh and Punch.
Medium	1.51-2.00	5	4.59	South Tripura, Kupwara, East Khasi Hills, Shimla and Badgam.
Moderate	2.01-2.50	5	4.59	Anantnag, Baramula, Mandi, Karbi Anglong and Nainital.
High	2.51-3.00	1	0.92	Srinagar.
Very High	3.01-3.50	2	1.83	Jammu and Kangra.
Extremely High	Above 3.51	5	4.59	Hardwar, Darjiling, West Tripura, Dehradun and Udhampur Singh Nagar.
-----	Total	109	100.00	-----

Source: Census of India, 2011 and Districts are classified by the author.

Uttarkashi, Samba, East Garo Hills, Reasi, Ganderbal, Ramban, East Sikkim, Churachandpur, Kohima, Shupian, Bageshwar, Champawat, Ribhoi, Mon, Rudrapur and Bishnupur. About 14.68 % have 1.01 to 1.50 % population of the Indian Himalaya. These are North Tripura, Garhwal, West Garo Hills, Rajouri, Almora, Tehri Garhwal, Kathua, Solan, Pulwama, Udhampur, Sirmour, Una, Chamba, Imphal West, Pithoragarh and Punch. Out of the total 109 districts of the Himalaya, 9.18 % districts have 1.51 % to 2.5 % population of the Himalaya. These are South Tripura, Kupwara, East Khasi Hills, Shimla, Badgam, Anantnag, Baramula, Mandi, Karbi Anglong and Nainital. Only 4.59 % districts have more than 3.51 % population of the Himalaya. These are Udhampur Singh Nagar (3.51%), Dehradun (3.62%), West Tripura (3.67%), Darjiling (3.92%) and Haridwar (4.1%). It is worth to mention that the districts which have more inhospitable geographical area particularly relief and climate registered less concentration of population while the districts have relatively less rugged terrain, fertile land, conducive climate, good irrigational and infrastructural development with migration from the hills are some positive factors for high concentration of Himalayan population.

## PATTERNS OF POPULATION GROWTH DURING 1901 TO 2011

### POPULATION GROWTH DURING 1901-1911

As per available data for 1901, the total population of the Indian Himalayan Region was 7346614 persons which increased 7909638 persons in 1911. The population growth of the Himalayan Region during the Census 1901 to 1911 was registered by 7.66 % which was higher than the country's growth (5.75 %). The growth rates were varied minimum from -1.22 % in Himachal Pradesh to maximum 48.98 % in Sikkim. Population figures for Arunachal Pradesh and Assam Hills were not available during 1901 and 1911. It is worth to mention that some of the states and districts were not existed as a separate state and districts during 1901 and 1911 but the Census authorities have compiled the data for such states and districts in these years also. There were three state / region (25 %) which population was increased from 5.31% to 8.2 %. These were W. B. Hills, Jammu and Kashmir and Uttarakhand. Out of total twelve states / region, 33 % had more than 21% growth rates during the specified decade of 1901 to 1911. These were Sikkim, Nagaland, Tripura and Manipur (Table 3).

The growth of population during 1901 to 1911 has been computed for the present 109 districts of the Indian Himalaya. The growth rate varies from -33.12 % in Dima Hasao district of Assam Hills to 133.99 % South Tripura district of Tripura State. Table 4 gives the distribution of districts by ranges of decadal growth (1901-1911) of population in the Indian Himalayan Region.

TABLE 3: DECADEAL GROWTH IN POPULATION DURING 1901-1911

India/State/Region	Persons	Growth since the preceding census 1901		Males	Females
		Absolute	Percentage		
Jammu & Kashmir	2,292,535	153,173	7.16	1,222,305	1,070,230
Himachal Pradesh	1,896,944	-23,350	-1.22	1,004,183	892,761
Uttarakhand	2,142,258	162,392	8.2	1,123,165	1,019,093
Sikkim	87,920	28,906	48.98	45,059	42,861
Arunachal Pradesh	N.A	N.A	N.A	N.A.	N.A.
Nagaland	149,038	47,488	46.76	74,796	74,242
Manipur	346,222	61,757	21.71	170,666	175,556
Mizoram	91,204	8,770	10.64	43,028	48,176
Tripura	229,613	56,288	32.48	121,820	107,793
Meghalaya	394,005	53,481	15.71	195,706	198,299
Assam Hills	N.A	N.A	N.A	N.A.	N.A.
W. B. Hills	279,899	14,119	5.31	149,636	130,263
<b>Indian Himalayan Region</b>	<b>7,909,638</b>	<b>563,024</b>	<b>7.66</b>	<b>4,150,364</b>	<b>3,759,274</b>
India	252,093,390	13,697,063	5.75	128,385,368	123,708,022

Source: Census of India, 2011.

Out of total 109 districts of Himalaya 39.45 % districts either was not existed as separate districts during 1901 to 1911 or population data is not available. About 11.01 % have recorded negative growth during 1901 to 1911. It may be due to some natural causes. These are Nainital, U.S. Nagar, Kathua, Hamirpur, Una, Kangra, Shimla, Samba, Jammu, Hardwar, Solan and Dima Hasao. There are 13.76 % districts which growth rates were between 0.01 to 10.0% only. These are Punch, Kishtwar, Doda, Ramban, Rajouri, Reasi, Udhampur, Chamba, Darjiling, Lahul & Spiti, Kinnaur, Kullu, Mandi, Bilaspur and Sirmour. About 26.6 % districts of the Himalaya were fallen in the range of 10.01 to 20.0 % growth rate. There were 6.42 % Himalayan districts falls in the range of 40.01 to 50.0 % growth rate. These are Dimapur, Phek, Peren, Kohima, Zunheboto, Wokha and Mokochung. Only three or 2.75 % districts had more than 50.01 % unprecedented growth during the decade of 1901 to 1911. These are South Tripura, Dhalai and North Tripura districts of Tripura State. It is clear from the table 3 that the maximum population growth was registered in Eastern Districts of Indian Himalaya. It was probably due to the urbanization and expansion of missionaries in this region and its impact on tribal society.



TABLE 4: DISTRIBUTION OF DISTRICTS BY RANGES OF DECADAL POPULATION GROWTH IN THE INDIAN HIMALAYAN REGION DURING 1901 TO 1911

Growth Zone	Growth Ranges (%)	Districts		
		No	%	Name
Data Not Available	N.A.	43	39.45	West Tripura, Karbi Anglong, North District (Sikkim), West District (Sikkim), South District (Sikkim), East District (Sikkim), Tawang, West Kameng, East Kameng, Papum Pare, Upper Subansiri, West Siang, East Siang, Upper Siang, Changlang, Tirap, Lower Subansiri, Kurung Kumey, Dibang Valley, Lower Dibang Valley, Lohit, Anjaw, Mon, Tuensang, Longleng, Kiphire, Senapati, Tamenglong, Churachandpur, Bishnupur, Thoubal, Imphal West, Imphal East, Ukhrul, Chandel, Mamit, Kolasib, Aizawl, Champhai, Serchhip, Lunglei, Lawngtlai and Saiha.
Negative	Below - 0.01	12	11.01	Nainital, U.S. Nagar, Kathua, Hamirpur, Una, Kangra, Shimla, Samba, Jammu, Hardwar, Solan and Dima Hasao.
Very Low	0.01-10.0	15	13.76	Punch, Kishtwar, Doda, Ramban, Rajouri, Reasi, Udhampur, Chamba, Darjiling, Lahul & Spiti, Kinnaur, Kullu, Mandi, Bilaspur and Sirmour.
Low	10.01-20.0	29	26.61	West Khasi Hills, Ribhoi, East Khasi Hills, Jaintia Hills, Pithoragarh, Bageshwar, Almora, Dehradun, East Garo Hills, South Garo Hills, West Garo Hills, Champawat, Leh (Ladakh), Kargil, Baramula, Bandipore, Kupwara, Uttarkashi, Tehri, Chamoli, Rudraprayag, Pauri, Anantnag, Shupiyan, Pulwama, Kulgam, Ganderbal, Srinagar and Badgam.
Average	20.01-30.0	Nil	Nil	Nil
Moderate High	30.01-40.0	Nil	Nil	Nil
High	40.01-50.0	7	6.42	Dimapur, Phek, Peren, Kohima, Zunheboto, Wokha and Mokokchung.
Very High	Above 50.01	3	2.75	South Tripura, Dhalai and North Tripura.
Total		109	100.0	-----

Source: Census of India, 2011 and Districts are classified by the author.

#### GROWTH OF POPULATION DURING 1911-1921

The total population of the Indian Himalayan Region was 7909638 persons in 1911 which were increased 8212570 persons in 1921. The population growth of the Himalayan Region was registered 3.83 % while the entire country recorded negative growth rate (-0.31%) during the second decade of 1911 to 1921. The growth rates were varied minimum from -7.05 % in Sikkim to maximum 32.59 % in Tripura. Likewise, the country, Uttarakhand and Sikkim states were registered negative growth in the decade of 1911 to 1921. Population figures for Arunachal Pradesh and Assam Hills were not available during this decade. There were two states (16.67 %) which population was increased from more than 10 %. These were Manipur (10.92) and Tripura (32.59%).

TABLE 5: DECADAL VARIATION IN POPULATION DURING 1911-1921

India/State/Region	Persons	Variation since the preceding census 1911		Males	Females
		Absolute	Percentage		
Jammu & Kashmir	2,424,359	131,824	5.75	1,296,205	1,128,154
Himachal Pradesh	1,928,206	31,262	1.65	1,020,201	908,005
Uttarakhand	2,115,984	-26,274	-1.23	1,104,586	1,011,398
Sikkim	81,721	-6,199	-7.05	41,492	40,229
Arunachal Pradesh	N.A	N.A	N.A	N.A.	N.A.
Nagaland	158,801	9,763	6.55	79,738	79,063
Manipur	384,016	37,794	10.92	188,119	195,897
Mizoram	98,406	7,202	7.9	46,652	51,754
Tripura	304,437	74,824	32.59	161,515	142,922
Meghalaya	422,403	28,398	7.21	211,216	211,187
Assam Hills	N.A	N.A	N.A	N.A.	N.A.
W. B. Hills	294,237	14,338	5.12	155,014	139,223
<b>Indian Himalayan Region</b>	<b>8,212,570</b>	<b>302,932</b>	<b>3.83</b>	<b>4,304,738</b>	<b>3,907,832</b>
India	251,321,213	-772,177	-0.31	128,546,225	122,774,988

Source: Census of India, 2011.

Out of total twelve states /region, 41.67 % had 5 to 10% growth rates during the specified period of 1911 to 1921. These were Jammu and Kashmir, Nagaland, Mizoram, Meghalaya and W. B. Hills. Himachal Pradesh was registered only 1.65% growth during 1911 to 191 (Table 5). The growth of population during 1911 to 1921 has been computed for the present 109 districts of the Indian Himalaya. The growth rate between 1911 to 1921 decades varied from -14.4 % in Nainital district of Uttarakhand to + 61.25 % North Tripura district of Tripura State. Table 6 gives the distribution of districts by ranges of decadal growth (1911-1921) of population in the Indian Himalayan Region.

TABLE 6: DISTRIBUTION OF DISTRICTS BY RANGES OF DECADAL POPULATION GROWTH IN THE INDIAN HIMALAYAN REGION DURING 1911 TO 1921

Growth Zone	Growth Ranges (%)	Districts		
		No	%	Name
Data Not Available	N.A.	42	38.53	Karbi Anglong, North Sikkim, West Sikkim, South Sikkim, East Sikkim, Tawang, West Kameng, East Kameng, Papum Pare, Upper Subansiri, West Siang, East Siang, Upper Siang, Changlang, Tirap, Lower Subansiri, Kurung Kumey, Dibang Valley, Lower Dibang Valley, Lohit, Anjaw, Mon, Tuensang, Longleng, Kiphire, Senapati, Tamenglong, Churachandpur, Bishnupur, Thoubal, Imphal West, Imphal East, Ukhrul, Chandel, Mamit, Kolasib, Aizawl, Champhai, Serchhip, Lunglei, Lawngtlai and Saiha.
Negative	Below - 0.01	6	5.50	Kinnaur, Lahul & Spiti, Champawat, Kullu, Hardwar and Nainital.
Very Low	0.01-10.0	48	44.04	Zunheboto, Ganderbal, Srinagar, Badgam, Rajouri, Dima Hasao, Uttarkashi, Tehri, Pulwama, Kulgam, Anantnag, Shupiyan, Bilaspur, Punch, Darjiling, Chamba, Reasi, Udhampur, Dehradun, West Khasi Hills, Ribhoi, East Khasi Hills, Jaintia Hills, Peren, Kohima, Dimapur, Phek, Rudraprayag, Jammu, Samba, Shimla, Kathua, Ramban, Mandi, Sirmour, Kargil, Leh (Ladakh), Chamoli, Pauri, Pithoragarh, Bageshwar, Almora, Doda, Kishtwar, U.S. Nagar, Kangra, Una and Hamirpur.
Low	10.01-20.0	9	8.26	West Garo Hills, South Garo Hills, East Garo Hills, Solan, Wokha, Mokokchung, Baramula, Kupwara and Bandipore.
Average	20.01-30.0	2	1.83	West Tripura and South Tripura.
Moderate High	30.01-40.0	Nil	Nil	Nil
High	40.01-50.0	1	0.92	Dhalai
Very High	Above 50.01	1	0.92	North Tripura
Total	-----	109	100.0	-----

Source: Census of India, 2011 and Districts are classified by the author.

Out of total 109 districts of Himalaya 38.53 % districts either was not existed as separate districts during 1901 to 1911 or population data is not available. About 5.5 % have recorded negative growth during 1901 to 1911. These are Kinnaur, Lahul & Spiti, Champawat, Kullu, Hardwar and Nainital. There are 44.04 % districts which growth rates were between 0.01 to 10.0% only. These are Zunheboto, Ganderbal, Srinagar, Badgam, Rajouri, Dima Hasao, Uttarkashi, Tehri, Pulwama, Kulgam, Anantnag, Shupiyan, Bilaspur, Punch, Darjiling, Chamba, Reasi, Udhampur, Dehradun, West Khasi Hills, Ribhoi, East Khasi Hills, Jaintia Hills, Peren, Kohima, Dimapur, Phek, Rudraprayag, Jammu, Samba, Shimla, Kathua, Ramban, Mandi, Sirmaur, Kargil, Leh (Ladakh), Chamoli, Pauri, Pithoragarh, Bageshwar, Almora, Doda, Kishtwar, U.S. Nagar, Kangra, Una and Hamirpur. About 8.26 % districts of the Himalaya were fallen in the range of 10.01 to 20.0 % growth rate. These are West Garo Hills, South Garo Hills, East Garo Hills, Solan, Wokha, Mokochung, Baramula, Kupwara and Bandipore. There were 1.83 % Himalayan districts falls in the range of 20.01 to 30.0 % growth rate. These are West and South Tripura. Only Dhalai (0.92%) district had 40.01 to 50.0 % growth rate during the decade of 1911 to 1921. Similarly, North Tripura had 40.01 to 50.0 % growth rate during the same decade. It is clear from the tables 5 and 6 that the population growth was very low in the Districts of Indian Himalaya. It was probably due to the First World War and expansion of epidemics in the Himalayan Districts and country as a whole.

#### GROWTH OF POPULATION DURING 1921-1931

The total population of the Indian Himalayan Region was 8212570 persons in 1921 which was increased 8413255 persons in 1931 i.e. 8.49 % population growth was registered in the Himalayan Region during the Census 1921 to 1931 which was lower than the country's growth (11.0%). The growth rates were varied minimum 5.23 % in Jammu & Kashmir and Himachal Pradesh to maximum 34.37 % in Sikkim. Population figures for Arunachal Pradesh and Assam Hills were not available during 1921 and 1931. It is worth to mention that some of the states and districts were not existed as a separate state and districts during 1921 and 1931 but the Census authorities have computed the data for such states and districts in these years also.

There were three state / region (25 %) which population was increased from 5.00% to 10.0 % during 2011 to 2031. These were Jammu and Kashmir, Himachal Pradesh and Uttarakhand. Out of total twelve states/region, 33.33 % had 10.0 to 20% growth rates during the specified decade of 1921 to 1931. These were Nagaland, Meghalaya, W.B. Hills and Manipur. The population growth of remaining three states, namely, Sikkim (34.37%), Mizoram (26.42%) and Manipur (25.63%) were more than 20% (Table 7). The population growth rate varies from -5.71 % in Solan district of Himachal Pradesh to 30.40 % in North Tripura district of Tripura State during the decade of 1921 to 1931. Table 8 gives the distribution of districts by ranges of decadal growth (1921-1931) of population in the Indian Himalayan Region.

TABLE 7: DECADEAL GROWTH IN POPULATION DURING 1921-1931

India/State/Region	Persons	Growth since the preceding census 1921		Males	Females
		Absolute	Percentage		
Jammu & Kashmir	2,029,113	100,907	5.23	1,069,540	959,573
Himachal Pradesh	2,029,113	100,907	5.23	1,069,540	959,573
Uttarakhand	2,301,019	185,035	8.74	1,202,594	1,098,425
Sikkim	109,808	28,087	34.37	55,825	53,983
Arunachal Pradesh	N.A	N.A	N.A	N.A.	N.A.
Nagaland	178,844	20,043	12.62	89,536	89,308
Manipur	445,606	61,590	16.04	215,815	229,791
Mizoram	124,404	25,998	26.42	59,186	65,218
Tripura	382,450	78,013	25.63	202,932	179,518
Meghalaya	480,837	58,434	13.83	243,993	236,844
Assam Hills	N.A	N.A	N.A	N.A.	N.A.
W. B. Hills	332,061	37,824	12.85	176,551	155,510
<b>Indian Himalayan Region</b>	<b>8,413,255</b>	<b>696,838</b>	<b>8.49</b>	<b>4,385,512</b>	<b>4,027,743</b>
India	278,977,238	27,656,025	11.00	142,929,689	135,788,921

Source: Census of India, 2011.

Out of total districts of Himalaya, 38.53 % districts were not existed as separate districts during 1921 to 1931 or population data is not available. Only one (0.92 %) district-Solan had registered 5.71 % negative growth during 1921 to 1931. There are 33.94 % districts which growth rates were between 0.01 to 10.0% only. These are Chamoli, Rudraprayag, Pithoragarh, Bageshwar, Almora, Uttarkashi, Tehri, Samba, Kulgam, Anantnag, Pulwama, Shupiyan, Champawat, Dehradun, Punch, Kinnaur, Kullu, Lahul & Spiti, East Garo Hills, South Garo Hills, West Garo Hills, Udhampur, Reasi, Sirmaur, Rajouri, Una, Hamirpur, Kangra, U.S. Nagar, Kargil, Leh (Ladakh), Kathua, Shimla, Chamba, Bilaspur, Pauri and Nainital. About 22.94 % districts of the Himalaya were fallen in the range of 10.01 to 20.0 % growth rate. There were 2.75 % Himalayan districts fell in the range of 20.01 to 30.0 % growth rate. These are Dhalai, South Tripura and West Tripura districts. Only one (0.92 %) North Tripura district of Tripura state was in the range between 30.01 to 40.00 % growth rate during the decade of 1921 to 1931 (Table 8).

TABLE 8: DISTRIBUTION OF DISTRICTS BY RANGES OF DECADEAL POPULATION GROWTH IN THE INDIAN HIMALAYAN REGION DURING 1921 TO 1931

Growth Zone	Growth Ranges (%)	Districts		
		No	%	Name
Data Not Available	N.A.	42	38.53	Karbi Anglong, North Sikkim, West Sikkim, South Sikkim, East Sikkim, Tawang, West Kameng, East Kameng, Papum Pare, Upper Subansiri, West Siang, East Siang, Upper Siang, Changlang, Tirap, Lower Subansiri, Kurung Kumey, Dibang Valley, Lower Dibang Valley, Lohit, Anjaw, Mon, Tuensang, Longleng, Kiphire, Senapati, Tamenglong, Churachandpur, Bishnupur, Thoubal, Imphal West, Imphal East, Ukhrul, Chandel, Mamit, Kolasib, Aizawl, Champhai, Serchhip, Lunglei, Lawngtlai and Saiha.
Negative	Below - 0.01	1	0.92	Solan.
Very Low	0.01-10.0	37	33.94	Chamoli, Rudraprayag, Pithoragarh, Bageshwar, Almora, Uttarkashi, Tehri, Samba, Kulgam, Anantnag, Pulwama, Shupiyan, Champawat, Dehradun, Punch, Kinnaur, Kullu, Lahul & Spiti, East Garo Hills, South Garo Hills, West Garo Hills, Udhampur, Reasi, Sirmaur, Rajouri, Una, Hamirpur, Kangra, U.S. Nagar, Kargil, Leh (Ladakh), Kathua, Shimla, Chamba, Bilaspur, Pauri, Nainital,
Low	10.01-20.0	25	22.94	West Khasi Hills, Ribhoi, East Khasi Hills, Jaintia Hills, Badgam, Srinagar, Ganderbal, Kishtwar, Doda, Mokochung, Wokha, Dima Hasao, Zunheboto, Darjiling, Ramban, Kohima, Phek, Dimapur, Peren, Baramula, Bandipore, Kupwara, Hardwar, Mandi and Jammu.
Average	20.01-30.0	3	2.75	Dhalai, South Tripura and West Tripura.
Moderate High	30.01-40.0	1	0.92	North Tripura.
High	40.01-50.0	Nil	Nil	Nil
Very High	Above 50.01	Nil	Nil	Nil
Total	-----	109	100.0	-----

Source: Census of India, 2011 and districts are classified by the author

**GROWTH OF POPULATION DURING 1931-1941**

The total population of the Indian Himalayan Region was 8413255 persons in 1931 which was increased 10393660 persons in 1941 i.e. 14.33% population growth was registered in the Himalayan Region during the Census 1931 to 1941 which was 0.11% higher than the country's growth (14.220%). The growth rates were varied minimum 6.04 % in Nagaland to maximum 34.14 % in Tripura. Population figures for Arunachal Pradesh and Assam Hills were not available during 1931 and 1941. It is worth to mention that some of the states and districts were not existed as a separate state and districts during 1931 and 1941 but the Census authorities have computed the data for such states and districts in these years in their parent states and districts.

**TABLE 9: DECADEAL VARIATION IN POPULATION DURING 1931-1941**

India/State/Region	Persons	Variation since the preceding census 1931		Males	Females
		Absolute	Percentage		
Jammu & Kashmir	2,946,728	276,520	10.36	1,577,021	1,369,707
Himachal Pradesh	2,263,245	234,132	11.54	1,197,620	1,065,625
Uttarakhand	2,614,540	313,521	13.63	1,371,233	1,243,307
Sikkim	121,520	11,712	10.67	63,289	58,231
Arunachal Pradesh	N.A	N.A	N.A	N.A.	N.A.
Nagaland	189,641	10,797	6.04	93,831	95,810
Manipur	512,069	66,463	14.92	249,183	262,886
Mizoram	152,786	28,382	22.81	73,855	78,931
Tripura	513,010	130,560	34.14	272,025	240,985
Meghalaya	555,820	74,983	15.59	282,666	273,154
Assam Hills	133,402	N.A	N.A	68,965	64,437
W. B. Hills	390,899	58,838	17.72	207,508	183,391
<b>Indian Himalayan Region</b>	<b>10,393,660</b>	<b>1,205,908</b>	<b>14.33</b>	<b>5,457,196</b>	<b>4,936,464</b>
India	318,660,580	39,683,342	14.22	163,685,302	154,690,267

Source: Census of India, 2011.

There was one state (25 %) Nagaland which population was increased only 6.04% during 1931 to 1941. Out of total twelve states /region, 58.33 % had 10.0 to 20% growth rates during the specified decade of 1931 to 1941. These were Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, Meghalaya, W.B. Hills and Manipur. Only two states (16.67%) Mizoram and Tripura which decadal growth was registered 22.81% and 34.14% respectively during 1931 to 1941 (Table 9).

The growth of population during 1931 to 1941 has been computed for the present 109 districts of the Indian Himalaya. The growth rate varied from -0.49 % in Phek district of Nagaland state to 35.68 % West Tripura district of Tripura State. Table 10 gives the distribution of districts by ranges of decadal growth (1931-1941) of population in the Indian Himalayan Region. Out of total 109 districts of Himalaya 38.53 % districts either was not existed as separate districts during 1931 to 1941 or population data is not available and their population was included in the parent state or district. About 3.67 % have recorded negative growth during 1931 to 1941. These are Peren, Dimapur, Kohima and Phek.

**TABLE 10: DISTRIBUTION OF DISTRICTS BY RANGES OF DECADEAL POPULATION GROWTH IN THE INDIAN HIMALAYAN REGION DURING 1931 TO 1941**

Growth Zone	Growth Ranges (%)	Districts		
		No	%	Name
Data Not Available	N.A.	42	38.53	Karbi Anglong, North Sikkim, West Sikkim, South Sikkim, East Sikkim, Tawang, West Kameng, East Kameng, Papum Pare, Upper Subansiri, West Siang, East Siang, Upper Siang, Changlang, Tirap, Lower Subansiri, Kurung Kumey, Dibang Valley, Lower Dibang Valley, Lohit, Anjaw, Mon, Tuensang, Longleng, Kiphire, Senapati, Tamenglong, Churachandpur, Bishnupur, Thoubal, Imphal West, Imphal East, Ukhrul, Chandel, Mamit, Kohlasib, Aizawl, Champhai, Serchhip, Lunglei, Lawngtlai and Saiha.
Negative	Below - 0.01	4	3.67	Peren, Dimapur, Kohima and Phek.
Very Low	0.01-10.0	19	17.43	Bilaspur, Kinnaur, Shimla, Udhampur, Reasi, Solan, Ramban, Doda, Kishtwar, Lahul & Spiti, Kulgam, Pulwama, Anantnag, Shupian, Leh (Ladakh), Kargil, Nainital, Sirmour and Kullu.
Low	10.01-20.0	40	36.70	Pithoragarh, Bageshwar, Almora, Darjiling, South Garo Hills, East Garo Hills, West Garo Hills, Champawat, Chamba, Dehradun, Jammu, U.S. Nagar, West Khasi Hills, Ribhoi, East Khasi Hills, Jaintia Hills, Mandi, Wokha, Mokokchung, Badgam, Samba, Srinagar, Hamirpur, Kangra, Una, Ganderbal, Dima Hasao, Uttarkashi, Tehri, Hardwar, Rudrapur, Chamoli, Pauri, Zunheboto, Rajouri, Kupwara, Bandipore, Baramula, Kathua and Punch.
Average	20.01-30.0	Nil	Nil	Nil
Moderate High	30.01-40.0	4	3.67	West Tripura, North Tripura, Dhalai and South Tripura.
High	40.01-50.0	Nil	Nil	Nil
Very High	Above 50.01	Nil	Nil	Nil
Total	-----	109	100.0	-----

Source: Census of India, 2011

There are 17.43 % districts which growth rates were between 0.01 to 10.0% only. These are Bilaspur, Kinnaur, Shimla, Udhampur, Reasi, Solan, Ramban, Doda, Kishtwar, Lahul & Spiti, Kulgam, Pulwama, Anantnag, Shupian, Leh (Ladakh), Kargil, Nainital, Sirmour and Kullu. About 36.7 % districts of the Himalaya were fallen in the range of 10.01 to 20.0 % growth rate. These were Pithoragarh, Bageshwar, Almora, Darjiling, South Garo Hills, East Garo Hills, West Garo Hills, Champawat, Chamba, Dehradun, Jammu, U.S. Nagar, West Khasi Hills, Ribhoi, East Khasi Hills, Jaintia Hills, Mandi, Wokha, Mokokchung, Badgam, Samba, Srinagar, Hamirpur, Kangra, Una, Ganderbal, Dima Hasao, Uttarkashi, Tehri, Hardwar, Rudrapur, Chamoli, Pauri, Zunheboto, Rajouri, Kupwara, Bandipore, Baramula, Kathua and Punch. There were only 3.67 % Himalayan districts fell in the range of 30.01 to 40.0 % growth rate. These are West Tripura, North Tripura, Dhalai and South Tripura.

**GROWTH OF POPULATION DURING 1941-1951**

As per available data for 1941, the total population of the Indian Himalayan Region was 10393660 persons which increased 11580059 persons in 1951. It was first Census after independence. The population growth of the Himalayan Region during the Census 1941 to 1951 was registered by 11.35 % which was lower than the previous decade and lower than the country's growth (13.31 %) during 1941 to 1951. The growth rates were varied minimum from 5.42 % in Himachal Pradesh to maximum 28.42 % in Mizoram. Population figures for Arunachal Pradesh were not available during 1941 and 1951. It is worth to mention that some of the states and districts were not existed as a separate independent unit during 1941 and 1951 but the Census authorities have computed the data for such states and districts in these years in their parent states or districts also. There were three state / region (25 %) which population was increased between the ranges of 5.01% to 10.0 %. These were Himachal Pradesh, Nagaland and Meghalaya. Out of total twelve states /region, 41.67 % had registered 10.01 to 20.0% growth rates during the specified decade of 1941 to 1951. These were Jammu & Kashmir, Uttarakhand, Sikkim, W. B. Hills and Manipur. Only two states (16.67%) Mizoram and Tripura which decadal growth was registered 28.42% and 24.56 % respectively during 1941 to 1951 (Table 11).

The growth of population during 1941 to 1951 has been computed for the present 109 districts of the Indian Himalaya. The growth rate varies from -3.40 % in Rajouri district of Jammu & Kashmir to 37.6 % in U. S. Nagar district of Uttarakhand State. Table 12 gives the distribution of districts by ranges of decadal growth

(1941-1951) of population in the Indian Himalayan Region. Out of total 109 districts of Himalaya 37.61 % districts either was not existed as separate districts during 1941 to 1951 or population data is not available but the Census authorities have computed the data for such states and districts in these years in their parent states and districts. About 4.59 % have recorded negative growth during 1941 to 1951. These are Phek, Kohima, Dimapur, Peren and Rajouri. There are 28.44 % districts which growth rates were between 0.01 to 10.0% only.

**TABLE 11: DECADEAL VARIATION IN POPULATION DURING 1941-1951**

India/State/Region	Persons	Variation since the preceding census 1941		Males	Females
		Absolute	Percentage		
Jammu & Kashmir	3,253,852	307,124	10.42	1,736,827	1,517,025
Himachal Pradesh	2,385,981	122,736	5.42	1,247,826	1,138,155
Uttarakhand	2,945,929	331,389	12.67	1,518,844	1,427,085
Sikkim	137,725	16,205	13.34	72,210	65,515
Arunachal Pradesh	N.A	N.A	N.A	N.A.	N.A.
Nagaland	212,975	16,309	8.6	106,551	106,424
Manipur	577,635	65,566	12.8	283,685	293,950
Mizoram	196,202	43,416	28.42	96,136	100,066
Tripura	639,029	126,019	24.56	335,589	303,440
Meghalaya	605,674	49,854	8.97	310,706	294,968
Assam Hills	165,440	32,038	24.02	86,430	79,010
W. B. Hills	459,617	68718.00	17.58	246,738	212,879
<b>Indian Himalayan Region</b>	<b>11,580,059</b>	<b>1,179,374</b>	<b>11.35</b>	<b>6,041,542</b>	<b>5,538,517</b>
India	361,088,090	42,420,485	13.31	185,528,462	175,559,628

Source: Census of India, 2011.

These are Kupwara, Baramula, Bandipore, Samba, West Khasi Hills, Ribhoi, East Khasi Hills, Jaintia Hills, Kathua, South Tripura, Kargil, Leh (Ladakh), South Garo Hills, East Garo Hills, West Garo Hills, Sirmaur, Chamoli, Pauri, Kullu, Dima Hasao, Rudraprayag, Lahul & Spiti, Punch, Kinnaur, Uttarkashi, Tehri, Mandi, Kangra, Una, Hamirpur and Chamba. About 23.85 % districts of the Himalaya were fallen in the range of 10.01 to 20.0 % growth rate. There were 4.59 % Himalayan districts falls in the range of 30.01 to 40.0 % growth rate. These are U.S. Nagar, West Tripura, Dehradun, Solan and Karbi Anglong. Only one or 0.92 % (North Tripura) district was between the ranges 20.01 to 30.0 % growth rate during the decade of 1941 to 1951 (Table 12).

**TABLE 12: DISTRIBUTION OF DISTRICTS BY RANGES OF DECADEAL POPULATION GROWTH IN THE INDIAN HIMALAYAN REGION DURING 1941 TO 1951**

Growth Zone	Growth Ranges (%)	Districts		
		No	%	Name
Data Not Available	N.A.	41	37.61	North Sikkim, West Sikkim, South Sikkim, East Sikkim, Tawang, West Kameng, East Kameng, Papum Pare, Upper Subansiri, West Siang, East Siang, Upper Siang, Changlang, Tirap, Lower Subansiri, Kurung Kumey, Dibang Valley, Lower Dibang Valley, Lohit, Anjaw, Mon, Tuensang, Longleng, Kiphire, Senapati, Tamenglong, Churachandpur, Bishnupur, Thoubal, Imphal West, Imphal East, Ukhrul, Chandel, Mamit, Kolasib, Aizawl, Champhai, Serchhip, Lunglei, Lawngtlai and Saiha.
Negative	Below - 0.01	5	4.59	Phek, Kohima, Dimapur, Peren and Rajouri.
Very Low	0.01-10.0	31	28.44	Kupwara, Baramula, Bandipore, Samba, West Khasi Hills, Ribhoi, East Khasi Hills, Jaintia Hills, Kathua, South Tripura, Kargil, Leh (Ladakh), South Garo Hills, East Garo Hills, West Garo Hills, Sirmaur, Chamoli, Pauri, Kullu, Dima Hasao, Rudraprayag, Lahul & Spiti, Punch, Kinnaur, Uttarkashi, Tehri, Mandi, Kangra, Una, Hamirpur and Chamba.
Low	10.01-20.0	26	23.85	Mokokchung, Wokha, Darjiling, Kishtwar, Doda, Dhalai, Ramban, Zunheboto, Nainital, Hardwar, Badgam, Srinagar, Bilaspur, Ganderbal, Champawat, Pithoragarh, Bageshwar, Almora, Shupiyen, Kulgam, Anantnag, Pulwama, Udhampur, Reasi, Jammu and Shimla.
Average	20.01-30.0	1	0.92	North Tripura.
Moderate High	30.01-40.0	5	4.59	U.S. Nagar, West Tripura, Dehradun, Solan and Karbi Anglong.
High	40.01-50.0	Nil	Nil	Nil
Very High	Above 50.01	Nil	Nil	Nil
Total	-----	109		-----

Source: Census of India, 2011

#### GROWTH OF POPULATION DURING 1951-1961

The total population of the Indian Himalayan Region was 11580059 persons in 1951 which was increased 14714175 persons in 1961 i.e. 23.06 % population growth was registered in the Himalayan Region during the Census 1951 to 1961 which was 1.55% higher than the country's growth (21.51%). The growth rates were varied minimum 9.44 % in Jammu & Kashmir to maximum 78.71 % in Tripura. Population figures for Arunachal Pradesh were not available. It is worth to mention that Arunachal Pradesh was not existed as a separate state till the Census 1961 but the population figures in these years included in their parent state/region.

**TABLE 13: DECADEAL VARIATION IN POPULATION DURING 1951-1961**

India/State/Region	Persons	Variation since the preceding census 1951		Males	Females
		Absolute	Percentage		
Jammu & Kashmir	3,560,976	307,124	9.44	1,896,633	1,664,343
Himachal Pradesh	2,812,463	426,482	17.87	1,451,334	1,361,129
Uttarakhand	3,610,938	665,009	22.57	1,854,269	1,756,669
Sikkim	162,189	24,464	17.76	85,193	76,996
Arunachal Pradesh	336,558	N.A	N.A	177,680	158,878
Nagaland	369,200	28,975	14.07	191,027	178,173
Manipur	780,037	202,402	35.04	387,058	392,979
Mizoram	266,063	69,861	35.61	132,465	133,598
Tripura	1,142,005	502,976	78.71	591,237	550,768
Meghalaya	769,380	163,706	27.03	397,288	372,092
Assam Hills	279,726	114,286	69.08	150,127	129,599
W. B. Hills	624,640	165023.00	35.90	335,036	289,604
<b>Indian Himalayan Region</b>	<b>14,714,175</b>	<b>2,670,308</b>	<b>23.06</b>	<b>7,649,347</b>	<b>7,064,828</b>
India	439,234,771	77,682,873	21.51	226,293,201	212,941,570

Source: Census of India, 2011.



There were four states (33.34 %) which population growth was increased from 9.0 to 18.0 % during 1951 to 1961. These were Jammu & Kashmir, Himachal Pradesh, Sikkim and Nagaland.

Out of total twelve states /region, 41.67% had registered 20.0 to 40% growth rates during the specified decade of 1951 to 1961. These were Uttarakhand, Manipur, Mizoram, Meghalaya and W.B. Hills. Only two states/ region (16.67%), namely, Assam Hills and Tripura which decadal growth was registered 69.08% and 78.71% respectively during 1951 to 1961 (Table 13).

The growth of population during 1951 to 1961 has been computed for the present 109 districts of the Indian Himalaya. The growth rate varied from -3.52 % in Rajouri district of Jammu & Kashmir state to 528.78 % in Tuensang district of Nagaland state. Table 14 gives the distribution of districts by ranges of decadal growth (1951-1961) of population in the Indian Himalayan Region. Out of total 109 districts of Himalaya 24.44 % districts either was not existed as separate districts during 1951 to 1961 or population data is not available and their population was included in the parent state or district. Only one (0.92 %) Rajouri district of Jammu & Kashmir had recorded negative growth (-3.52%) during 1951 to 1961.

**TABLE 14: DISTRIBUTION OF DISTRICTS BY RANGES OF DECADAL POPULATION GROWTH IN THE INDIAN HIMALAYAN REGION DURING 1951 TO 1961**

Growth Zone	Growth Ranges (%)	Districts		
		No	%	Name
Data Not Available	N.A.	31	24.44	North Sikkim, West Sikkim, South Sikkim, East Sikkim, Tawang, West Kameng, East Kameng, Papum Pare, Upper Subansiri, West Siang, East Siang, Upper Siang, Changlang, Tirap, Lower Subansiri, Kurung Kumey, Dibang Valley, Lower Dibang Valley, Lohit, Anjaw, Mon, Longleng, Kiphire, Mamit, Kolasib, Aizawl, Champhai, Serchhip, Lunglei, Lawngtlai and Saiha.
Negative	Below - 0.01	1	0.92	Rajouri
Very Low	0.01-10.0	12	11.01	Reasi, Udhampur, Jammu, Bandipore, Baramula, Kupwara, Samba, Kathua, Leh (Ladakh), Kargil, Kullu and Punch.
Low	10.01-20.0	37	33.94	Chamoli, Shimla, Pithoragarh, Sirmour, Kinnaur, Dehradun, Haridwar, Ukhul, Wokha, Mokochung, Zunheboto, Uttarkashi, Hamirpur, Una, Kangra, Chandel, Solan, Bageshwar, Kishtwar, Doda, Pauri, Almora, Ramban, Rudrapur, Tehri, Badgam, Srinagar, Ganderbal, Tamenglong, Kohima, Peren, Phek, Dimapur, Shupian, Anantnag, Pulwama and Kulgam.
Average	20.01-30.0	12	11.01	South Garo Hills, West Khasi Hills, Ribhoi, East Khasi Hills, Jaintia Hills, Imphal West, East Garo Hills, West Garo Hills, Bilaspur, Chamba, Mandi and U.S. Nagar.
Moderate High	30.01-40.0	6	5.50	Bishnupur, Nainital, Dima Hasao, Thoubal, Darjiling and Champawat.
High	40.01-50.0	1	0.92	Churachandpur.
Very High	Above 50.01	9	8.26	Tuensang, South Tripura, Karbi Anglong, Dhalai, West Tripura, North Tripura, Lahul & Spiti, Senapati and Imphal East.
Total	----	109	100.0	-----

Source: Census of India, 2011

There were 11.01 % districts which growth rates were between 0.01 to 10.0% only. These are Reasi, Udhampur, Jammu, Bandipore, Baramula, Kupwara, Samba, Kathua, Leh (Ladakh), Kargil, Kullu and Punch. About 33.94 % districts of the Himalaya were fallen in the range of 10.01 to 20.0 % growth rate. These are Chamoli, Shimla, Pithoragarh, Sirmour, Kinnaur, Dehradun, Haridwar, Ukhul, Wokha, Mokochung, Zunheboto, Uttarkashi, Hamirpur, Una, Kangra, Chandel, Solan, Bageshwar, Kishtwar, Doda, Pauri, Almora, Ramban, Rudrapur, Tehri, Badgam, Srinagar, Ganderbal, Tamenglong, Kohima, Peren, Phek, Dimapur, Shupian, Anantnag, Pulwama and Kulgam. There were only 11.01 % Himalayan districts fell in the range of 20.01 to 30.0 % growth rate. These are South Garo Hills, West Khasi Hills, Ribhoi, East Khasi Hills, Jaintia Hills, Imphal West, East Garo Hills, Bilaspur, Chamba, Mandi and U.S. Nagar. About 5.50 % districts of the Himalaya had 30.01 to 40.0 % growth rate. These are Bishnupur, Nainital, Dima Hasao, Thoubal, Darjiling and Champawat. About 8.26% districts were recorded more than 50.01% growth rate. These are Tuensang, South Tripura, Karbi Anglong, Dhalai, West Tripura, North Tripura, Lahul & Spiti, Senapati and Imphal East.

#### GROWTH OF POPULATION DURING 1961-1971

The total population of the Indian Himalayan Region was 14714175 persons in 1961 which increased 18973911 persons in 1971. The population growth of the Himalayan Region during the decade of 1961 to 1971 was registered by 28.95 % which was 4.15% higher than the national growth (24.8%). The growth rates were varied minimum from 23.04 % in Himachal Pradesh to maximum 62.79 % in Assam Hills. There were fifty percent states / regions which population was increased from 20 to 30%. These were Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, Mizoram and W. B. Hills. Out of total twelve states /region, 41.67% had 30 to 40.0% growth rates during the specified decade of 1961 to 1971. These were Arunachal Pradesh, Nagaland, Manipur, Tripura and Meghalaya (Table 15). Assam Hills was recorded highest 62.79% growth rate during 1961 to 1971. The spurt growth of eastern Himalayan states/region was because of intrusion or international migration from Bangladesh and Myanmar (than known as Burma).

The growth rate varied during 1961 to 1971 minimum from 2.21 % in East Siang district of Arunachal Pradesh to 166.39% Dimapur district of Nagaland State. Table 16 gives the distribution of districts by ranges of decadal growth (1961-1971) of population in the Indian Himalayan Region. Out of total 109 districts of Himalaya 9.17 % districts either was not existed as separate districts during 1961 to 1971 or population data is not available. Only one district East Siang was between the ranges of 0.01 to 10.0 % growth rate. About 14.68 % have recorded 10.01 to 20.0% growth during 1961 to 1971. These are West Kameng, Leh (Ladakh), Ganderbal, Kargil, Kiphire, Chamoli, Lahul & Spiti, Chamba, Una, Almora, Pauri, Pithoragarh, Tehri, Rudrapur, South Garo Hills and Punch.

**TABLE 15: DECADAL VARIATION IN POPULATION DURING 1961-1971**

India/State/Region	Persons	Variation since the preceding census 1961		Males	Females
		Absolute	Percentage		
Jammu & Kashmir	4,616,632	1,055,656	29.65	2,458,315	2,158,317
Himachal Pradesh	3,460,434	647,971	23.04	1,766,957	1,693,477
Uttarakhand	4,492,724	881,786	24.42	2,315,453	2,177,271
Sikkim	209,843	47,654	29.38	112,662	97,181
Arunachal Pradesh	467,511	130,953	38.91	251,231	216,280
Nagaland	516,449	147,249	39.88	276,084	240,365
Manipur	1,072,753	292,716	37.53	541,675	531,078
Mizoram	332,390	66,327	24.93	170,824	161,566
Tripura	1,556,342	414,337	36.28	801,126	755,216
Meghalaya	1,011,699	242,319	31.5	520,967	490,732
Assam Hills	455,357	175,631	62.79	243,661	211,696
W. B. Hills	781,777	157,137	25.16	415,442	366,335
Indian Himalayan Region	18,973,911	4,259,736	28.95	9,874,397	9,099,514
India	548,159,652	108,924,881	24.8	284,049,276	264,110,376

Source: Census of India, 2011.

There are 28.44 % districts which growth rates were between 20.01 to 30.0 %. These are Doda, East Khasi Hills, Lower Subansiri, Mon, Kurung Kumey, Ukhrul, West Siang, Pulwama, Anantnag, Rajouri, Tawang, Shupiyan, Kupwara, Zunheboto, Kullu, Darjiling, Badgam, Anjaw, East Kameng, West Khasi Hills, Sirmaur, Bageshwar, Solan, Nainital, Shimla, Bilaspur, Tamenglong, Kangra, Kinnaur, Uttarkashi and Hamirpur. About 29.36 % districts of the Himalaya were fallen in the range of 30.01 to 40.0 % growth rate. There were 8.26 % Himalayan districts falls in the range of 40.01 to 50.0 % growth rate. These are Champawat, Senapati, Samba, Peren, Ribhoi, Mokokchung, Lower Dibang Valley, South Tripura and Jammu. Ten or 9.17 % districts had more than 50.01 % growth rate during the decade of 1961 to 1971. These are Dimapur, Lohit, Changlang, Upper Siang, Dhalai, Karbi Anglong, Dibang Valley, Kohima, Churachandpur and East Sikkim.

TABLE 16: DISTRIBUTION OF DISTRICTS BY RANGES OF DECADAL POPULATION GROWTH IN THE INDIAN HIMALAYAN REGION DURING 1961 TO 1971

Growth Zone	Growth Ranges (%)	Districts		
		No	%	Name
Data Not Available	N.A.	10	9.17	West Sikkim, South Sikkim, Mamit, Kolasib, Aizawl, Champhai, Serchhip, Lunglei, Lawngtlai and Saiha.
Negative	Below - 0.01	Nil	Nil	Nil
Very Low	0.01-10.0	1	0.92	East Siang
Low	10.01-20.0	16	14.68	West Kameng, Leh (Ladakh), Ganderbal, Kargil, Kiphire, Chamoli, Lahul & Spiti, Chamba, Una, Almora, Pauri, Pithoragarh, Tehri, Rudraprayag, South Garo Hills and Punc.
Average	20.01-30.0	31	28.44	Doda, East Khasi Hills, Lower Subansiri, Mon, Kurung Kumey, Ukhrul, West Siang, Pulwama, Anantnag, Rajouri, Tawang, Shupiyan, Kupwara, Zunheboto, Kullu, Darjiling, Badgam, Anjaw, East Kameng, West Khasi Hills, Sirmaur, Bageshwar, Solan, Nainital, Shimla, Bilaspur, Tamenglong, Kangra, Kinnaur, Uttarkashi and Hamirpur.
Moderate High	30.01-40.0	32	29.36	Dima Hasao, Imphal East, Chandel, West Garo Hills, Jaintia Hills, U.S. Nagar, Bishnupur, Papum Pare, Tirap, Imphal West, Longleng, Thoubal, Dehradun, Mandi, North Tripura, Kulgam, North Sikkim, Hardwar, Udampur, Phek, Kathua, Tuensang, East Garo Hills, Bandipore, Kishtwar, Ramban, Baramula, West Tripura, Upper Subansiri, Wokha, Srinagar and Reasi.
High	40.01-50.0	9	8.26	Champawat, Senapati, Samba, Peren, Ribhoi, Mokokchung, Lower Dibang Valley, South Tripura and Jammu.
Very High	Above 50.01	10	9.17	Dimapur, Lohit, Changlang, Upper Siang, Dhalai, Karbi Anglong, Dibang Valley, Kohima, Churachandpur and East Sikkim.
Total	-----	109	100.0	-----

Source: Census of India, 2011

#### GROWTH OF POPULATION DURING 1971-1981

As per available data for 1971, the total population of the Indian Himalayan Region was 18973911 persons which increased 24045189 persons in 1981. The population growth of the Himalayan Region during the decade of 1971 to 1981 was registered by 29.13 % which was higher than the country's growth (24.66 %). The growth rates were varied minimum from 23.71 % in Himachal Pradesh to maximum 50.77 % in Sikkim. Population figures for Assam Hills were not available during 1971 and 1981. There were three state / region (25 %) which population was increased 20% to 30 %. These were Jammu and Kashmir (29.67 %), Himachal Pradesh (23.71 %) and Uttarakhand (27.45 %).

TABLE 17: DECADAL VARIATION IN POPULATION DURING 1971-1981

India/State/Region	Persons	Variation since the preceding census 1971		Males	Females
		Absolute	Percentage		
Jammu & Kashmir	5,987,389	1,370,757	29.69	3,164,660	2,822,729
Himachal Pradesh	4,280,818	820,384	23.71	2,169,931	2,110,887
Uttarakhand	5,725,972	1,233,248	27.45	2,957,847	2,768,125
Sikkim	316,385	106,542	50.77	172,440	143,945
Arunachal Pradesh	631,839	164,328	35.15	339,322	292,517
Nagaland	774,930	258,481	50.05	415,910	359,020
Manipur	1,420,953	348,200	32.46	721,006	699,947
Mizoram	493,757	161,367	48.55	257,239	236,518
Tripura	2,053,058	496,716	31.92	1,054,846	998,212
Meghalaya	1,335,819	324,120	32.04	683,710	652,109
Assam Hills	N.A	N.A	N.A	N.A.	N.A.
W. B. Hills	1,024,269	242,492	31.02	542,567	481,702
Indian Himalayan Region	24,045,189	5,526,635	29.13	12,479,478	11,565,711
India	683,329,097	135,169,445	24.66	353,374,460	329,954,637

Source: Census of India, 2011.

Out of total twelve states /region, 41.67 % had more 30 to 40% growth rates during the specified decade of 1971to1981. These were Arunachal Pradesh, Tripura, Meghalaya, Manipur and W.B. Hills (Table 17). Sikkim and Nagaland, two states in the Indian Himalayan Region were registered more than 50 % growth rate during 1971 to 1981 while Mizoram had 48.55% growth in same decade.

The growth of population during 1971 to 1981 has been computed for the present 109 districts of the Indian Himalaya. The growth rate varies from -0.96 % in Upper Siang district of Arunachal Pradesh to 165.7 % Dimapur district of Nagaland State. Table 18 gives the distribution of districts by ranges of decadal growth (1971-1981) of population in the Indian Himalayan Region. The population data of 1.83 % districts of Assam Hills is not available for 1981. Only one district (0.92 %) in the Himalaya was recorded negative growth (-0.96%) during 1971 to 1981.

TABLE 18: DISTRIBUTION OF DISTRICTS BY RANGES OF DECADEAL POPULATION GROWTH IN THE INDIAN HIMALAYAN REGION DURING 1971 TO 1981

Growth Zone	Growth Ranges (%)	Districts		
		No	%	Name
Data Not Available	N.A.	2	1.83	Karbi Anglong and Dima Hasao.
Negative	Below - 0.01	1	0.92	Upper Siang
Very Low	0.01-10.0	3	2.75	Serchhip, Anjaw and North Tripura.
Low	10.01-20.0	13	11.93	Hamirpur, Bageshwar, Chamoli, Kinnaur, Tirap, Lahul & Spiti, Pithoragarh, Tawang, Almora, Kurung Kumey, Pauri, Lower, Subansiri and South Sikkim.
Average	20.01-30.0	40	36.70	Udhampur, Champhai, Zunheboto, West Sikkim, West Kameng, Uttarkashi, Pulwama, Jammu, Shupiyan, Solan, Kupwara, Thoubal, Ganderbal, Kulgam, West Siang, Bilaspur, Doda, Anantnag, Mokokchung, East Khasi Hills, Sirmaur, Champawat, Mandi, Rudraprayag, Imphal West, Tehri, Srinagar, Kullu, Chamba, Kangra, Kargil, Ramban, Upper Subansiri, Mon, West Garo Hills, Shimla, East Kameng, Una, Kishtwar and South Garo Hills.
Moderate High	30.01-40.0	24	22.02	Rajouri, Samba, Badgam, Nainital, Jaintia Hills, Reasi, Tamenglong, Imphal East, Churachandpur, Ukhrul, East Garo Hills, Hardwar, Kathua, Longleng, Dehradun, Leh (Ladakh), Punch, Darjiling, Baramula, West Tripura, Dibang Valley, Bishnupur, U.S. Nagar and Bandipore.
High	40.01-50.0	9	8.25	Changlang, Wokha, Senapati, Chandel, West Khasi Hills, Lunglei, South Tripura, Kolasib and Tuensang.
Very High	Above 50.01	17	15.60	Dimapur, Lower Dibang Valley, Papum Pare, North Sikkim, Ribhoi, Dhalai, Peren, Mamit, Aizawl, East Siang, Saiha, East Sikkim, Lohit, Phek, Kiphire, Kohima and Lawngtlai.
Total	-----	109	100.0	-----

Source: Census of India, 2011

There are 2.75 % districts which growth rates were between 0.01 to 10.0% only. These are Serchhip, Anjaw and North Tripura. About 11.93 % districts of the Himalaya were fallen in the range of 10.01 to 20.0 % growth rate. These are Hamirpur, Bageshwar, Chamoli, Kinnaur, Tirap, Lahul & Spiti, Pithoragarh, Tawang, Almora, Kurung Kumey, Pauri, Lower, Subansiri and South Sikkim. There were 36.7 % Himalayan districts falls in the range of 20.01 to 30 % growth rate. There were 22.02 % Himalayan districts which population growth rate was registered 30.01 % to 40.0 % These are Rajouri, Samba, Badgam, Nainital, Jaintia Hills, Reasi, Tamenglong, Imphal East, Churachandpur, Ukhrul, East Garo Hills, Hardwar, Kathua, Longleng, Dehradun, Leh (Ladakh), Punch, Darjiling, Baramula, West Tripura, Dibang Valley, Bishnupur, U.S. Nagar and Bandipore. Only nine or 8.25 % districts had 40.01 to 50 % growth rate during the decade of 1971 to 1981. These are Changlang, Wokha, Senapati, Chandel, West Khasi Hills, Lunglei, South Tripura, Kolasib and Tuensang. There are 15.6% districts which population was increased more than 50% in the decade of 1971 to 1981. These are Dimapur, Lower Dibang Valley, Papum Pare, North Sikkim, Ribhoi, Dhalai, Peren, Mamit, Aizawl, East Siang, Saiha, East Sikkim, Lohit, Phek, Kiphire, Kohima and Lawngtlai. Due to the national and international migration maximum population growth was registered in eastern districts of Indian Himalaya.

**GROWTH OF POPULATION DURING 1981-1991**

The total population of the Indian Himalayan Region was 24045189 persons in 1981 which increased 31711454 persons in 1991. The growth during the decade of 1981 to 1991 was registered by 29.99 % which was 6.12% higher than the country's growth (23.87 %).

TABLE 19: DECADEAL VARIATION IN POPULATION DURING 1981-1991

India/State/Region	Persons	Variation since the preceding census 1981		Males	Females
		Absolute	Percentage		
Jammu & Kashmir	7,837,051	1,849,662	30.89	4,142,082	3,694,969
Himachal Pradesh	5,170,877	890,059	20.79	2,617,467	2,553,410
Uttarakhand	7,050,634	1,324,662	23.13	3,640,895	3,409,739
Sikkim	406,457	90,072	28.47	216,427	190,030
Arunachal Pradesh	864,558	232,719	36.83	465,004	399,554
Nagaland	1,209,546	434,616	56.08	641,282	568,264
Manipur	1,837,149	416,196	29.29	938,359	898,790
Mizoram	689,756	195,999	39.7	358,978	330,778
Tripura	2,757,205	704,147	34.3	1,417,930	1,339,275
Meghalaya	1,774,778	438,959	32.86	907,687	867,091
Assam Hills	813,524	358,167	78.66	428,803	384,721
W. B. Hills	1,299,919	275,650	26.91	679,323	620,596
Indian Himalayan Region	31,711,454	7,210,908	29.99	16,454,237	15,257,217
India	846,421,039	163,091,942	23.87	439,358,440	407,062,599

Source: Census of India, 2011.

The growth rates were varied minimum from 20.79 % in Himachal Pradesh to maximum 78.66 % in Assam Hills. There were four state / region (33.33 %) which population was increased from 20% to 30 %. These were W. B. Hills, Manipur, Sikkim and Uttarakhand. Out of total twelve states /region, 41.67% had 30 to 40% growth rates during the specified decade. These were Jammu & Kashmir, Arunachal Pradesh, Mizoram, Tripura and Meghalaya (Table 19). It is evident from the table 19 Nagaland and Assam Hills were registered more than 50 % growth rate during 1981 to 1991. The local people gave exaggerated figures to census enumerators because they considered that more population for more fund allocation by the government. Many cases government had rejected census data.



TABLE 20: DISTRIBUTION OF DISTRICTS BY RANGES OF DECADEAL POPULATION GROWTH IN THE INDIAN HIMALAYAN REGION DURING 1981 TO 1991

Growth Zone	Growth Ranges (%)	Districts		
		No	%	Name
Data Not Available	N.A.	Nil	Nil	Nil
Negative	Below - 0.01	1	0.92	Lahul & Spiti
Very Low	0.01-10.0	4	3.67	Almora, Pauri, Dibang Valley and Kurung Kumey.
Low	10.01-20.0	12	11.01	Kinnaur, Bilaspur, Una, Anjaw, Kangra, Rudraprayag, North Sikkim, East Kameng, Tehri, Hamirpur, Bageshwar and Pithoragarh.
Average	20.01-30.0	37	33.94	Srinagar, Punch, Imphal East, Ramban, Lunglei, Tirap, East Sikkim, Doda, Badgam, Bishnupur, Kishtwar, Ribhoi, Upper Subansiri, Rajouri, Darjiling, Kolasib, Kullu, Pulwama, Champawat, Chamba, Thoubal, Hardwar, Imphal West, Solan, Chandel, Uttarkashi, South Garo Hills, Reasi, Sirmaur, Mamit, Samba, Kathua, Chamoli, Serchhip, Lower Subansiri, Shimla and Mandi.
Moderate High	30.01-40.0	32	29.36	Tamenglong, East Garo Hills, Tuensang, Kulgam, Senapati, West Khasi Hills, West Kameng, Kargil, Dehradun, South Sikkim, Dhalai, Anantnag, West Tripura, Zunheboto, Ukhrul, Leh (Ladakh), Jammu, West Siang, Upper Siang, Udampur, Churachandpur, West Garo Hills, North Tripura, East Khasi Hills, West Sikkim, Baramula, Shupiyan, Champhai, East Siang, Nainital, U.S. Nagar and Tawang.
High	40.01-50.0	9	8.26	Ganderbal, Lower Dibang Valley, Lawngtlai, Phek, Wokha, Kupwara, Jaintia Hills, South Tripura and Bandipore.
Very High	Above 50.01	14	12.84	Longleng, Dima Hasao, Peren, Papum Pare, Kiphire, Karbi Anglong, Lohit, Mon, Aizawl, Kohima, Dimapur, Saiha, Changlang and Mokochung.
Total	-----	109	100.0	-----

Source: Census of India, 2011

The growth of population during 1981 to 1991 has been computed for the present 109 districts of the Indian Himalaya (Table 20).

The growth rate varied from -2.51 % in Lahul and Spiti district of Jammu & Kashmir to 163.39 % in Longleng district of Nagaland State. Only one (Lahul and Spiti) district's growth was registered negative while 3.67 % districts growth rates were 0.01 to 10 %. These are Almora, Pauri, Dibang Valley and Kurung Kumey. Out of total 109 districts of Himalaya 11.01 % districts were fallen 10.01 to 20.0 % growth rates during 1981 to 1991. These are Kinnaur, Bilaspur, Una, Anjaw, Kangra, Rudraprayag, North Sikkim, East Kameng, Tehri, Hamirpur, Bageshwar and Pithoragarh. There were 33.94 % districts which growth rates were between 20.01 to 30 %. These are Srinagar, Punch, Imphal East, Ramban, Lunglei, Tirap, East Sikkim, Doda, Badgam, Bishnupur, Kishtwar, Ribhoi, Upper Subansiri, Rajouri, Darjiling, Kolasib, Kullu, Pulwama, Champawat, Chamba, Thoubal, Hardwar, Imphal West, Solan, Chandel, Uttarkashi, South Garo Hills, Reasi, Sirmaur, Mamit, Samba, Kathua, Chamoli, Serchhip, Lower Subansiri, Shimla and Mandi. About 29.36 % districts of the Himalaya were fallen in the range of 30.01 to 40 % growth rate. There were 8.26 % Himalayan districts falls in the range of 40.01 to 50.0 % growth rate. These are Ganderbal, Lower Dibang Valley, Lawngtlai, Phek, Wokha, Kupwara, Jaintia Hills, South Tripura and Bandipore. Only 12.84 % districts had more than 50.01 % growth rate during the decade of 1981 to 1991. These are Longleng, Dima Hasao, Peren, Papum Pare, Kiphire, Karbi Anglong, Lohit, Mon, Aizawl, Kohima, Dimapur, Saiha, Changlang and Mokochung. Maximum population growth rate was registered in Eastern Districts of Indian Himalaya. It was probably due to the establishment of new development units in this region and it attracts/pulls the outsiders and promotes the migration.

**GROWTH OF POPULATION DURING 1991-2001**

The total population of the Indian Himalayan Region was 31711454 persons in 1991 which increased 39650860 persons in 2001. The growth during the decade of 1991 to 2001 was registered by 25.04 % less than previous decade 1981 to 1991 and in 1991 to 2001 it was also higher than the country's growth (21.54 %). The growth rates were varied minimum from 16.03 % in Tripura to maximum 64.53 % in Nagaland. There were 75 % states / regions which population was increased from 16% to 30 % during 1991 to 2001. Nagaland, Sikkim and Meghalaya population growth rates were recorded respectively 64.53, 33.06 and 30.65 % during 1991 to 2001.

TABLE 21: DECADEAL VARIATION IN POPULATION DURING 1991-2001

India/State/Region	Persons	Variation since the preceding census 1991		Males	Females
		Absolute	Percentage		
Jammu & Kashmir	10,143,700	2,306,649	29.43	5,360,926	4,782,774
Himachal Pradesh	6,077,900	907,023	17.54	3,087,940	2,989,960
Uttarakhand	8,489,349	1,438,715	20.41	4,325,924	4,163,425
Sikkim	540,851	134,394	33.06	288,484	252,367
Arunachal Pradesh	1,097,968	233,410	27	579,941	518,027
Nagaland	1,990,036	780,490	64.53	1,047,141	942,895
Manipur	2,293,896	456,747	24.86	1,161,952	1,131,944
Mizoram	888,573	198,817	28.82	459,109	429,464
Tripura	3,199,203	441,998	16.03	1,642,225	1,556,978
Meghalaya	2,318,822	544,044	30.65	1,176,087	1,142,735
Assam Hills	1,001,390	187,866	23.09	522,072	479,318
W. B. Hills	1,609,172	309,253	23.79	830,644	778,528
Indian Himalayan Region	39,650,860	7,939,406	25.04	20,482,445	19,168,415
India	1,028,737,436	182,316,397	21.54	532,223,090	496,514,346

Source: Census of India, 2011.

The growth of population during 1991 to 2001 has been computed for the present 109 districts of the Indian Himalaya. The growth rate varies from -2.77 % in Mamit district of Mizoram to 105.6 % Kiphire district of Nagaland State. Table 22 gives the distribution of districts by ranges of decadal growth (1991-2001) of population in the Indian Himalayan Region. About 1.83 % had recorded negative growth during 1991 to 2001. These are Dibang district of Arunachal Pradesh and Mamit district of Mizoram. There are 7.34 % districts which growth rates were between 0.01 to 10.0% only. These are Kinnaur, Bageshwar, Anjaw, South Tripura, Kurung Kumey, Lahul & Spiti, Pauri and Almora. About 20.18 % districts of the Himalaya were fallen in the range of 10.01 to 20.0 % growth rate. There were 32.11 % Himalayan districts falls in the range of 20.01 to 30.0 % growth rate. These are Champhai, South Sikkim, Udampur, Churachandpur, Tamenglong, Lower Subansiri, Bandipore, Ukhrul, Shupiyan, Hardwar, Punch, Ramban, North Tripura, Doda, Kishtwar, Kullu, Rajouri, West Sikkim, Pulwama, Dehradun, Dima Hasao,

TABLE 22: DISTRIBUTION OF DISTRICTS BY RANGES OF DECADAL POPULATION GROWTH IN THE INDIAN HIMALAYAN REGION DURING 1991 TO 2001

Growth Zone	Growth Ranges (%)	Districts		
		No	%	Name
Data Not Available	N.A.	Nil	Nil	Nil
Negative	Below - 0.01	2	1.83	Dibang Valley and Mamit.
Very Low	0.01-10.0	8	7.34	Kinnaur, Bageshwar, Anjaw, South Tripura, Kurung Kumey, Lahul & Spiti, Pauri and Almora.
Low	10.01-20.0	22	20.18	Imphal East, Una, West Tripura, Serchhip, Champawat, Tirap, Chamba, Shimla, Imphal West, Tehri, Mandi, West Siang, Bilaspur, Bishnupur, Kangra, Chamoli, East Kameng, Rudraprayag, Hamirpur, Dhalai, Pithoragarh and Upper Subansiri,
Average	20.01-30.0	35	32.11	Champhai, South Sikkim, Udhampur, Churachandpur, Tamenglong, Lower Subansiri, Bandipore, Ukhrul, Shupiyan, Hardwar, Punch, Ramban, North Tripura, Doda, Kishtwar, Kullu, Rajouri, West Sikkim, Pulwama, Dehradun, Dima Hasao, Ganderbal, Thoubal, Reasi, Darjiling, East Khasi Hills, South Garo Hills, Lunglei, Uttarkashi, Karbi Anglong, Samba, Kathua, East Siang, Sirmour and Upper Siang,
Moderate High	30.01-40.0	27	24.77	Kupwara, Aizawl, Tawang, East Sikkim, Senapati, Kulgam, Jaintia Hills, Kolasib, Lohit, Lawngtlai, Saiha, Kargil, West Khasi Hills, Nainital, U.S. Nagar, East Garo Hills, West Kameng, Baramula, North Sikkim, Changlang, Anantnag, Badgam, Solan, West Garo Hills, Srinagar, Leh (Ladakh) and Jammu.
High	40.01-50.0	4	3.67	Mokokchung, Phek, Kohima and Lower Dibang Valley.
Very High	Above 50.01	11	10.10	Kiphire, Wokha, Longleng, Dimapur, Mon, Papum Pare, Chandel, Tuensang, Peren, Zunheboto and Ribhoi.
Total	-----	109	100.0	-----

Source: Census of India, 2011

Ganderbal, Thoubal, Reasi, Darjiling, East Khasi Hills, South Garo Hills, Lunglei, Uttarkashi, Karbi Anglong, Samba, Kathua, East Siang, Sirmour and Upper Siang. There are 24.77 % districts of the Himalaya which growth rates were registered 30.01 to 40 % during 1991 to 2001. These are Kupwara, Aizawl, Tawang, East Sikkim, Senapati, Kulgam, Jaintia Hills, Kolasib, Lohit, Lawngtlai, Saiha, Kargil, West Khasi Hills, Nainital, U.S. Nagar, East Garo Hills, West Kameng, Baramula, North Sikkim, Changlang, Anantnag, Badgam, Solan, West Garo Hills, Srinagar, Leh (Ladakh) and Jammu. Only 3.67 % district was registered 40.01 to 50 % growth during 1991 to 2001. These are Mokokchung, Phek, Kohima and Lower Dibang Valley There are 10.1% districts which growth rates were recorded more than 50.01 % in the specified decade. These are Kiphire, Wokha, Longleng, Dimapur, Mon, Papum Pare, Chandel, Tuensang, Peren, Zunheboto and Ribhoi.

**GROWTH OF POPULATION DURING 2001-2011**

The population growth of the Indian Himalayan Region in the Census 2011 is registered by 18.73 % which is higher than the country's growth (17.7%). The population growth in both the Indian Himalayan Region and country as a whole decreased from the previous decades. In 2011 the growth rate varies from -0.58 % in Nagaland to 27.95 % in Meghalaya.

TABLE 23: DECADAL VARIATION IN POPULATION DURING 2001-2011

India/State/Region	Persons	Variation since the preceding census 2001		Males	Females
		Absolute	Percentage		
Jammu & Kashmir	12,541,302	2,397,602	23.64	6,640,662	5,900,640
Himachal Pradesh	6,864,602	786,702	12.94	3,481,873	3,382,729
Uttarakhand	10,086,292	1,596,943	18.81	5,137,773	4,948,519
Sikkim	610,577	69,726	12.89	323,070	287,507
Arunachal Pradesh	1,383,727	285,759	26.03	713,912	669,815
Nagaland	1,978,502	-11,534	-0.58	1,024,649	953,853
Manipur	2,855,794	561,898	24.5	1,438,586	1,417,208
Mizoram	1,097,206	208,633	23.48	555,339	541,867
Tripura	3,673,917	474,714	14.84	1,874,376	1,799,541
Meghalaya	2,966,889	648,067	27.95	1,491,832	1,475,057
Assam Hills	1,170,415	169,025	16.88	600,969	569,446
W. B. Hills	1,846,823	237,651	14.77	937,259	909,564
<b>Indian Himalayan Region</b>	<b>47,076,046</b>	<b>7,425,186</b>	<b>18.73</b>	<b>24,220,300</b>	<b>22,855,746</b>
India	1,210,854,977	1,163,778,931	17.70	623,270,258	587,584,719

Source: Census of India, 2011.

It is worth to mention here that Nagaland had recorded the country's highest decadal population growth of 56.08 % in 1991 and 64.53 % in 2001 respectively (Table 19 & 21). However, the state government had rejected the state's 2001 census figures because most of the villages recorded exaggerated population figures believing that they would get more financial allocation from the government for various rural development schemes. This prevailing perception the Chief Minister and state census director have made repeated appeals to the people particularly to village authorities to give correct data to the enumerators during census operation 2011. Due to the impact of appeals done by census authorities the Nagaland has recorded a negative decadal growth of population during 2001 to 2011.

TABLE 24: DISTRIBUTION OF DISTRICTS BY RANGES OF DECADEAL POPULATION GROWTH IN THE INDIAN HIMALAYAN REGION DURING 2001 TO 2011

Growth Zone	Growth Ranges (%)	Districts		
		No	%	Name
Data Not Available	N.A.	Nil	Nil	Nil
Negative	Below - 0.01	8	7.34	Pauri, Almora, Mon, Lahul & Spiti, Zunheboto, Mokokchung, Kiphire and Longleng.
Very Low	0.01-10.0	14	12.84	West Siang, Kulgam, Kinnaur, Lower Dibang Valley, North Sikkim Rudraprayag, Upper Siang, Chamoli, Tuensang, Bageshwar, Peren, Pithoragarh, Wokha and Tehri.
Low	10.01-20.0	40	36.70	Baramula, Serchhip, Changlang, Kargil, Lunglei, Karbi Anglong, North Tripura, Samba, Champhai, Lohit, Imphal West, Una, Thoubal, Solan, East Sikkim, Champawat, Sirmaur, Imphal East, Darjiling, Kullu, South Tripura, Anjaw, Bishnupur, Leh (Ladakh), Dima Hasao, East Siang, Kangra, Jammu, Shimla, Chamba, West Tripura, West Kameng, Bilaspur, Uttarkashi, Tirap, Mandi, West Sikkim, Phek, Hamirpur and Dibang Valley.
Average	20.01-30.0	28	25.69	West Khasi Hills, South Garo Hills, Bandipore, Tawang, Doda, Punch, Kolasib, Reasi, Pulwama, West Garo Hills, Tamenglong, Shupiyan, East Garo Hills, Nainital, U.S. Nagar, East Khasi Hills, Badgam, Dimapur, Aizawl, Chandel, Dhalai, Kohima, Kishtwar, Udhampur, Kathua, Srinagar, Churachandpur and Saiha.
Moderate High	30.01-40.0	13	11.93	Anantnag, East Kameng, Mamit, Ganderbal, Lawngtlai, Ribhoi, Kupwara, Rajouri, Dehradun, Jaintia Hills, Ramban, Ukhul and Hardwar.
High	40.01-50.0	3	2.75	Lower Subansiri, Papum Pare and South Sikkim.
Very High	Above 50.01	3	2.75	Kurung Kumey, Senapati and Upper Subansiri.
Total	-----	109	100.0	-----

Source: Census of India, 2011

About 50 % states/ regions of the Himalaya have recorded less growth rate than the average of Himalaya and nation as a whole. It is also noticed that population growth of all the states / regions in 2011 is decreased from the census 2001. It is due to awareness of the people in one hand and wrong information was given by the people to the enumerators are discouraged on the other.

The growth of population during 2001 to 2011 has been computed for the 109 districts of the Indian Himalaya. The growth rate varies from -58.48% in Longleng district of Nagaland state to 116.56 % in Kurung Kumey district of Arunachal Pradesh. Table 24 gives the distribution of districts by ranges of decadal growth (2001-2011) of population in the Indian Himalayan Region. Out of total 109 districts of Himalaya 7.34 % districts have recorded negative decadal growth during 2001-2011. These are Pauri, Almora, Mon, Lahul & Spiti, Zunheboto, Mokokchung, Kiphire and Longleng districts. About 12.84 % districts of the Himalaya fall in the range of 0.01 to 10 % growth rate. These are West Siang, Kulgam, Kinnaur, Lower Dibang Valley, North Sikkim Rudraprayag, Upper Siang, Chamoli, Tuensang, Bageshwar, Peren, Pithoragarh, Wokha and Tehri. About 36.7% districts of the Himalaya fall in the range of 10.01 to 20 % growth rate. The 29.69 % Himalayan districts fall in the range of 20.01 to 30 % growth rate. These are West Khasi Hills, South Garo Hills, Bandipore, Tawang, Doda, Punch, Kolasib, Reasi, Pulwama, West Garo Hills, Tamenglong, Shupiyan, East Garo Hills, Nainital, U.S. Nagar, East Khasi Hills, Badgam, Dimapur, Aizawl, Chandel, Dhalai, Kohima, Kishtwar, Udhampur, Kathua, Srinagar, Churachandpur and Saiha. About 11.93 % districts are in the ranges from 30.01 to 40.0 % growth rate. Only 3 or 2.75% districts have registered 40.01 to 50% growth rate during the decade of 2001 to 2011. These are Lower Subansiri, Papum Pare and South Sikkim. Out of the total Himalayan districts only 2.75 districts have recorded more than 50 % growth rate. These are Kurung Kumey, Senapati and Upper Subansiri. The high growth rates in these districts are probably due to the inclusion of more settlements which were not included in earlier censuses in one hand and creation of new districts in the state.

## CONCLUSION

The pattern of population growth in the Indian Himalayan Region is a combined output of socio-economic development, historical incidents and cultural activities. In the Indian Himalayan Region very limited area is suitable for human habitation and these areas are overcrowded in view of minimum living conditions. Keeping in mind the paucity of suitable land for human dwellings, eco friendly and scientific use of available natural resources, institutional and infrastructural development can be increased in potential areas to bear the growing human burden. Any type of planning not only in the Himalaya but India as a whole since colonial period is primarily based on exploitation of resources has weakened its carrying capacity in one hand and rapid population growth has been triggering the problem on the other. The policies are more or less similar after the independence too.

The average growth of the Indian Himalayan Region was registered 7.66 % more than the country's growth (5.75 %) during 1901 to 1911. Except Himachal Pradesh (-1.22%) all eastern Himalayan states registered more growth during the decade of 1901 to 1911. During the decade of 1991 to 2011, Himachal Pradesh, Uttarakhand, Sikkim and country as a whole experienced negative growth due to the heavy impact of epidemic and second World War. Overall growth of the Himalaya was also very low (3.83%). Only Sikkim and Mizoram states had registered more than 25% growth during 1921 to 1931 decade while the population growth in both the regions Himalaya (10.2%) and country (11%) was more or less equal. Next decade 1931 to 41 and 1941 to 51 maximum growth was registered by respectively Tripura and Mizoram because British administration was infrastructural and institutionally developed in these states for their own settlements and migrants and innocent tribal people helped them and also settled in these areas. Average growth rate during 1951 to 61 in Himalaya (28.91%) was more than the national average (21.51%). It is very considerable that unexpected growth in population of Tripura, Assam Hills, Mizoram and Manipur were registered respectively 78.71, 69.08, 35.61 and 35.04 % during 1951 to 61. It may be possible that after independence many more human new dwellings were came in the main stream of the state and finally they enumerated 1961 and onwards. During the decade of 1961 to 71 Assam Hills was recorded 62.79 % population growth. Due to the unexpected growth was recorded by the Nagaland and Assam Hills during 1981-91 and 1991 to 2001 which were rejected by the state administration, the average growth of the Indian Himalayan Region was also recorded higher than the country average. But the pace of growth seems to be slowed down in both the regions during 2001 to 2011.

The growth in population from 1901 to 1951 was recorded slow growth rates in the Himalaya and country as a whole respectively 57.62 and 51.62 % and second phase 1951 to 2011 recorded unexpected rapid growth in the Indian Himalayan Region (306.53%) and nation (235.34%). During the span of fifty (1901 to 1951) and sixty years (1951 to 2011) the female growth rate was registered higher than the male in the region. More awareness and increasing literacy level with attitudinal change towards female by the society were the main factors for higher female growth in the Himalayan Region while it was lower than the male in the country as a whole. The Indian Himalayan Region was recorded more than 500 % (total growth 540.78%, male 529.04% and female 553.72%) growth during the span of 110 years (1901 to 2011) while country as a whole was registered around 400% (total growth 407.91%, male 415.99% and female 400.67%) growth in same specified period. The study concludes that the demographic study in general and population distribution and growth pattern in particular of smaller units such as Gram Panchayat, Community Development Block, Tehsil and micro watershed level will provide more useful results for analysis and direction for further investigation and formulation of sustainable development plan.

## NOTES\*

1. In working out 'decadal variation' and 'percentage decadal variation' for 1941-1951 & 1951-1961 of Nagaland state, the population of Tuensang district for 1951 (7,025) and the population of Tuensang (83,501) and Mon (50,774) districts for 1961 Census have not been taken into account as the area was censused for the first time in 1951 and the same are not comparable.
2. The 1981 Census could not be held owing to disturbed conditions prevailing in Assam. Hence the population figures for 1981 of Assam have been worked out by 'Interpolation'.

3. The 1991 Census was not held in Jammu & Kashmir. Hence the population figures for 1991 of Jammu & Kashmir have been worked out by 'Interpolation'. 1951 population are the arithmetic mean of 1941 and 1961 population. Population of 41 villages fully and 3 villages partly of Akhnour Tahsil (District Jammu) falling on the other side of line of control referred to in the Simla Agreement, 1972 has been adjusted in districts Udhampur, Kathua and Jammu on pro rata basis. Population of villages transferred after 1971 conflict to Kupwara, Kargil, Ladakh and Punch districts from other side of line of control referred to in the Simla Agreement of 1972 has not been included.
4. In Sikkim the figures at state level are given for all the census years commencing from 1901 to 2011. But at the district level the figures are presented from 1961 onward in the case of North and East districts and from 1971 in respect of all the four districts due to non availability of information at district level prior to this period.
5. Arunachal Pradesh was censused for the first time in 1961.
6. In 1951, Tuensang was censused for the first time for 129.5 sq.kms. of areas only. In 1961 censused areas of Tuensang district of Nagaland was increased to 5356.1 sq. kms.
7. Due to non-availability of census data the figures for the decades, from 1901 to 1951 have been estimated for the districts of Kohima, Phek, Wokha, Zunheboto and Mokokchung. Estimation however could not be done for Tuensang and Mon as they were not fully censused prior to 1961.
8. In working out 'decadal variation' and 'percentage decadal variation' for 1941 - 1951 and 1951 - 1961 of Nagaland state, the population of Tuensang district for 1951 (7,025) and the population of Tuensang (83,501) and Mon (50,774) districts for 1961 Census, have not been taken into account as the area was censused for the first time in 1951 and the same are not comparable.
9. The population of Manipur State by sex includes the estimated population of Mao Maram, Paomata and Purul sub - divisions of Senapati district for 2001.
10. Data could not be recasted up to district level before 1971 as during that period Mizoram was only a District of Assam.
11. The population shown in 1901 of West Tripura District includes the population of Udaipur and Amarpur Sub- division of South Tripura districts as the 1901 population of these district is not comparable.

\* Source: Census of India, 2011

## REFERENCES

1. Anonymous, 2001. *Census of India 2001*, Population Totals, Registrar General of India, New Delhi (In C.D.).
2. Anonymous, 2011. *Census of India 2011*, Registrar General of India, New Delhi. [www.censusofindia.govt](http://www.censusofindia.govt).
3. Chand, R. and M. C. Thakur, 1991. Changing Population Profile, *Seminar*, The Himalaya, 378, pp 19-23.
4. Chandna, R.C., 1970. *Changes in the Demographic Characteristics of Rohtak and Gurgaon Districts, 1951-61: A Geographical Analysis*. Panjab University Chandigarh (Unpublished Ph.D. Thesis).
5. Gosal, G.S., 1961. Regionalism of Sex Composition of India's Population, *Rural Sociology*, 26, pp 122-37.
6. Gosal, G.S., 1956. *A Geographical Analysis of India's Population*, University of Wisconsin, Wisconsin, U.S.A. (Unpublished Ph.D Thesis).
7. Gosal, G.S., 1962. Regional Aspect of Population Growth in India. *Pacific Viewpoint*, 3, pp 81-90.
8. Gosal, G.S., 1966. Urbanization in Punjab (India) 1881-1961. *Research Bulletin of the Punjab University*, pp 1-26.
9. Gosal, G.S., 1979. Spatial Perspective on Literacy in India, *Population Geography*, Volume 1: pp 41-46.
10. Kumar, Kamlesh, 1973. Pattern of Population in the Mandakini Valley- District Chamoli. *Indian Geographical Journal*, XLVIII, (2): pp 50-56.
11. Mehta, S. 1967. *Some Aspects of Changes in the Demographic Characteristics of Bist Doab, 1951-61*, Panjab University Chandigarh (Unpublished Ph.D. Thesis).
12. Pant B.R and R. Chand. 2013. 2011 Mai Bhartiya Himalaya, *PAHAR*-18:22-54.
13. Pant B.R and R. Chand. 2014. *Uttarakhand Jansankhyatmak Jhalak*. PAHAR. Publication: 2-23.
14. Pant B.R. 2015. Distribution, Growth, Sex Ratio and Literacy Pattern among Scheduled Tribe Population in the Indian Himalayan Region. *Aayushi International Interdisciplinary Research Journal (AIIRJ)*, Vol.2 (V): 1-29.
15. Pant B.R., 2010. *Tribal Demography of India*, Anamika Publication, New Delhi 288p.
16. Pant, B. R. 2011a. Jangarharna 2011 mai Uttarakhand, *Uttara*, 21(4) July- September: 5-7
17. Pant, B. R. 2011b. Bharat ka Jansankhikiya Paridrishya: Jangarna 2011, *Uttara*, 21(3) April- June: 5-7.
18. Pant, B. R. 2012. Demography of Indian Himalayan Region in Census, 2011, *ENVIS BULLETIN on Himalayan Ecology*, 20: 1-20.
19. Pant, B. R. 2013. Growth and Distribution of Population in the Indian Himalaya. *The Geographer*. 60 (2): 76-89.
20. Pant, B.R., 1996 a. Physical Geography and Demographic Structure of Uttarakhand, In K.S. Valdiya (ed.) *Uttarakhand Today*, Shree Almora Book Depot, Almora: pp 45-65.
21. Pant, B.R., 1996 b, A Geographical Study of Scheduled Caste Population in Uttarakhand Himalaya (India), *The Indonesian Journal of Geography*, 28 (7): pp 25-38.
22. Pant, B.R., 2006, Level, Growth and Gap in the Literacy by Sex in the Himalaya, India, *Man in India*, 86 (1 & 2): pp 65-95.
23. Sharma, K.D., 1981. Endogenous and Exogenous Urbanization: A Case Study of Uttarakhand (U. P. Himalaya), *Transactions Institute of Indian Geographers*: pp 159-174.
24. Sharma, K.D., 1992. Patterns and Processes of Urbanisation in a Himalayan State: A Case Study of Himachal Pradesh (India) 1881-1981. *Transactions Institute of Indian Geographers* 14 (1): pp 1-12.

## A STUDY ON RURAL CONSUMER AWARENESS AND BRAND PREFERENCE OF INSTANT FOOD PRODUCTS (WITH SPECIAL REFERENCE TO VADAKARAPATHY PANCHAYATH)

**DR. P. S. CHANDNI**

**HEAD**

**PG AND RESEARCH DEPARTMENT OF COMMERCE**

**SREE NARAYANA GURU COLLEGE**

**K. G. CHAVADI**

**JENIFERSARA.D**

**RESEARCH SCHOLAR**

**PG AND RESEARCH DEPARTMENT OF COMMERCE**

**SREE NARAYANA GURU COLLEGE**

**K. G. CHAVADI**

### ABSTRACT

*Consumers around the world vary greatly in age, income, education level, and tastes and understanding how these differences affect consumer buying decision is never easy. However, marketing success largely depends on the ability to anticipate what buyers will do and what they prefer from available products. Today, the highly fragmented instant food industry with large number of players both from the organized and unorganized sectors has resulted in severe competition and as a result, Instant food businesses in India have shifted their focus to understand consumer choices better on one side and increasingly moving away from products to embracing a structured brand management to achieve competitiveness and profitability in the market place. The present study explores the consumers awareness on instant food products and its brand preference. The study highlights that, Price, Brand image, Quality & Taste, Easy availability, Package and Hygiene of particular brand are the most important factors influencing consumers decision making for instant food product preferences.*

### KEYWORDS

brand awareness, brand preference, instant food products.

### INTRODUCTION

Instant food products are those products which are made instantly. These food products are made within less time. The instant food products are not only easy to cook but also have a significant role and place in the celebration of the family functions and religious functions of the people. Oxford Advanced Learners Dictionary defined instant food products as "instant food products which are prepared and packaged often in powered form are required only the addition of a liquid as water or milk for final preparation." In the modern days, where the life is at fast pace with the time very valuable to every person, "instant foods" plays an important role in everyone's day-to-day life. The term 'instant food' means simple, fast and convenient food, which is easy and fast to prepare besides being hygienic, free from microbial contamination and also convenient to eat. Unlike olden days where man used to have his food lavishly and slowly, the present trend changed the habits to foods, which are simple and easy to digest. Hence, the existence of these foods fulfilled all the needs of modern human being. Preparing food with instant mixes have become a way life and no doubt they are going to be an integral part of food habit in future.

### REVIEW OF LITERATURE

**Kubendran and Vanniarajan (2005)** founded that, the change in consumption pattern is due to changes in food habits. If income and urbanization increase among consumers, the percentage of income spent on consumption increases. The urban consumers prefer mostly branded products compared to rural consumers. The most significant factors influencing buying decisions were accessibility, quality, regular supply, door delivery and the mode of payment.

**Ramaswamy et al. (2005)** studied consumer behaviour towards instant food products in Madurai, the second largest city in Tamil Nadu and observed that consumers do build opinion about a brand on the basis of which various product features play an important role in decision making process. A large number of respondents (78%) laid emphasis on quality and 76% on price which is an important factor, while 64% of respondents attached importance to the image of the manufacturer and 50% considered packaging as an important factor and an equal percentage (50%) felt longer shelf life influenced them.

**Banumathy and Hemameena (2006)** while studying consumer brand preference with respect to soft drinks, found that after globalization most of the consumers like the international brands such as Pepsi and coco-cola. Consumers preferred a certain brand or a particular drink mainly because of its taste and refreshing ability.

**Indumathi et al. (2007)** in their study have revealed that occupation of the women, income of the family and saving time while cooking are the most influencing factors of spicy products. The authors say that most of the consumers have purchase 200 gm pack of powders and masalsa, while small number of consumers prefer 100 gm packets.

**Ranjith kumar (2007)** concluded that the advertisement influences product purchase for a non-durable product like masala powder, the main factor is the quality. Consumers get more awareness and influence from the advertisements. As there is an option for home made preparation of masala powder, the marketers should be highly competitive without sacrificing the quality of the product.

**Saritha Bahi (2012)** has develop a model to understand the determinants of consumer behaviour regarding buying decision. The frequency of consumer's shopping for food products has been analysed among different occupations. Efforts have been taken to know the attitude of the consumers towards food product labels and their perception about food safety which has also analysed.

### SCOPE OF THE STUDY

This study is based on a survey conducted in Vadakarapathy Panchayath in Palakkad district. The researcher has mainly focused on consumer awareness and brand preference of instant food products. The scope of the study was limited only to the instant food product users. The study may be useful to the manufactures to take suitable measures to improve the various aspects of the products and it helps the consumer to develop right attitude towards instant food products.

### STATEMENT OF THE PROBLEM

In the recent trend the consumption pattern of the consumer has been changed. Depending upon their income level, they acquire durable as well as non-durable items in the case of food habits and also have changed their attitude because of the strategies, which are adopted by the companies to attract the consumers. Specially in the case of instant food products there is vast behavioral changes among the consumers, they were aware of the products through various medias,



advertisement and evaluate the uses and benefits of these products in these circumstances, the researcher felt that there is a need to study about the awareness level of consumers and their consumption level with regard to instant food products.

## OBJECTIVE OF THE STUDY

To know the consumer awareness about the instant food products.

## HYPOTHESIS

- There is no significant relationship between age and period of using instant food products.
- There is no significant relationship between educational qualification and price of instant food products.
- There is no significant relationship between occupation and reasons for purchasing instant food products.
- There is no significant relationship between area of residence and watching manufacturing date of instant food products.

## RESEARCH METHODOLOGY

Research methodology is the methods which are used to solve the research problem systematically. The study has been conducted by framing questionnaire for interviewing the consumer. This study is based on primary data only. The required information was collected through the questionnaire from the customers directly. The first part of the questionnaire consists of personal details and second part of the questionnaire consists awareness and third part of the questionnaire consists of brand preference. Direct interview method or survey research approach has been adopted

### STATISTICAL TOOLS USED

#### ➤ SIMPLE PERCENTAGE ANALYSIS

This is the simplest way to analyze different types of data. In this method we found out the percentage of each data with respect to total. Using this percentage rate we can analyze the data. In this research it is used to classify the respondents under their socio economic status and also to cater to the needs of the objectives framed

#### ➤ CHI-SQUARE TEST

A statistical test used to determine the probability of obtaining the observed results by chance under a specific hypothesis. It can be calculate using a formula.

$$\chi^2 = \sum (O-E)^2 / E$$

In this research the chi-square test is used to find out whether there is any association of variables namely age, monthly income, educational qualification and satisfaction of respondents.

#### ➤ WEIGHTED AVERAGE METHOD

The term weight stands for the relative importance of the different items of the series. Weighted average refers to the weighted arithmetic mean calculated after assigning weights to different values of variables.

$$\frac{\sum wx}{\sum w}$$

It is applied here to find out the most influencing factor of purchase behaviour in respondents.

#### ➤ CORRELATION

Correlation analysis is a statistical technique used to measure the degree and direction of relationship between the variables. This tool is used to assess the correlation of age and monthly income with level of satisfaction of respondents. Co-efficient correlation is calculated as under

$$r = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}}$$

## RESULTS AND DISCUSSION

### CORRELATION

TABLE 1: AGE AND PERIOD OF USING INSTANT FOOD PRODUCTS

Age	Period of usage
109	59
94	147
47	44
250	250

Calculated r value=0.8965

When r =0value. There is no correlation between the variables.

#### Interpretation

There is positive correlation between age of the respondents and their period of using instant food products.

TABLE 2: EDUCATIONAL QUALIFICATION AND PRICE OF INSTANT FOOD PRODUCTS

Educational qualification	Price
46	20
113	63
42	139
31	19
18	9
250	250

Calculated r value=0.70315

When r =0 value. There is no correlation between variables.

#### Interpretation

There is positive correlation between Educational qualification and price of the instant food products.

TABLE 3: OCCUPATION AND REASONS FOR PURCHASING INSTANT FOOD PRODUCTS

Occupation	Reasons for purchased
90	32
55	118
28	55
20	34
57	11
250	250

Calculated r value; 0.7059

When r=0 value. There is no correlation between the variables.

**Interpretation**

There is positive correlation between Occupation and Reasons for purchasing instant food products.

**TABLE 4: AREA OF RESIDENCE AND WATCHING MANUFACTURING OF INSTANT FOOD PRODUCTS**

Area of residence	Watching manufacturing date
147	220
103	30
<b>250</b>	<b>250</b>

Calculated r value=0.0002557

When r =1 value. There is perfect positive correlation.

**Interpretation**

There is positive correlation between Area of residence and Watching manufacturing of instant food products.

**FINDINGS****CORRELATION**

- There is no significant relationship between age and period of using instant food products.
- There is no significant relationship between educational qualification and price of instant food products.
- There is no significant relationship between occupation and reasons for purchasing instant food products.
- There is no significant relationship between area of residence and watching manufacturing date of instant food products.

**SUGGESTIONS**

More varieties of instant food products with details of ingredients on the label is recommended at the food court of private organization and in the retail outlet. More aggressive advertisement with celebrities can be done in the most effective media namely television.

As per the analysis professionally qualified and school level educated respondents are neutral in their level of satisfaction towards advertisement. In hence the advertisement should carry attractive presentation and messages.

Respondents in nuclear type of family have exposed their dissatisfaction towards products package. Hence there should be immediate attention in their regards to make the factors more economical and satisfactory.

It is better to increase the quantity of the instant food products so that the consumers can purchase more. It is suggested to the manufactures of that all the details regarding instant food products to collect consumers taste and preference, needs etc should be collected properly and design the product accordingly.

**CONCLUSION**

Nowadays due to busy schedule of people and both are working in a modern family, using instant food products is an unavoidable one. It is obvious to note that the food habits of people changed much whole companies a decade before. The marketing study reveals that the instant food products are more popular in Vadakarapathy panchayath because, I found the usage of instant food products is significant in and around Palakkad. I found that Out of 7 factors like price, quality, quantity, packaging, taste, advertisement and availability of products, regarding price consumers highly satisfied and rest of the factors them are satisfaction level is average. Hence we can say that most of the respondents have positive opinion regarding instant food products.

**LIMITATIONS**

Following are the limitations, which made constraints while conducting the study.

- ❖ The result may not hold good for a long time.
- ❖ Time is a major constraint for a detailed study.
- ❖ The information collected only from the consumer.
- ❖ The analysis was based on the data collected with the help of the questionnaire and this might have its own limitation.

**REFERENCES**

1. Kubendran, V. and Vanniarajan, T., 2005, Comparative analysis of rural and urban consumers on milk consumption. Ind. J. Marketing. 35 (12): 27-30.
2. Ramasamy, K., Kalaivanan, G., and Sukumar, S., 2005, Consumer behavior towards instant food products. Ind. J. marketing. 35 (6): 24-25.
3. Banumathy, S. and Hemameena, M., 2006, Analysis of brand preference of soft drinks in the global environment. Ind. J. Marketing, 36 (6): 12-16.
4. Indumathi.V.M S. D. Sivakumar, N. Raveendran, P. Balaji- consumer buying behaviour of processed spice products- Indian journal of marketing August (2007). PP 52-55.
5. R. Ranjith Kumar, An evaluation of television advertisements of masala powder in pollachi (Tamil nadu). Indian journal of marketing. April, 2007. PP 13-99.
6. Dr. Sarita Bahl. Consumer behaviour towards food retailing system a journal of economics and managements vol.1 issue 4, july 2012.

**ANNEXURE****INTERVIEW SCHEDULE**

- 1) Name:
- 2) Age:
  - a) Below 30 years
  - b) 31-45 years
  - c) Above 45 years
- 3) Marital status
  - a) Married
  - b) unmarried
- 4) Educational qualification:
  - a) School level
  - b) Graduate
  - c) Post graduate
  - d) Professional
  - e) Others specify....



- 5) Occupation:
- Private employee
  - Govt employee
  - Self employed
  - Professionalist
  - Home maker
- 6) Monthly income:
- Below Rs.15000
  - Rs.15000-Rs.30000
  - Above Rs.30000
- 7) Family type:
- Joint family
  - Nuclear family
- 8) Size of the family:
- 2-4 members
  - 5-6 members
  - Above 6 members

**CONSUMER AWARENESS**

- 9) Which products do you purchase maximum for your family?
- Idly mix
  - Dosa mix
  - Noodles
  - Soupy noodles
  - Chapatti
  - Bhel poori
  - Chicken soup
  - Bread
  - Others specify...
- 10) How long you are using instant food products?
- Below 6 month
  - 6 month-1year
  - Above 1 year
- 11) When do you use instant food products?
- Breakfast
  - Lunch
  - Dinner
  - Evening snacks
- 12) Where did you buy the instant food products?
- Retail shop
  - Fruit stall
  - General stores
  - Departmental stores
  - Others specify....
- 13) Who influence to take decision in purchase of instant food products?
- Self
  - Children
  - Parents
  - Friends & relatives
- 14) How frequently you buy instant food products?
- Daily
  - Weekly
  - Monthly
  - When required
- 15) How do you know about the promotional factor of instant food products?
- Television
  - Magazine
  - Banner advertisement
  - News paper & journals
  - Radio television
  - Others specify
- 16) Which of your personal factors influence you to purchase instant food products?
- Job Nature
  - Family Size
  - Reduce work
  - Interest in new flavor
  - Time constraint

**BRAND PREFERENCE**

- 17) Rank the following product features which influences your purchase decision?

Sl/no	factors	Rank
1	Price	
2	Brand image	
3	Quality & Taste	
4	Easy availability	
5	Package	
6	Hygiene food	

18) Which brand do you used?

products	Brand names		
Idly mix	Eastern	Aachi	Nirapara
Dosa mix	Aachi rava dosa	Eastern	Nirapara
Noodles	Maggi	yippee	Foodles
Soupy noodles	knoor	Maggi	Top raman
Chapatti	Annapoorna	Pillsbury	Aashirvaad
Bhel poori	Pillsbury	Lakshmi	Sakthi
Chicken soup	Knoor	Campbell's	Maggie
Bread	Milka	Elite	Britannia
Others specify...			

19) How do you feel about the price of instant food products?

- a) Very High
- b) High
- c) Normal
- d) Low
- e) Very low

20) Reasons for purchasing instant food products?

- a) Quality
- b) Easy availability
- c) Cheaper
- d) Tasty
- e) Others specify....

21) Do you have the practice of observing expiry date?

Yes / No

22) if yes, what will be your reaction?

- a) Calling customer care
- b) Keep it as such
- c) Return the product
- d) Asking explanation
- e) Others specify...

23) How many times you have consumed instant food products in a week?

- a) once
- b) twice
- c) More than thrice

24) Level of satisfaction

Sl/no	factors	Highly Satisfied	Satisfied	Neutral	Dissatisfied	Highly Dissatisfied
1	Price					
2	Quality					
3	Quantity					
4	Packaging					
5	Taste					
6	Advertisement					
7	Availability of products					

# ROLE OF MICRO-FINANCE INSTITUTIONS IN DEVELOPMENT FOR UNDERPRIVILEGED IN HARYANA STATE AMONGST WOMEN: AN EMPIRICAL STUDY

**RAVI DUTT**

**RESEARCH SCHOLAR**

**DEPARTMENT OF MANAGEMENT**

**BANASTHALI VIDYAPITH**

**BANASTHALI**

**DR. R. K. SHARMA**

**DEAN & PROFESSOR**

**BHARATI VIDYAPEETH DEEMED UNIVERSITY INSTITUTE OF MANAGEMENT & RESEARCH**

**NEW DELHI**

## ABSTRACT

*This study aims to evaluate the position of rural poor borrowers in groups and centers that are a part of the lending operation. Also, it would study that microfinance is not only given to provide them economic opportunities but it also helps to create an environment in which rural poor are able to exchange socially-needed information, encouragement and motivation for confidence-building. The study focuses on both social and economic aspects. Data will be obtained by visiting the various branches of Ujjivan financial services Haryana. With the help of a structured questionnaire. Independent T- test will be used to make a comparison in the position of the rural households between customers of Ujjivan financial services. It was concluded that in Haryana still there is gender biasness prevails and when it comes to empowerment still males dominate in the society, unlike other studies in Tamil Nadu and southern parts of India, similarly there has been a contradiction in the studies conducted in Punjab. Though there has been economic improvement and financial upliftment in the society due to microfinancing but still when it comes to empowerment there is a substantial difference between males and females.*

## KEYWORDS

micro-finance, encouragement, motivation, independent t-test, ujjivan financial services, financial upliftment.

## INTRODUCTION

Micro-Finance is an extension of small amounts of collateral-free institutional loans to jointly liable poor group members for their self-employment and income-generation. Micro-Finance is also called as Collateral-free loan. The main objective is to extend credit to poor people in rural areas who have no physical collateral. People who are not in a position to provide any physical collateral for availing loans are given this facility of microfinance. Microfinance is provided for the upliftment of the poor. It has opened a gateway for people who don't have any access to the formal sectors to take assistance since the formal sector lend to clients having an established track records, regular incomes and some collateral to provide. But poorer section of people is not able to fulfill such a criterion, thus, microfinance has gained importance since it aims at the upliftment of the poor. Microfinance provides financial assistance for the house, business etc. for sustenance of the poor. It not only helps them to earn their livelihood but also enhance their status. It is also an informal way of reaching the poor communities especially in the rural areas. Many bilateral and multilateral development institutions have increased their funding for micro-lending programs in order reach the poor-particularly women-to help them to achieve substantial livelihoods through creation of earning opportunity and eradication of poverty. "The Grameen Bank" micro-lending model has now replicated in 56 countries, including many developed countries like USA and Canada. It has been thought by the promoters of micro-lending projects, who organized the Micro-Credit World Summit, to create a poverty-free planet by the year 2025 through micro-lending. Microfinance is also making an attempt to reduce poverty by bringing mainstream financial institutions and capacity-building services to poor households in a sustainable manner; to constantly deliver need-based financial services in a cost effective manner. There is a growing sense that micro-lending projects for women have potential to achieve the goal of equitable (women's entitlement to resources), and sustainable (independent stability and continuity) development. In the 1980's the "programmatic success" of the micro-credit scheme of the Microfinance institutions and Grameen Bank among poor has been there. They have funded around 100 million people.

## REVIEW OF LITERATURE

The concept of was at first introduced by Prof. Mohd.Yunus in Bangladesh. The entire credit for the same goes to him. Now, there are more than 1000 micro-finance NGO's or MFI's (Micro Finance Institutes). According to (SIDA) Swedish International Development Cooperation Agency report, 2005, India's Self Help Group Bank Linkage model, which has reached more than 120 million clients since the 1990's, targets women with an estimated 90 percent women client base. A substantial number of studies have been conducted primarily by economists on the micro-credit program of the Grameen Bank since its beginning in 1983. Most of these studies are evaluative in nature, in which the researchers have tried to examine the kind of impact the Grameen Bank micro-credit programs have had on its borrowers (Ghai 1984; Ahmed 1985; R.I. Rahman 1986; Atiur Rahman 1986a and 1986b; Hossain 1988). These studies provide both quantitative and descriptive information on gradual changes in the number of Grameen Bank memberships, the amount of loans taken by borrowers, income earned from loan money, household income, areas of investment and also on social development indicators. Women in loan centres of the Grameen Bank are able to gain strength in collective solidarity, to challenge traditional norms and values, and fight against social injustice. Economic growth has taken place with various development initiatives in many cases but at the macro level. But they have failed to provide benefits at the micro level and there were serious concerns about equitable distribution of the benefits of development along the gender lines. There was a concern for women. Currently, micro-finance is has turned out to be not only an anti-poverty development tool but also an emerging sector for financial markets and profit-making potential.

### Empowerment

Empowerment is a very broad concept and is likely to be interpreted in different ways as per the requirement of the situation. In a general sense, it tries to encompass self-strength, control, self-power, self-reliance, own choice, life of dignity, independence, own decision making, being free.

Empowerment, by definition may be defined as a social process, since it occurs in relationship to others. It is a dynamic process of change: going from a 'disempowered' state to a more 'empowered' one. Empowerment is a multi-dimensional, social process. It is multi-dimensional in the sense that it occurs within socio-logical, psychological, economic, and other dimensions. Empowerment also occurs at various levels, such as individual, group, and community. Empowerment is also a construct shared by many disciplines and arenas: community development, psychology, education, economics, and studies of social movements and organizations, among others. In recent empowerment literature, the meaning of the term empowerment is often assumed rather than explained or defined. Rappoport (1984) has noted that it is easy to define empowerment by its absence but difficult to define in action as it takes on different forms in different people and contexts. Zimmerman (1984) has stated that asserting a single definition of empowerment may make attempts to achieve it formulaic or prescription-like, contradicting the very concept of empowerment. Although empowerment has now become a familiar and much used term, an adequate and comprehensive definition remains

elusive. One problem is that empowerment is a 'latent phenomenon' that is not directly observable: its aggregate results or effects may be visible but the internal dynamism is difficult to examine. Empowerment is also often seen only partially, through the outcomes of increased autonomy and freedom. (Kabeer) 2000 states that empowerment entails a process of change. People who exercise a great deal of choice in their lives may be very powerful, but they are not empowered in the sense in which the word is being used, because they were never disempowered in the first place. Inasmuch the notion of empowerment is about change, it refers to the expansion in people's ability to make strategic life choices in a context where this ability was previously denied to them. Empowerment in women is defined as the process by which women take control and ownership of their lives through expansion of their choices. Thus, it is a process of acquiring the ability to make strategic life choices in a context where this ability has previously been defined. The core elements of empowerment have been defined as the ability to define one's goals and act upon them, awareness of gendered power structures, self-esteem and self-confidence Kabeer (2001). Empowerment, as per Rowlands (1997), is a process whereby women become able to organise themselves to increase their own self-reliance, to assert their independent right to make choices, and to control resources which assist in challenging and eliminating their own subordination. Empowerment in women can take place at different levels-individual, household, community and societal. Microfinance programs have been increasingly promoted in India for their positive economic impact and the belief that they empower women. Women empowerment is a process in which women challenge the existing norms and culture, to effectively improve their well-being. Empowerment in women implies that women are gaining greater control over their life, have increased life options and choices (even when those are not chosen), and generally attaining the capability to live the life one wishes to live. Kabeer (2001) defines women's empowerment as "an expansion in the range of potential choices available to women so that actual outcomes reflect the particular set of choices which the women value." While empowerment is relevant to both sexes, women's empowerment necessarily is more complicated by the fact that they face additional disadvantages because of their sex, and the fact that household and intra-familial relationships are a major source of women's disempowerment. Malhotra and Schuler (2005). Empowerment of women is defined as the process by which those who have been denied the ability to make strategic life choices acquire such ability. The ability to exercise choices incorporates three inter-related dimensions: resources which include access to and future claims to both material and social resources; agency which includes the process of decision-making, negotiation, deception and manipulation; and achievements that are the well-being outcomes. Also, it needs to be seen what other factors are important for women empowerment other than microfinance. Women access to saving and credit will increase women's social and political empowerment, and even change traditional gender relationships.

### Microfinance

M-CRIL (2006), analyzes the needs of microfinance industry of India in 2006. Indian microfinance industry can reach 72 million households in 5 years, if the required fundare made available to them in time. To achieve this, the microfinance industry will be requiring Rs. 6295 crores. The paper argues while majority of this funding would need to be provided by Govt., private investment would need to be encouraged. Apart from that, a legal framework for microfinance institutions would have to be created to supplement and regulate this growth and ensure microfinance reaches poorest sections of society.

Chowdhury J (2007), has empirically analysis of impact of microfinance on consumption of the beneficiary households. It chooses Grameen Bank's customers via a household survey to collect data. The data analysis concludes that old member households consume 19% more than new members. The growth in consumption decreases after 5 years of membership before declining. Overall consumption increases after households participate in a microfinance program.

Deininger, K. & Liu, Y. (2009), evaluated the SHG-based microcredit model using a large-scale World Bank-supported intervention in the state of Andhra Pradesh, India. Based on two rounds of a 2,400 household panel, the paper uses double differences, propensity score matching and pipeline comparison to assess economic impacts of longer exposure of a program that promoted and strengthened self-help programs. The analysis finds that longer program exposure has positive impacts on consumption, nutritional intake and asset accumulation. Study results suggest that a program that not only fosters group formation, but also supports more mature groups through federation and credit access can have significant economic benefits in the long term. Research to determine the extent to which benefits will be maintained once outside support is terminated will help assess the overall desirability and impact of such programs.

Cull, R, Demircug-Kunt, A & Morduch J(2008) compares mainstream financial services companies and micro-banks. It analyzes if micro-banks have grown in countries which have less developed financial services industry. It cites example of 2 countries Bolivia and Bangladesh which have a low per capita mainstream banking penetration, but microfinance has thrived in these countries. The author tries to prove if lack of mainstream competition is one of the reasons of growth of micro-banks. He concludes that microfinance, until recently has filled the niche that is not served by mainstream banking. However, as microfinance expands along with mainstream banking, the prospect for competition and direct interaction has increased.

Krauss N & Walter I (2006), analyzes whether microfinance represents a distinct financial asset class, thereby forming the basis for access to global capital markets and performance-driven investors in their search for efficient portfolios. Based on a scientific study, the paper concludes that microfinance institutions in developing countries are less exposed to market risks than commercial banks and hence can be a distinct asset class.

Ahmed H (2002) argues while conventional microfinance institutions have grown over time, Islamic microfinance institutions are yet to take off. The author describes a theoretical basis and operational framework for Islamic microfinance.

Deininger, K. & Liu, Y. (2009), investigated the impact of exogenous monitoring and loan recovery arrangements on loan repayments, together with loan and group characteristics. The paper uses data from more than 2000 groups, federated in 299 village organizations (VOs) in Andhra Pradesh, India. Study results highlight the overriding importance of rules, suggesting that the impact of regular monitoring, audits and high repayment frequencies as well as in-kind credit to ensure consumption can compensate not only for loans made out of grants but, for the decrease in repayment probability incurred by focusing on groups of very poor borrowers.

Galema, R., Lensink, R. & Spierdijk, L. (2008), investigates the potential of adding microfinance funds to a portfolio of risky international assets to yield diversification gains. It uses mean-variance spanning tests with short-sale constraints to demonstrate that investing in microfinance may be attractive for investors seeking a better risk-return profile. The spanning methodology simultaneously considers risk and return, thereby providing a good indication of possible diversification benefits of microfinance. The study results have clear implications for private and institutional investors. The paper suggests that microfinance can provide an attractive investment opportunity even if investors are only interested in risk and return. Investing in microfinance becomes even more attractive if investors value the social aim of microfinance.

This aim of the research is to study the role of Micro-Finance Institutions fostering Financial Inclusion for Poor in Haryana State and to evaluate poor i.e. males and females under microfinance scheme and then make a comparative between them keeping various parameters in mind and thus, see the effect on their empowerment in addition to other aspects. It has been found that in the Indian Context especially, the northern part of India, fewer studies have been done since micro-finance to rural women is not prevalent here. Thus, there is a strong need to study the effects on rural poor empowerment with regard to micro-finance and recommend implementing the Haryana.

### OBJECTIVES OF THE STUDY

This study aims to evaluate the position of rural poor borrowers in groups and centers that are a part of the lending operation. Also, it would study that micro-finance is not only given to provide them economic opportunities but it also helps to create an environment in which rural poor are able to exchange socially-needed information, encouragement and motivation for confidence-building. The study focuses on both social and economic aspects.

### RESEARCH METHODOLOGY

This would be a *descriptive* research study, which aims to evaluate the effectiveness of the microfinance on empowerment of rural poor in Ujjivan financial services Haryana. Ujjivan, Haryana (India) based microfinance company has been working mostly in urban and semi urban areas of Haryana with 5 branches at Rohtak, Jind, Hissar, Bhiwani & Bahadurgarh. With this Ujjivan has made entry into 18th states of operation with 278 branches in India. Ujjivan claimed that they provide small loans to economically active poor women at 1.07% interest rate per month and encourage them to use it for expanding business for building a better life for the family. The company offers a range of financial services including loan for business and consumption purposes, education, emergency, festival loan and funeral advance besides providing accidental life insurance coverage to the women and her husband as well.

The main aim is to evaluate the effectiveness between women who have availed microfinance and those rural poor who have not availed microfinance. In corollary to the above, a comparative analysis will be done to identify the differences.

For this study the sample will be selected from various branches of Ujjivan financial services Haryana. The sample size would be around 250 borrowers both males and Females, which will be selected randomly. It would be a representative sample. The central strategy of information generation in research would be survey method followed by structured interviews with detailed aspects with them. The sample would be collected from all the geographical directions of Ujjivan financial services Haryana and then interact with the various groups of people within the branches.

Data will be obtained by visiting the various branches of Ujjivan financial services Haryana. There would be structured interviews conducted with locals who have availed micro-finance not only men but also with women who have availed micro-finance in the same areas. Survey will also conduct through a well drafted questionnaire. There would be a pre-testing on the questionnaire by at least 3 experts. The interviews will mostly have "closed-ended questions" (Nelson 1989; Patton 1990; van Mannen 1988)

Independent T- test will be used to make a comparison in the position of the rural households between customers of Ujjivan financial services Haryana who have availed microfinance both males and females who could not avail microfinance from Ujjivan financial services Haryana.

### Hypothesis

Since this study aims at testing the effectiveness of empowerment of rural poor members after availing micro-finance, the first hypothesis takes the following form:

*H<sub>01</sub>. There is no significant difference in the **improvement** of rural females who avail micro-finance and females who have not avail microfinance.*

*H<sub>02</sub>. There is no significant difference in the **empowerment** of rural females who avail micro-finance and females who have not avail microfinance*

*H<sub>03</sub>. There is no significant difference in the **enhancement** of rural females who avail micro-finance and females who have not avail microfinance.*

### FINDINGS

The survey was given to 250 respondents and a sum of 190 respondents responded to the survey completely. Out of the aggregate of 190 respondents only 126 male respondents availed microcredit from the company Ujjivan financial services. 64 female of the respondents were sanctioned the loan. All these respondents were the clients of Ujjivan financial services, Haryana. What's more all the respondents are from the same Micro-financing scheme. So no examination has been carried out demonstrating the contrasts in the strengthening of around microfinance organization. Various parameters which have been studied are:

**TABLE 1-DEMOGRAPHIC PROFILE OF RESPONDENTS SHOWING VARIOUS PARAMETERS**

Parameter	190 respondents		126 female respondents whoreceived microfinance		64 female respondents whohave not re- ceived microfinance	
	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev
Age	34.0	10.6	36.1	10.3	29.8	10.1
Monthly Expenditure	10.9	3.8	10.9	3.8	2.4	1.5
Number of Children	2.6	1.3	2.6	1.2	2.4	1.5
Land in Acres	0.3	0.4	0.3	0.4	0.3	0.2
Numberof income earners	1.5	0.7	1.6	0.8	0.7	0.5
Education	0.8	0.4	0.8	0.4	0.7	0.5

Table- 4.1 gives the attributes of the specimen for microcredit borrowers and impending micro credit borrowers. Microcredit borrowers have a tendency to be more seasoned and have a marginally higher month to month use. Additionally, microcredit borrowers have somewhat more pay earners in the family and children contrasted with forthcoming microcredit borrowers. What is not noted in Table-1 in regards to demography was that all the respondents were married, separated, or widowed. Additionally, all the respondents had no less than one child.

**TABLE 2: EFFECT OF DIFFERENT INCOME PROFILESON THE RESPONDENTS**

Parameters	190 respondents		126 female respondents who re- ceived microfinance		64 female respondents who have not re- ceived microfinance	
	Number	Percentage	Number	Percentage	Number	Percentage
Agricultural Work	87	45.8%	51	40.5%	36	56.3%
Non-Agricultural work	12	6.3%	10	7.9%	2	3.1%
Own Business	11	5.8%	10	7.9%	1	1.6%
Husband's Business	80	42.1%	55	43.7%	25	39.1%

Table2- gives data with respect to pay gaining profile for microcredit borrowers and impending microcredit borrowers. The picture that rises will be that impending microcredit borrowers appear to be, on normal, more included in the agrarian area contrasted with microcredit borrowers. Then again, microcredit borrowers appear to be, on normal, more included in the non-agricultural segment. Moreover, microcredit borrowers appear to be more probable, contrasted with impending microcredit borrowers, to be included in own business.

GROUP STATISTICS					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
Overall improvement	Female availed	126	2.4373	1.04959	.04381
	Female unavailed	64	2.6069	.99204	.07542

INDEPENDENT SAMPLES TEST									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Dif- ference	Std. Error Dif- ference	95% Confidence Interval of the Difference
Overall im- provement	Equal variances as- sumed	2.117	.146	-1.887	745	.030	-.16965	.08991	Lower -.34615 Upper .00684
	Equal variances not assumed			-1.945	297.473	.053	-.16965	.08722	Lower -.34131 Upper .00200

For Overall improvement, the Levene's Test for Equal variances yields a p-value of .146. This means that the difference between the variances is statistically insignificant and one should use the statistics in the first row. The p-value .030, less than 0.05, indicates that there is significant difference between the males and females for Overall improvement at 95% confidence interval.

*H<sub>01</sub>. There is no significant difference in the **improvement** of rural females who avail micro-finance and females who have not avail microfinance. **Accepted***



GROUP STATISTICS					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
Enhancement	Female availed	126	3.1254	1.58250	.06605
	Female unavailed	64	3.7688	1.34413	.10219

INDEPENDENT SAMPLES TEST									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
									Lower Upper
Enhancement	Equal variances assumed	16.616	.000	-4.846	745	.000	-.64335	.13277	-.90399 -.38271
	Equal variances not assumed			-5.287	328.521	.000	-.64335	.12168	-.88272 -.40398

For Enhancement, the Levene's Test for Equal variances yields a p-value of .000. This means that the difference between the variances is statistically insignificant and one should use the statistics in the first row. The p-value .005, less than 0.00, indicates that there is no significant difference between the males and females for Enhancement at 95% confidence interval.

*H<sub>03</sub>. There is no significant difference in the enhancement of rural females who avail micro-finance and females who have not avail micro-finance. Accepted*

GROUP STATISTICS					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
Empowerment	male	126	2.7230	1.18082	.04929
	female	64	2.6936	1.11742	.08496

INDEPENDENT SAMPLES TEST									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
									Lower Upper
Empowerment	Equal variances assumed	3.141	.077	.290	745	.772	.02935	.10117	-.16926 .22797
	Equal variances not assumed			.299	297.159	.765	.02935	.09822	-.16393 .22264

For Empowerment the Levene's Test for Equal variances yields a p-value of .077. This means that the difference between the variances is not statistically insignificant and one should use the statistics in the second row. The p-value .772, more than 0.05, indicates that there is significant difference between the males and females for Empowerment at 95% confidence interval.

*H<sub>02</sub>. There is no significant difference in the empowerment of rural females who avail micro-finance and females who have not avail micro-finance. not Accepted*

## CONCLUSIONS

The paper has an objective to evaluate the position of rural poor borrowers in groups and centers that are a part of the lending operation in Haryana in special reference to Ujjivan financial services. Also, it would study that microfinance is not only given to provide them economic opportunities but it also helps to create an environment in which rural poor are able to exchange socially-needed information, encouragement and motivation for confidence-building. For the fulfillment of the objective a sample of 250 respondents were interviewed and there were around 196 filled responses were received. A comparative analysis between the female availed and unavailed borrowers was undertaken considering improvement in the economic conditions, enhancement in the financial status of the borrowers and the empowerment in the family or society were taken as the parameters. Independent T-Test was done and it was found that no significant difference between the female availed and unavailed in the improvement who avail micro-finance and females who have not avail micro-finance. Further, there is a similarity between female availed and unavailed who avail micro-finance and females who have not avail micro-finance when enhancement of the social status was considered, in other words there has a similar upliftment in the financial status of both female availed and unavailed borrowers. But when empowerment was taken as a variable it was found that there has been a significant difference between female availed and unavailed who avail micro-finance and females who unavail micro-finance. It can be concluded that in Haryana still there is gender biasness prevails and when it comes to empowerment still males dominate in the society, unlike other studies in Tamil Nadu and southern parts of India, similarly there has been a contradiction in the studies conducted in Punjab. Though there has been economic improvement and financial upliftment in the society due to microfinancing but still when it comes to empowerment there is a substantial difference between female availed and unavailed.

## REFERENCES

1. Accion International. (1988). An operational Guide for Micro Enterprise Projects. Cambridge: Accion International.
2. Afsar, Helen. (1985). Women, work and Ideology in the Third World. London: Tavistock Publication.
3. Ahmed H (2002). Financing Microenterprises: An Analytical Study of Islamic Microfinance Institutions
4. Armendariz B., Roome N. (2008). Empowering women via microfinance in fragile states, Working Papers CEB, 2008
5. Bali Swain R, 2006. Microfinance and Women's Empowerment, Sida Working paper, Division of Market Development, Sida, Stockholm.
6. Boserup, Ester. (1970). Women's Role in Economic Development. New York: St. Martin Press.
7. CBC (Canadian Broadcasting Corporation). The Grameen Bank, CBC – Ideas, 5 March (1991). Toronto: Ontario.
8. Cheston, S. & Kuhn, L. (2002). Empowering Women Through Microfinance
9. Chowdhury J (2007). Does the Participation in the Microcredit Programs Increase Consumption of Participating Households? The Case of the Grameen Bank in Bangladesh.
10. Counts, A.M. (1990). Training Guide: Grameen Bank (1990). Dhaka: Grameen Bank.
11. Cull, R, Demircuc-Kunt, A & Morduch J (2008). Banks and Microbanks
12. Deininger, K. & Liu, Y. (2009). Determinants of Repayment Performance in Indian Microcredit Groups
13. Deininger, K. & Liu, Y. (2009). Longer-Term Economic Impacts of Self-Help Groups in India
14. Dessy, S. & Ewoudou, J. (2006). Microfinance and Female Empowerment Gugliotta, G. (1993). Microenterprise is Growing, Grameen Dialogue 15: 7-9.

15. Hulme, D. and P. Mosley. (1997). Finances for the Poor or Poorest? Financial Innovation, Poverty and Vulnerability. In Who Needs Credit? Poverty and Finance in Bangladesh. G. Wood and I.A. Sharif, eds. Dhaka: University Press Limited.
16. Johnson, Jo-Ann. (1995). The Boldly Loan Where No Banker Has Loaned Before, Business Ethics Magazine. [www.condor.depaul.edu/ethics/bizsoc3](http://www.condor.depaul.edu/ethics/bizsoc3)
17. Johnson, S. and B. Rogaly. (1997). Financial Services and Poverty Reduction. London: OXFAM & ACTION AID (draft)
18. K. Kalpana (2008). The Vulnerability of 'Self-Help': Women and Microfinance in South India EDA Rural Systems (2003), Impact Assessment of Microfinance: Interim Findings from a National Study of MFIs in India
19. Kabeer, N. (2001). Resources Agency Achievement: Reflections on the Measurement of Women's Empowerment. -Theory and Practice, SIDA Studies, No.3.
20. Linda Mayoux (2001). Poverty Elimination and the Empowerment of Women, ILO, Geneva
21. Linda Mayoux (2003). Women's Empowerment and Participation in Micro-finance: Evidence, Issues and Ways Ahead
22. Linda Mayoux (2005). Women's Empowerment through Sustainable Microfinance: Rethinking "Best Practice"
23. Linda Mayoux. (2006). Women's Empowerment through Sustainable Micro-finance: Rethinking 'Best Practice'
24. M. Pilar Ramirez (2006). Empowering Women Through Microfinance: Achievements and Limitations, FIE SA – Bolivia,
25. Madhuri, Mathema. (1992). Improving Rural Women's Lives: A Case Study in Nepal. PhD. Dissertation, Stanford university, Stanford, CA.
26. Malhotra, Meenakshi (2004). Empowerment of Women, Isha Books, Delhi.
27. Markar, A.K; June (2008). Vol. 5, Issue 2, Empowerment of women through participation in rural development, ICAI Journal of Entrepreneurship Development.
28. Rosenberg, R. (1996). Micro-Credit Interest Rates, CGAP Occasional Paper No.1. [www.worldbank.org/html/cgap/occl.htm](http://www.worldbank.org/html/cgap/occl.htm)
29. Rowlands, J. (1997). Questioning Empowerment. Oxford: Oxfam Publications.
30. Sen, Amartya. (1990). Gender and Cooperative Conflicts. In Persistent Inequalities: Women and World Development. Irene Tinker, ed. Oxford: Oxford University Press.
31. Yunus, Muhammad. (1992). Grameen Bank-The First Decade 1976-86. In The Grameen Reader. David Gibbons, ed. Dhaka: Grameen Bank
32. Yunus, Muhammad. 1993. The Poor as Engine of Development. The Washington Quarterly 104, 1987.

## IMPACT OF TOURISM ON INDIAN ECONOMY

DR. JASJEET GILL

ASSOCIATE PROFESSOR IN ECONOMICS

GURU NANAK COLLEGE FOR GIRLS

SRI MUKTSAR SAHIB

## ABSTRACT

*Traveling and Tourism has been an integral part of Indian Culture & Tradition. Tourism Industry is the most vibrant tertiary activity and a multibillion industry in India. The potential and performance of India's tourism industry needs to gauge in terms of its socio-economic magnitudes. Traditionally known largely for its historical and cultural dimensions, tourism today is highlighted for its immense business opportunities. The first public milestone in the history of tourism was the creation of the Indian Tourism Development Corporation (ITDC), in 1966. National Tourism Development Policy, 2002 introduced with the principles of positioning tourism as a major engine of economic growth and that removes the large exercise of unplanned tourism development. Tourism policy highlights seven key areas viz. Swagat (Welcome), Soochna (Information), Suvidha (Facilitation), Suraksha (Safety), Sahyog (Cooperation), Samrachna (Infrastructure Development), and Safai (Cleanliness) that would provide the thirst to tourism development. Public Road Shows and mass media communication in newspapers, Television, and outdoors media create general awareness about the Atithi Devo Bhavah program. Under the Incredible India Online Campaign, a domestic online campaign was launched to promote tourism within the country. This paper aims to study tourism industry, impact on Indian economy, contribution to GDP and employment and some highlights of tourism industry.*

## KEYWORDS

tourism industry, impact on economy, economic growth.

## INTRODUCTION

Tourism has become the world's largest industry, generating wealth and employment, opening the minds of both visitors and the visited to different ways of life. India has strong signs of becoming one of the emerging giants in world tourism. The most imperative factors for successful tourism development include product enhancement, marketing, regulations and human resource development. India's tourism is one of the flourishing sectors in terms of its scope. Tourism in India is growing continuously to generate employment and earn large amount of foreign exchange in order to stabilize the country's economic and social development. It also helps in preserving and sustaining the diversity of the India's natural and cultural environments. Indian tourism has huge untapped potential for generating employment and ensuring a steady flow of foreign exchange besides giving a much-needed boost to the country's overall economic and social development. There have been significant improvements in the spheres of increasing air seat capacity, trains and railway connectivity to important tourist destinations, four-lining of roads connecting important tourist centers. Accommodation facilities have been redefined for the convenience of the visitors. Right from luxury resorts to paying guest accommodations, there is something for everybody, to suit every pocket. Tourism is a major contributor in India's economy. Indian economy is second fastest growing economy in the world. With growth of this economy, tourism industry is also prospering. In 2002 to 2010, the international tourist flow has increased from 2.58 million to 5.11 million. There is dramatic increase in foreign tourist arrival. According to world travel and tourism council report, 2015 total contribution of Travel & Tourism to GDP was 6.7% of GDP in 2014, and to rise by 7.3% pa to 7.6% of GDP in 2025. The total contribution of travel and tourism to employment was 8.7% of total employment. In developing countries like India tourism has become one of the major sectors of the economy, contributing to a large proportion of the National Income and generating huge employment opportunities. It has become the fastest growing service industry in the country with great potentials for its further expansion and diversification. However, there are pros and cons involved with the development of tourism industry in the country.

## IMPACT OF TOURISM ON ECONOMY

Tourism industry in India has several positive and negative impacts on the economy and society.

These impacts are highlighted below.

## POSITIVE IMPACTS

- 1. Generating Income and Employment:** Tourism in India has emerged as an instrument of income and employment generation, poverty alleviation and sustainable human development. It contributes 6.77% to the national GDP and 8.78% of the total employment in India. Almost 20 million people are now working in the India's tourism industry.
- 2. Source of Foreign Exchange Earnings:** Tourism is an important source of foreign exchange earnings in India. This has favourable impact on the balance of payment of the country. The tourism industry in India generated about US\$19.657 billion in 2014 and that is expected to increase to US\$275.5 billion by 2018 at a 9.4% annual growth rate.
- 3. Preservation of National Heritage and Environment:** Tourism helps preserve several places which are of historical importance by declaring them as heritage sites.
- 4. Developing Infrastructure:** Tourism tends to encourage the development of multiple-use of infrastructure that benefits the host community, including various means of transports, health care facilities, and sports centers.
- 5. Promoting Peace and Stability:** Tourism industry can also help promote peace and stability in developing country like India by providing jobs, generating income & diversifying the economy.
- 6. The Multiplier Effect:** The flow of money generated by tourist spending multiplies as it passes through various sections of the economy.
- 7. Regional Development:** The underdeveloped regions of the country can greatly benefit from tourism development. Many of the economically backward regions contain areas of high scenic beauty and cultural attractions.
- 8. Economic Value of Cultural Resources:** Tourism provides monetary incentives for the development of many local crafts and culture, thus it has an effect on the income of the local artisans and artists.
- 9. Promotion of International Understanding:** Tourism can also become an effective tool to develop a better understanding and interaction amongst people of different countries.

## NEGATIVE IMPACTS

- 1. Undesirable Social and Cultural Change:** Tourism sometimes led to the destruction of the social fabric of a community. The more tourists coming into a place, the more the perceived risk of that place losing its identity.
- 2. Increase Tension and Hostility:** Tourism can increase tension, hostility, and suspicion between the tourists and the local communities when there is no respect and understanding for each other's culture and way of life.
- 3. Creating a Sense of Antipathy:** Tourism brought little benefit to the local community. In most all inclusive package tours more than 80% of travelers' fees go to the airlines, hotels and other international companies, not to local businessmen and workers.
- 4. Adverse Effects on Environment and Ecology:** One of the most important adverse effects of tourism on the environment is increased pressure on the carrying capacity of the ecosystem in each tourist locality.

5. **Import Leakage:** This commonly occurs when tourists demand standards of equipment, food, drinks, and other products that the host country cannot supply, specially developing countries.
6. **Seasonal Character of Job:** The job opportunities related to tourism industry are seasonal in nature as they are available only during the tourist season.
7. **Increase in Prices:** Increasing demand for basic services and goods from tourists will often cause price hikes that negatively affect local residents whose income does not increase proportionately.

## FACTS AND FIGURES OF TOURISM IN INDIA

There is new product development such as Golf tourism in Indian Himalayan ranges, Cruise tourism consists Ocean cruise at Cochin port, river cruise at Andhra Pradesh and West Bengal, adventure tourism like skiing, paragliding and mountaineering in Gulmarg, medical tourism, wellness tourism, Sustainable or Eco tourism, Accessible tourism etc. Let's have a look on tourism industry contribution to GDP, Employment, foreign exchange earnings and foreign tourist arrivals.

### TRAVEL AND TOURISM CONTRIBUTION TO EMPLOYMENT

Travel & Tourism generated 23,024,000 jobs directly in 2014 (5.5% of total employment). This includes employment by hotels, travel agents, airlines and other passenger transportation services (excluding commuter services). It also includes, for example, the activities of the restaurant and leisure industries directly supported by tourists. By 2025, Travel & Tourism will account for 29,020,000 jobs directly, an increase of 2.2% pa over the next ten years.

### TOURISM INDUSTRY CONTRIBUTION TO GDP

The direct contribution of Travel & Tourism to GDP in 2014 was INR2,478.2bn (2.2% of GDP). This primarily reflects the economic activity generated by industries such as hotels, travel agents, airlines and other passenger transportation services (excluding commuter services). But it also includes, for example, the activities of the restaurant and leisure industries directly supported. The direct contribution of Travel & Tourism to GDP is expected to grow by 7.2% pa to INR5,339.2bn (2.5% of GDP) by 2025. The total contribution of travel and tourism to GDP was INR7,642.5bn in 2014 (6.7% of GDP) and is expected to grow by 7.5% to INR8,218.0bn (6.8% of GDP) in 2015. It is forecast to rise by 7.3% pa to INR16,587.2bn by 2025 (7.6% of GDP).

TABLE 1

Year	Contribution of Tourism in GDP of the Country (%)
2009-10	6.77
2010-11	6.76
2011-12	6.76
2012-13	6.88
2013-14	6.77

Source: Ministry of Tourism Annual Report 2014-15

### FOREIGN EXCHANGE EARNINGS FROM TOURISM

Tourism is an important sector of Indian economy and contributes substantially in the country's foreign exchange earnings. The FEE's from tourism in rupee terms during 2014 were Rs. 1,20,083 crore with a growth of 11.5%, as compared to FEE's of Rs. 1,07,671 crore with a growth of 14.0% during 2013 over 2012.

TABLE 2

Year	Foreign Exchange Earnings Rs. (crore)	Percentage Change over Previous Year
2000	15,626	20.6
2001	15,083	(-) 3.5
2002	15,064	(-) 0.1
2003	20,729	37.6
2004	27,944	34.8
2005	33,123	18.5
2006	39,025	17.8
2007	44,360	13.7
2008	51,294	15.6
2009	53,700	4.7
2010	64,889	20.8
2011	77,591	19.6
2012	94,487	21.8
2013	1,07,671	14.0
2014	1,20,083	11.5

Source: Ministry of Tourism Annual Report 2014-15

Table shows the Amount of Foreign Exchange Earning (FEE) earned by India through Tourism since 2000 to 2014. The rate of FEE is increasing over the period except few years. In 2003 and 2004 foreign exchange earning was on higher point i.e. 37.6% and 34.8% respectively. Since tourist arrival was also rose by 14.3% in 2003 and 26.8% in 2004. This achievement was the reward of Incredible Campaign and effective implementation of New Tourism Policy 2002. Foreign Exchange Earnings rose to 20.8% in 2010, 21.8% in 2012 is the appreciable growth rate and in 2014 it was 11.5% for Indian Tourism Scenario.

### FOREIGN TOURIST ARRIVALS IN INDIA

Earlier foreign tourist arrivals to India were highly lopsided with a few countries such as US and UK accounting for the bulk of arrivals in India. In recent years' foreign tourist arrival figures have been diversifying. More and more people from Afghanistan, Nepal, Sri Lanka and Bangladesh visit India now as are people from Southeast Asian countries, South America and South Africa.

FTAs during 2014 were 77.03 lakh with a growth of 10.6%, as compared to the FTAs of 69.68 lakh with a growth of 5.9% during 2013 over 2012.

TABLE 3

Year	Foreign Tourist Arrivals (In nos.)	Percentage Change over Previous Year
2000	26,49,378	6.7
2001	25,37,282	(-)4.2
2002	23,84,364	(-)6.0
2003	27,26,214	14.3
2004	34,57,477	26.8
2005	39,18,610	13.3
2006	44,47,167	13.5
2007	50,81,504	14.3
2008	52,82,603	4.0
2009	51,67,699	(-)2.2
2010	57,75,692	11.8
2011	63,09,222	9.2
2012	65,77,745	4.3
2013	69,67,601	5.9
2014	77,03,386	10.6

Source: Ministry of Tourism Annual Report 2014-15

Table highlights the foreign tourist flow in India. The percentage of change over previous year is increasing consistently except few years i.e. 2001, 2002 and 2009. There was a marvelous jump in the tourist arrival in 2004, the percentage increase by 26.8% as compared to year 2003. Tourist arrival fall down by 2.2% in the year 2009 due to global slowdown, terrorist activities, swine flu, etc., Tourist arrival rose to 10.6% in 2014.

#### HIGHLIGHTS OF INDIAN TOURISM

The following are highlights about Indian tourism-

- Increase in international trade.
- Growth in hotel industry
- Focus on rural tourism
- Motivating private sectors to attract more tourists
- Expansion in transport, air travel and shipping
- Progress in health care industries
- Growth in health care management
- Giving more innovative promotional measure for tourism
- Multi- socio cultural activities
- Helping to preserve, retain and enrich our cultural heritage.

#### CONCLUSION

Tourism industry in India is growing and it has vast potential for generating employment and earning large amount of foreign exchange besides giving a fillip to the country's overall economic and social development. But much more remains to be done. Eco-tourism needs to be promoted so that tourism in India helps in preserving and sustaining the diversity of the India's natural and cultural environments. Tourism in India should be developed in such a way that it accommodates and entertains visitors in a way that is minimally intrusive or destructive to the environment and sustains & supports the native cultures in the locations it is operating in. Moreover, since tourism is a multi-dimensional activity, and basically a service industry, it would be necessary that all wings of the Central and State governments, private sector and voluntary organisations become active partners in the endeavour to attain sustainable growth in tourism if India is to become a world player in the tourism industry. To the conclusion Indian tourism is growing with leaps and bounds and have a great potential to be develop as a world class tourist destination. There is significant improvement in growth of arrival of tourist and their Foreign exchange earnings.

#### REFERENCES

1. Market Research Division, Ministry of tourism, GOI, 2014-15 "Tourism Statistics 2014-15"
2. World travel & tourism council report, 2015 economic impact on india

#### WEBSITES

3. [www.economywatch.com/business-and-economy/tourism-industry.html](http://www.economywatch.com/business-and-economy/tourism-industry.html)
4. [www.ibef.org/industry/tourismhospitality](http://www.ibef.org/industry/tourismhospitality)



**FACTORS DETERMINING WOMEN SHOPPING BEHAVIOUR****SHILPA BAGDARE****ASST. PROFESSOR****INTERNATIONAL INSTITUTE OF PROFESSIONAL STUDIES****DEVI AHILYA UNIVERSITY****INDORE****ABSTRACT**

*Women and shopping are complementary to each other. Shopping is both a utilitarian as well as a hedonic activity for women. There is various retailing related factors which shape their shopping behaviour. These factors range from merchandize, store staff, ambience, to store image and discounts. The relative importance of different factors may vary. Retailers can understand such factors and consider them while designing their strategy to attract women shoppers. The present study was aimed at understanding and examining different factors influencing women shopping behaviour. In a survey based study of women shoppers, nine different factors have emerged which govern their shopping behaviour. The data was analyzed using exploratory factor analysis and all the factors are discussed in detail. The present study provides important implications for retailers as well as for future researches in the area of retailing.*

**KEYWORDS**

shopping behaviour, women, retailing, buying behaviour, shoppers.

**INTRODUCTION**

Shopping is increasingly becoming very popular activity among women due to changing lifestyle, demographics and environmental factors. Women are often engaged in shopping for self, family or friends. Most of the studies have reported that shopping is an enjoyable activity for women. Shopping behaviour exhibited by women is often different than man. They spend more time, buy more and consider a number of factors before making their purchase decisions. In comparison to women, men consider a fewer factors and take more rational decisions. It has been observed that women give due consideration to both rational and emotional factors while shopping. Changing role of women, growing purchasing power, more number of women in the workforce, growing exposure due to media, opening of new format retail stores and malls, frequent introduction of new products, and emphasis on lifestyle related products has contributed to increased consumption of all types of products. It has also created more opportunities for women to shop for a variety of reasons. The present study was aimed at exploring the major factors shaping shopping behaviour of women in the changing scenario. It will help in designing retail strategies for providing better satisfaction to women shoppers and increasing store sales.

**REVIEW OF LITERATURE - DETERMINANTS OF WOMEN SHOPPING BEHAVIOUR**

Shopping behaviour is influenced by a large number of factors present in the retail environment. They are related to both rational and emotional decision making. In an important study on retail store behaviour Terblanche and Boshoff (2001) found that shopping activities involve browsing, price comparisons, search for merchandise, evaluating product variety and quality, and interaction with store personnel. They further reported that colours, lighting, music, arrangements, ambient scents and layout influence consumer responses in a variety of ways. Women shopping behaviour is influenced by a wide range of factors present in the retail or mall environment. Bakewell and Mitchell (2003) observed that women consider shopping as leisure and enjoyable activity while purchasing clothes, cosmetics, footwear and jewellery. Considering different factors influencing women shopping, they found five distinct decision making groups of women shoppers: recreational quality seekers; recreational discount seekers; trend setting loyal; shopping and fashion uninterested; and confused/time money conserving.

Kapoor and Kulshrestha (2008) in a study on urban women found that price and quality along with media usage and price perceptions influence their buying behaviour. They reported that media plays an important role in shaping the images about different products sold by retail stores. De Klerk and Lubbe (2008) found that product design and material plays an important role in decision making for apparel products by women.

A number of studies have examined the effect of retail environment on women shopping behaviour. Retail environment uses a combination of various sensory cues related to lighting, display, music, scent, air quality and temperature, interiors, promotional materials, layout etc. to shape facilitate shopping process. Michon et al. (2008) found that women shopping behaviour is influenced by the perception of mall environment (relaxed, comfortable, cheerful, colourful, stimulating, lively, bright and interesting). In many other studies retail or mall environment is reported to have significant influence on shopping behaviour. Music is an important element of shopping environment and influences shopper's behaviour. In an experimental study on women, Broekemier et al. (2008) found that happy and liked music has significant influence on the shopping intentions in the women's clothing store.

In a study on understanding women decision making, Granot et al. (2010) found that retail brand, retail environment (sales people, atmospherics, design, service, specialization, distribution and other cues have significant influence on women shopping behaviour. Women prefer to shop at a relaxed pace when they move around in a retail store. They make purchases after examining merchandise, comparing items and prices, ask questions, and try things on (Kraft and Weber, 2012). In a study on purchase of branded apparel by women in India, Rajput et al. (2012) observed in their study that price, fitting, income level of consumers are significant factors influencing their buying behaviour.

Guha (2013) suggests that women due to their multiple roles influence their own and of their family members' shopping behaviour. The study also revealed that shopping behaviour of working women is highly influenced by price, quality, brand image and others shoppers. In another study Singh and Parashar (2013) observed that shopping is influenced by five factors: ambience, convenience, physical infrastructure, marketing focus and safety and security.

In the light of the literature review of related studies it can be concluded that there are a large number of factors present in the retail environment which influence shopping behaviour or women shoppers. Some of these factors can be summarized as: assortment (variety, uniqueness, quality); service interface (service person, technology, co-creation / customization); retail atmosphere (design, scents, temperature, music); price (loyalty programs, promotions); customer experiences in alternative channels; social environment (reference group, service personnel); retail brand (retailers own brand – private labels and manufacturer or service brand); store image and value added services. The review of literature also revealed that although many studies have been carried out in western context, very few studies were conducted in India to examine shopping behaviour of women. Therefore, present study was aimed at examining presence of such factors, mentioned in earlier studies, with the help of an empirical investigation.

**RESEARCH OBJECTIVE**

The objective of the present study was to identify different factors which determine shopping behaviour of women.

**RESEARCH METHODOLOGY**

The present research is descriptive and adopted survey research technique to identify the major factors governing women shopping behaviour. The sample unit was women shoppers in the age group 21-48. The data was collected with the help of a scientifically developed questionnaire consisting of thirty items. The statements were carefully developed in the light of literature review. Nine items were dropped during the initial phase of analysis and the final analysis included only 21 items. The responses were measured on five point Likert type scale. The sample size was 350 respondents. After editing 29 questionnaires were rejected

and only 321 valid responses were retained. Final data analysis was done on valid 321 responses. The data was analyzed using exploratory factor analysis using Principal Component Technique.

## RESULTS AND DISCUSSIONS

The data was analysed for factor constitution through Exploratory Factor Analysis technique. Firstly, the data was checked for sample adequacy through KMO and Bartlett's Test. The values for both the tests were found to be significant and adequate in the light of obtained scores (Table 1). The scale has high reliability (Cronbach's Alpha = .756) (Table – 2) and high content validity. Principle Component - Varimax Rotation Method was applied for understanding the factor constitution. Nine items were removed due to cross loading or low factor loading scores. Remaining twenty-one items converged into nine factors such as merchandise, store staff, value added services, customer convenience, aesthetics, product knowledge, ambience, store image and discount. The total variance contributed by all the factors was 69.067% which is regarded as highly significant. (Table – 3, 4, and 5). All the nine factors were given a suitable name in the light of their constituents. A brief discussion of all the nine factors is presented below:

The first factor was named as **merchandise** with a total variance of 9.346%. It consisted of three items namely - A large number of preferred brands are available in the store; Store maintains a large variety of products; and Products of latest design and style are available, with factor loadings .823; .822; and .666 respectively. It shows that the type of products and brands maintained by the retail store has the most important influence on shopping behaviour of women. This can be further explained by the fact that products satisfy functional needs, whereas, brands satisfy emotional or psychological needs of the shoppers.

The second factor was named as **store staff** with a total variance of 9.324%. It consisted of three items namely - Customers are serviced with a smile; Staff members have pleasant physical appearance; and Staff members are friendly with customers, with factor loadings .796; .748; and .740 respectively. The structure of this factor establishes the importance of store staff knowledge, attitude, behaviour and appearance. Store staff is a key element in explain product details, handling customer queries and providing required help or assistance to the shoppers. Women shoppers place significant importance on store staff during shopping process.

The third factor was named as **value added services** with a total variance of 8.677%. It consisted of three items namely - Exchange / return facilities are provided; Availability of after sales service i.e. repair, alteration; and Spacious and well equipped fitting/trial rooms, with factor loadings .866; .732; and .623 respectively. This finding reveal that women place due importance to value added services. This may be explained by the fact that women often buy lifestyle products and apparels which may require need for trying on, alteration, exchange or return facilities. Such services offered by retail stores may form an important factor to be considered before purchase decision by women shoppers.

The fourth factor was named as **customer convenience** with a total variance of 8.2%. It consisted of three items namely - Sufficient open space for customer movement; Store maintains cleanliness and hygiene; and Noise levels are managed for smooth shopping, with factor loadings .788; .744; and .650 respectively. Women shoppers value the convenience provided by store layout in terms of movement, cleanliness and noise levels. It may also lead to a better shopping experience and satisfaction.

The fifth factor was named as **aesthetics** with a total variance of 7.281%. It consisted of two items namely - Colour scheme of the Store is attractive; and Store's interior design has a major impact on customers, with factor loadings .820 and .791 respectively. It reveals an important role of design and decor of the store which has a significant influence on women shopping behaviour. It contributes to the pleasure or joy of shopping.

The sixth factor was named as **product knowledge** with a total variance of 7.095%. It consisted of two items namely - Store personnel demonstrate/display the products; and Product information is available, with factor loadings .827 and .808 respectively. This factor reflects an importance dimension that women may seek detailed product information and may ask for demonstration or display of products before purchase. This may contribute towards becoming assured about the product attributes and performance.

The seventh factor was named as **ambience** with a total variance of 6.903%. It consisted of two items namely - Theme décor is used in the store; and Background music is soothing, with factor loadings .818 and .719. Both the elements describing ambience of the retail store creates a pleasurable mood and lead to comfortable shopping. Influence of music on shopping has already been explained in a large number of earlier studies.

The eighth factor was named as **store image** with a total variance of 6.859%. It consisted of two items namely - Store entrance is attractive and appealing; and Store is stylish, with factor loadings .824 and .783 respectively. Store image is an important consideration in selection of the retail store by women shoppers.

The ninth factor was named as **discounts** with a total variance of 5.383%. It consisted only one item namely - Discounts motivated customers to buy more, with factor loading .876. Women shoppers are described as bargain hunters. They highly attracted by the discounts offered by the stores on different products.

The above mentioned nine factors emerging out of factor analysis, explain the major determinants of shopping behaviour of women. These factors are in line with earlier studies related to women / females shopping behaviour (Terblanche and Boshoff, 2001; Michon et al., 2008; Singh and Parashar, 2013).

## CONCLUSION

The present study brings important insights into factors influencing women shopping behaviour. Shopping is an important activity in the life of women, whether they shop for functional requirements or they consider it as a pleasure trip. Most of the women enjoying shopping activity. They derive hedonic and utilitarian value from shopping. One of the major contribution of the present study is the identification of Nine Factors comprising of twenty-one elements, which determine women shopping behaviour. These factor are described as: Merchandise; Store Staff; Value Added Services; Customer Convenience; Aesthetics; Product Knowledge; Ambience; Store Image; and Discounts. Retail stores, focussing on women shoppers, can draw insights from the present study and design their retail strategy to influence them.

## SCOPE FOR FUTURE RESEARCH

There is enough scope for future research in the area of women shopping behaviour. Generalization of results requires more studies for validation purposes. Future researches may include a variety of retail stores to explore other determinants. The relationship of determinants and with customer response / retail performance measures such as revenue, profitability, satisfaction, quality, loyalty and others may be further explored. Comparative studies to examine gender differences in shopping behaviour.

## REFERENCES

1. Bakewell, C. and Mitchell, V. W. (2003), "Generation Y female consumer decision-making styles", *International Journal of Retail & Distribution Management*, Vol. 31, No. 2, pp. 95 – 110.
2. Broekemier, G., Marquardt, R. and Gentry, J. W. (2008), "An exploration of happy/sad and liked/disliked music effects on shopping intentions in a women's clothing store service setting", *Journal of Services Marketing*, Vol. 22, No. 1, pp. 59 – 67.
3. De Klerk, H. M. and Lubbe, S. (2008), "Female consumers' evaluation of apparel quality: exploring the importance of aesthetics", *Journal of Fashion Marketing and Management: An International Journal*, Vol. 12, No. 1, pp. 36 – 50.
4. Granot, E., Greene, H. and Brashear, T. G. (2010), "Female Consumers: Decision making in brand driven retail", *Journal of Business Research*, Vol. 63, pp. 801–808.
5. Guha, S. (2013), "The changing perception and buying behaviour of women consumer in Urban India", *IOSR Journal of Business and Management*, Volume 11, No. 6, pp. 34-39.
6. Kapoor, A. and Kulshrestha, C. (2008), "The effect of perception on Indian urban female consumer buying behaviour", *Monash Business Review*, Vol. 4, No. 1, pp. 1-12.
7. Kraft, H. and Weber, M. J. (2012), "A Look at Gender Differences and Marketing Implications", *International Journal of Business and Social Science*, Vol. 3, No. 21, pp. 247-253.

8. Michon, R., Yu, H., Smith, D. and Chebat, J.C. (2008), "The influence of mall environment on female fashion shoppers' value and behaviour", *Journal of Fashion Marketing and Management*, Vol. 12, No. 4, pp. 456 – 468.
9. Rajput, N., Kesharwani, S. and Khanna, A. (2012), "Dynamics of Female Buying Behaviour: A Study of Branded Apparels in India", *International Journal of Marketing Studies*, Vol. 4, No. 4, pp. 121-129.
10. Singh, H. and Prashar, S. (2013), "Factors Defining Shopping Experience: An Analytical Study of Dubai", *Asian Journal of Business Research*, Vol. 3, No. 1, pp. 36-53.
11. Terblanche, N. S. and Boshoff, C. (2001), "Measuring customer satisfaction with some of the controllable elements of the total retail experience: An exploratory study", *South African Journal of Business Management*, Vol. 32, No. 2, pp. 35-41.

## ANNEXURE

TABLE – 1: KMO AND BARTLETT'S TEST

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.700
Bartlett's Test of Sphericity	Approx. Chi-Square	1314.239	
	Df	210	
	Sig.	.000	

TABLE – 2: RELIABILITY STATISTICS

Cronbach's Alpha	N of Items
.756	21

TABLE – 3: TOTAL VARIANCE EXPLAINED

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.665	17.454	17.454	1.963	9.346	9.346
2	1.950	9.283	26.737	1.958	9.324	18.670
3	1.744	8.303	35.040	1.822	8.677	27.347
4	1.487	7.080	42.120	1.722	8.200	35.547
5	1.266	6.029	48.150	1.529	7.281	42.828
6	1.180	5.620	53.770	1.490	7.095	49.923
7	1.122	5.341	59.111	1.450	6.903	56.826
8	1.089	5.188	64.299	1.440	6.859	63.685
9	1.001	4.768	69.067	1.130	5.383	69.067
10	.828	3.945	73.012			
11	.666	3.170	76.182			
12	.661	3.149	79.331			
13	.634	3.020	82.351			
14	.588	2.800	85.151			
15	.561	2.669	87.820			
16	.504	2.401	90.221			
17	.473	2.250	92.472			
18	.439	2.092	94.563			
19	.399	1.900	96.463			
20	.386	1.840	98.304			
21	.356	1.696	100.000			

Extraction Method: Principal Component Analysis.

TABLE – 4: ROTATED COMPONENT MATRIX<sup>a</sup>

	Component								
	1	2	3	4	5	6	7	8	9
1	.823								
2	.822								
3	.666								
4		.796							
5		.748							
6		.740							
7			.866						
8			.732						
9			.623						
10				.788					
11				.744					
12				.650					
13					.820				
14					.791				
15						.827			
16						.808			
17							.818		
18							.789		
19								.824	
20								.783	
21									.876
Extraction Method: Principal Component Analysis.									
Rotation Method: Varimax with Kaiser Normalization.									
a. Rotation converged in 6 iterations.									

TABLE – 5

Factor Number	Factor Name	Constituent Items
1	Merchandise	A large number of preferred brands are available in the store.
		Store maintains a large variety of products.
		Products of latest design and style are available.
2	Store Staff	Customers are serviced with a smile.
		Staff members have pleasant physical appearance.
		Staff members are friendly with customers.
3	Value Added Services	Exchange / return facilities are provided.
		Availability of after sales service i.e. repair, alteration
		Spacious and well equipped fitting/trial rooms.
4	Customer Convenience	Sufficient open space for customer movement.
		Store maintains cleanliness and hygiene.
		Noise levels are managed for smooth shopping.
5	Aesthetics	Colour scheme of the Store is attractive.
		Store's interior design has a major impact on customers.
6	Product Knowledge	Store personnel demonstrate/display the products.
		Product information is available.
7	Ambience	Theme décor is used in the store.
		Background music is soothing.
8	Store Image	Store entrance is attractive and appealing.
		Store is stylish.
9	Discounts	Discounts motivated customers to buy more.

## REVIEW OF CHANGES IN AGRICULTURE SECTOR IN PUNJAB

**DALVIR SINGH**

**RESEARCH SCHOLAR, SANT LONGOWAL INST. OF ENGINEERING & TECH. (DEEMED UNIVERSITY), LONGOWAL; & ASST. PROFESSOR**

**AKAL GROUP OF TECHNOLOGY & MANAGEMENT INSTITUTIONS  
MASTUANA SAHIB**

### ABSTRACT

Agriculture sector was central hub for the progressive of Punjab. In the central food-grain pool it was the highest share. Around 82% of its geographical area is under agriculture & 36% of population (census 2011) working in this sector. 99% of agriculture area is under irrigation. After the green revolution, although, Punjab has given its best in national food security, but now, agriculture sector has so many challenges like stagnation in production rate, no profit & exploitation of natural resources. Agriculture sector contribution into Gross State Domestic Product as well as net state income is decreasing. Through this paper, we will try to find the changes (since 1981) in various factors which are related with agriculture sector.

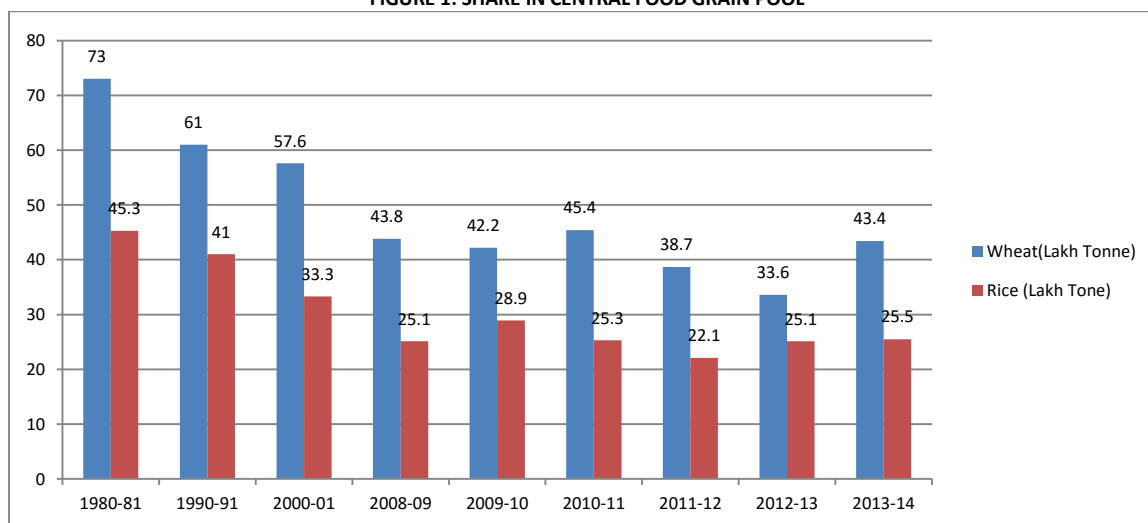
### KEYWORDS

agriculture growth rate, crop pattern, growth factor, GSDP, productivity.

### INTRODUCTION

Punjab has 2.29% of Indian population & 1.54% area of the country. Punjab state has its own outstanding sharing in national food security after green revolution. Well irrigation system, high quality seeds, chemical fertilizers & establishments of local agriculture market centres lead to rapid growth. It contributes around 35-40% of rice & 40-70% of wheat to the central pool.

**FIGURE 1: SHARE IN CENTRAL FOOD GRAIN POOL**



Source: Ministry of Consumer Affairs, Govt. Of India & Statistical Abstract of Punjab 2012, Publication no. 938.

After the green revolution, around 1980s, stagnation in growth rate of crop production has become more serious problem. Share in central pool which was 73% of wheat & 45.3% of rice in 1980-81 decreased to 43.4% of wheat & 25.5% of rice. Farmers are committing suicide due to stagnation in growth & gap between inputs & output, factor responsible for committing suicide is loan, although it was taken from CO-operative Society or Bank, Financial Institutions & other Money lenders (Arthias). To repay the old loan, small –marginal farmers are taking new loans for requirements like arrangement of new techniques for example submersible pumps, zero tilling instruments & other agro inputs & to fulfil social responsibilities like education for children & amount for marriage of daughters. On another side due to failure of crop which was attacked by whitefly or other insects, leads to losses. Return on investments was very low. Farmers are not in position to pay the lease of land to the land owners. This widening gap between inputs costs & income lead to worst conditions of the farmers. This cycle of financial burden never came to an end. In the clutches of all these socio-economic reasons put the pressure on the farmers to commit the suicide. Now, we want to discuss the changes with the help of data from various issues of Statistical Abstracts of Punjab Govt.

### REVIEW OF LITERATURE

H.S. Sidhu in his paper, "Productions Conditions in Contemporary Punjab Agriculture" points that small operational holdings are not economically viable. In wheat-paddy cycle, there is stagnation in growth rate. Agriculture sector contribution is not good for state income.

Accordingly, Sucha S. Gill in "Economic Distress and Farmers Suicides in Rural Punjab" one point is clear that the widening gap between the cost of production lead to high cost risk & another is crop failure. It questioned the viability of small & marginal farmers. Although small farmers want to leave this sector but trapped in agriculture.

In 1960s "Green Revolution" lead to high productivity with effort of central Indian govt & earned the name of "Bread Basket" for Punjab. After three decades "Bread Basket" turned into "Suicide Site". Wheat –paddy cycle affected the mindset & life styles of the peoples. But with technological advancement, like as new techniques of harvesting, lead to reduction in employment generation. Some farmers try to adopt crop diversification but they did not get supportive facility like as proper seeds, market & MSP. Lack of this supportive facility & more input cost lead to high credit. With this, problems of small & marginal farmers have become broader. Relationships between Arthias & farmers have come to an end due to charging of high interest rate.

### RESEARCH METHODOLOGY

#### (I) SOURCE OF DATA

Secondary data is used for the analysis. Secondary data was collected from various govt. Reports. Main source for data is "Statistical Abstract, 2014, Punjab."



## (II) STATISTICAL TOOLS FOR ANALYSIS

Percentage methods were used to measure the change & linear trend was used to know the trend & further estimations.

Formula used to calculate decadal wise growth rate:

$$\text{Growth Rate (\%)} = \frac{\text{Units at end of Period} - \text{Units at starting of Period}}{\text{Units at starting of Period}} \times 100$$

## INTERPRETATIONS &amp; EXPLANATIONS

## 1. POPULATION DEMOGRAPHY

TABLE 1: TOTAL POPULATION DECADAL WISE

P U N J A B		1971			1981			1991			2001			2011		
		TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
	RURAL	10334885	5533475	4801406	12141158	6444464	5696694	14288744	7569423	6719321	16096488	8516596	7579892	17344192	9093476	8250716
	URBAN	3216175	1733040	1483139	4647757	2492746	2155011	5993225	3208611	2784614	8262511	4468499	3794062	10399146	5545989	4853157
	TOTAL	13551060	7266515	62854545	16788915	8937210	7851705	20281969	10778034	9503935	24358999	12985045	11373954	27743338	14639465	13103873

Source: 1. Economic & Statistical Organization, Punjab; & 2. Director, Census Operation, Punjab

TABLE 2: TOTAL WORKERS DECADAL

P U N J A B		1971			1981			1991			2001			2011		
		TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
	TOTAL	3912592	3838517	74075	4927759	4749646	178113	6098374	5832852	265522	9127474	6960213	2167261	9897362	8074157	1823205
	RURAL	3008697	2974147	34550	NA	NA	NA	NA	NA	NA	6360351	4589049	1771302	6179199	4995819	1183380
	URBAN	903895	864370	39525	NA	NA	NA	NA	NA	NA	2767123	2371164	395959	3718163	3078338	639825

Source: 1. Economic & Statistical Organization, Punjab; & 2. Director, Census Operation, Punjab

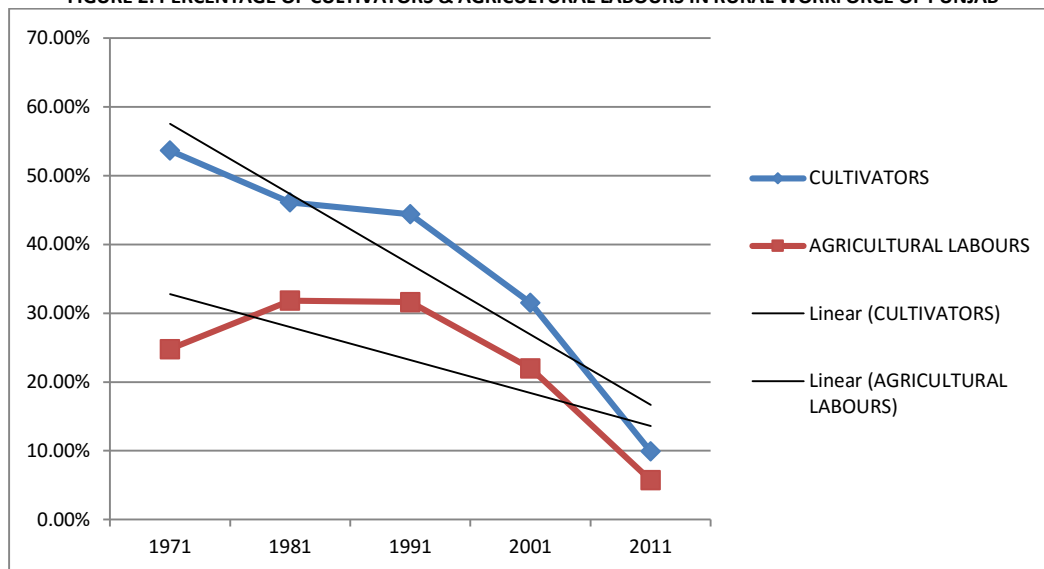
From the analysis of table 1, population has doubled as compare to 1971; in 2011 it is 104% of 1971 population & increased 13.89% from 2001 population. In table 2. During various decadal growths of total workers in 1991- 2001 is highest growth in but 2011 there is only 8.43 % growth & it has become 152.96% of 1971's total workers. One anxious point is that during 2001-11 rural population increased 7.75% but total workers growth in that period in rural a reduced by 2.84%. In urban area, in 2001-11 workers growth rate is 34.36%.

TABLE 3: TOTAL CULTIVATORS DECADAL WISE (1971-2011)

P U N J A B		1971			1981			1991			2001			2011		
		TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
	TOTAL	3912592	3838517	74075	4927759	4749646	178113	6098374	5832852	265522	9127474	6960213	2167261	9897362	8074157	1823205
	RURAL	3008697	2974147	34550	NA	NA	NA	NA	NA	NA	6360351	4589049	1771302	6179199	4995819	1183380
	URBAN	903895	864370	39525	NA	NA	NA	NA	NA	NA	2767123	2371164	395959	3718163	3078338	639825

Source: 1. Economic & Statistical Organization, Punjab; & 2. Director, Census Operation, Punjab

FIGURE 2: PERCENTAGE OF CULTIVATORS &amp; AGRICULTURAL LABOURS IN RURAL WORKFORCE OF PUNJAB



Source: 1. Census 2001 & 2011; & 2. Statistical Abstract of Punjab 2014.

In the rural areas of Punjab, agriculture is the sole source of income. In 1971, 76.26% of the population was rural population & 53.64% peoples among this rural workforce were cultivators & 24.79% were agricultural labours, every decadal, no. of cultivators is decreasing. In 2001 it was 31.5 % of the rural workforce (total rural population 66.08%) & in 2011 no. of cultivators 9.91% in rural areas & 4.49% in urban areas. through the trend lines of both, we can make estimate that every decadal, agricultural labours & cultivators is decreasing. Due to no more profit, labour prefers to go on daily basis wages in market to earn their livelihoods.

## 2. SIZE OF HOLDINGS

TABLE 4: SIZE OF OPERATIONAL HOLDINGS IN PUNJAB

Year	Marginal Less than 1 hect.	Small 1-2 hect.	Semi-medium 2-4 hect.	Medium 4-10 hect.	Large Above 10 hect.	All holdings
1970-71	5,17,568 (37.63)	2,60,083 (18.91)	2,81,103 (20.44)	2,47,755 (18.01)	68,883 (5.01)	13,75,392 (100.00)
1980-81	1,98,060 (19.42)	1,99,368 (19.54)	2,87,423 (28.18)	2,61,201 (25.61)	73,940 (7.25)	10,19,992 (100.00)
1990-91	2,95,668 (26.47)	2,03,842 (18.25)	2,88,788 (25.86)	2,61,481 (23.41)	67,172 (6.01)	11,16,951 (100.00)
1995-96	2,03,876 (18.65)	1,83,453 (16.78)	3,20,340 (29.31)	3,05,794 (27.98)	79,610 (7.28)	10,93,073 (100.00)
2000-01	1,22,760 (12.31)	1,73,071 (17.53)	3,28,231 (32.91)	3,00,954 (30.18)	72,356 (7.25)	9,97,372 (100.00)
2005-06	1,34,762 (13.42)	1,83,062 (18.22)	3,19,933 (31.85)	2,95,749 (29.45)	70,960 (7.06)	10,04,466 (100.00)
2010-11(P)*	1,64,431 (15.62)	1,95,439 (18.57)	3,24,515 (30.83)	2,98,451 (28.36)	69,718 (6.62)	10,52,554 (100.00)

Note: figures in brackets are percentage.

\* shows that year data is prepared on the basis of 20% survey by concerned department.

Source: 1. Statistical Abstract 2014 of Punjab; & 2. Director Agriculture, Agriculture Census, Punjab 2010-11

FIGURE 3: TRENDS IN SMALL &amp; MARGINAL OPERATIONAL HOLDINGS

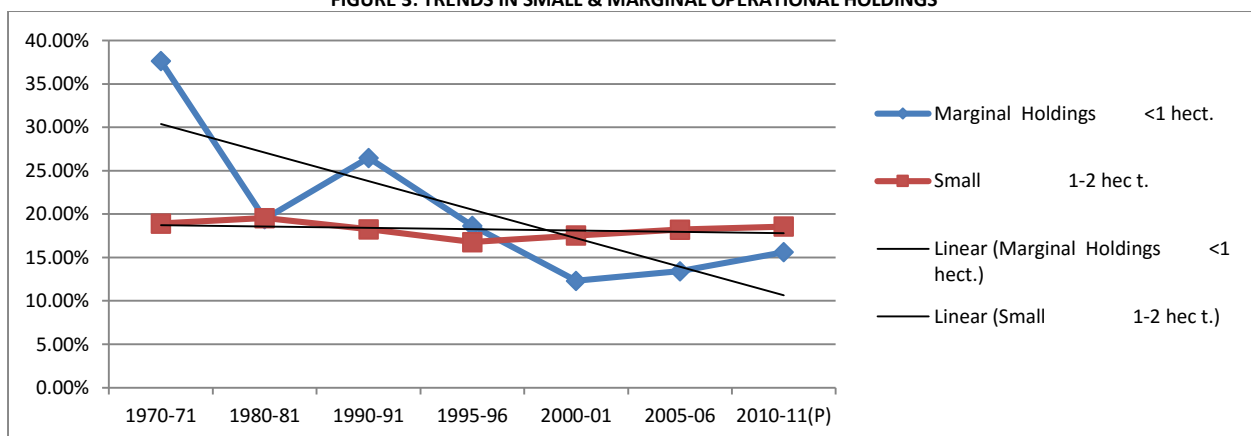
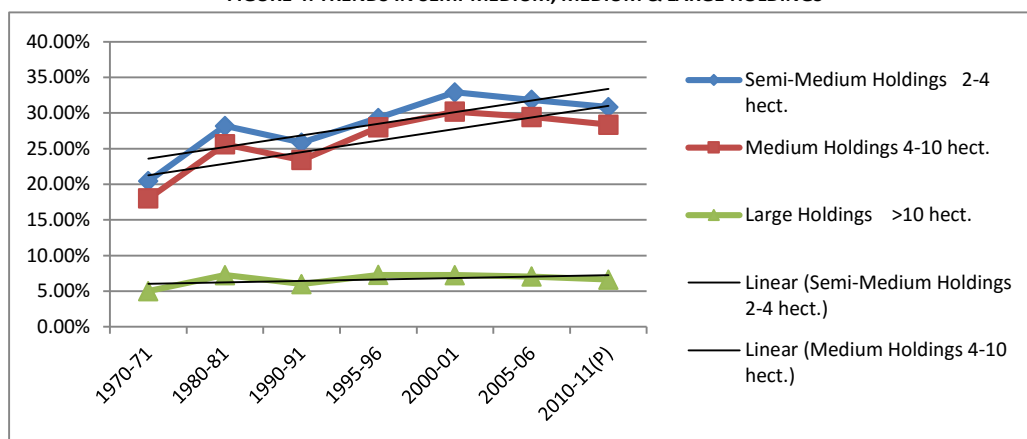


FIGURE 4: TRENDS IN SEMI-MEDIUM, MEDIUM &amp; LARGE HOLDINGS



From above data regarding operational holdings, one point is clear that is declination in small & marginal holdings. Due to wide gap between input costs & return, marginal & small farmers can't face this losses. Their holdings are purchased or leased by medium or large farmers. Trend line in figure three indicates that marginal holdings are decreasing. But trend line in semi-medium indicators the growth of these holdings.

### 3. NET SOWN AREA & CROPPING PATTERN

Punjab has 5036000 hectare land. In 1961, only 74% of land was shown, after 1980s, it was 83-84% area under shown area. There is only 1% up & down till the 2012-13. but total cropped year is increasing due to crops more than once are grown in one year. Area under forest is 262000 hectares.

TABLE 5: NET AREA SOWN

Year	Net Area Sown (Thousands Hect.)	Percentage of total area	Area Sown more than once (Thousands Hect.)	Total (net area sown + area sown more than once) (Thousands Hect.)
1960-61	3757	74	NA	NA
1970-71	4053	80	NA	NA
1980-81	4191	83	2572	6763
1990-91	4218	84	3284	7502
2000-01	4250	84	3691	7941
2010-11	4158	83	3724	7882
2011-12	4134	82	3767	7902
2012-13	4150	82	3720	7870

Source: Statistical Abstract of Punjab, various issues

TABLE 6: AREA UNDER MAIN CROPS (in thousands hectare)

Year	Kharif Cereals				Rabi Cereals			Total area under cereals (VIII)	Pulses			Total food-grains (VIII+XI)
	Rice (I)	Jowar (II)	Maize (III)	Bajra (IV)	Wheat (V)	Barly (VI)	Other cereals (VII)		Gram (IX)	Other Pulses (X)	Total Pulses (XI)	
1980-81	1183	1	382	69	2812	65	1	4513	258	83	341	4854
1990-91	2015	(a)	188	12	3273	37	(a)	5525	60	83	143	5668
2000-01	2612	(a)	165	5	3408	32		6223	8	46	54	6277
2008-09	2735	.1	151	6	3526	16		6433	3	19	22	6455
2009-10	2802	.1	139	3	3522	14		6480	3	15	18	6498
2010-11	2826	-	133	3	3510	12		6484	3	17	20	6504
2011-12	2814	--	130	3	3527	13		6487	2	18	20	6507
2012-13 (R)	2849	-	131	3	3517	13		6513	2	18	20	6533
2013-14 (P)	2851	-	130	1	3512	12		6506	2	10	12	6518

Source: 1. Statistical Abstract of Punjab, Various Issues; & 2. Directorate of Land Records/Agriculture Punjab

P means provisional

R means revised (a) Means below 500 hectare

TABLE 7: AREA UNDER OIL-SEEDS &amp; OTHER CROPS

Year	Ground-nut	Seas mum	Sunflower	Rapeseed & Mustard	Linseed	Total oil seeds	Cotton	Sugarcane	Potatoes
1980-81	83	17	-	136	2	238	649	71	40
1990-91	11	18	5	69	1	104	701	101	23
2000-01	4	19	7	55	1	86	474	121	60
2008-09	3	8	20	29	(a)	60	527	81	82
2009-10	3	6	22	31	---	62	511	60	74
2010-11	2	7	15	32	----	56	483	70	64
2011-12	2	6	14	30	----	52	515	80	70
2012-13 (R)	2	5	15	29	----	51	481	82	80
2013-14 (P)	1	4	11	32	----	48	446	89	87

P means provisional Source: 1. Statistical Abstract of Punjab, Various Issues

R means revised 2. Directorate of Land Records/Agriculture Punjab

(a) Means below 500 hectare

## 3. TRENDS ANALYSIS IN TOTAL PRODUCTION &amp; YIELD PER HECTARE (CROP WISE)

FIGURE 5: TOTAL PRODUCTION &amp; YIELD PER HECT. OF RICE

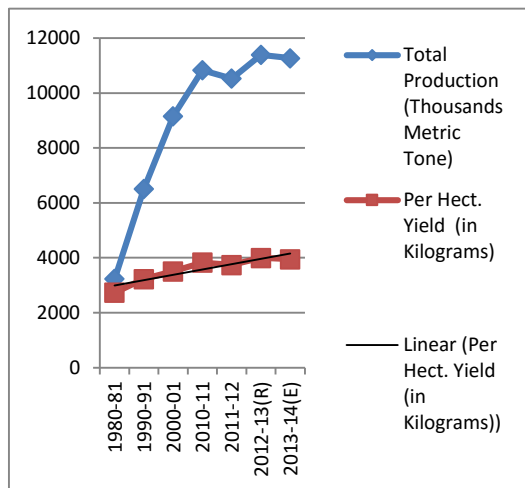


FIGURE 6: TOTAL PRODUCTION &amp; YIELD PER HECT. OF BAJRA

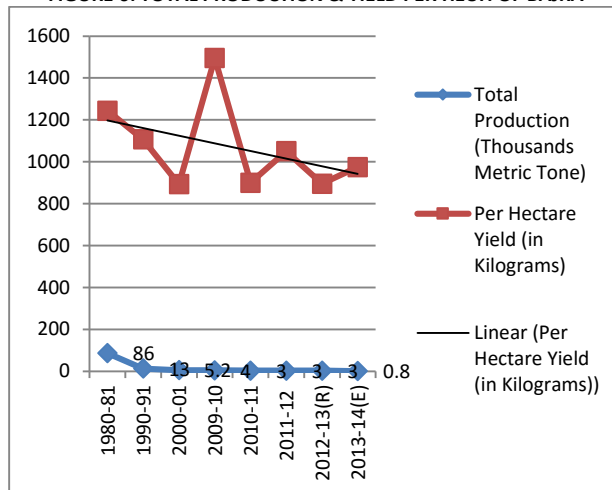


FIGURE 7: TOTAL PRODUCTION &amp; YIELD PER HECT. OF MAIZE

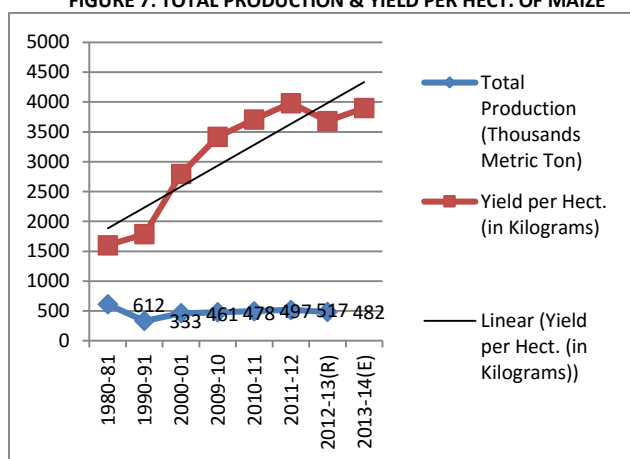


FIGURE 8: TOTAL PRODUCTION &amp; YIELD PER HECT. OF WHEAT

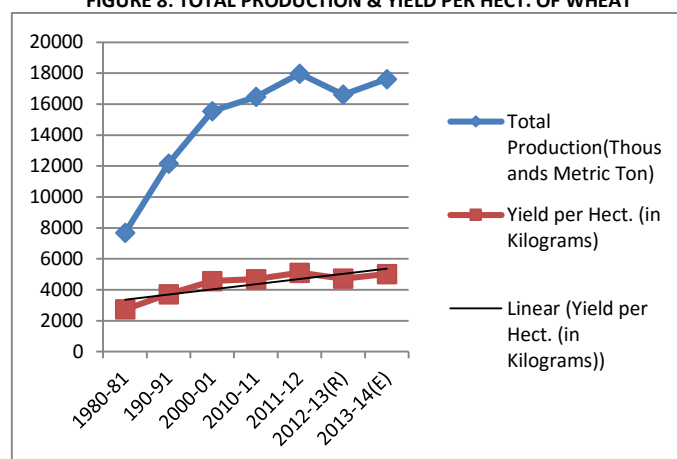


FIGURE 9: TOTAL PRODUCTION &amp; YIELD PER HECT. OF BARLEY

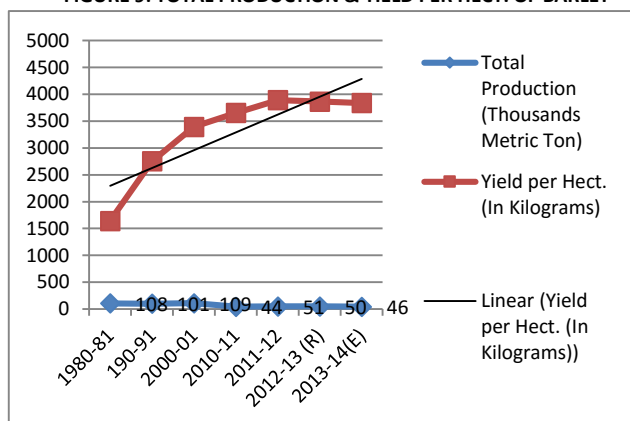


FIGURE 10: TOTAL PRODUCTION &amp; YIELD PER HECT. OF SUGARCANE

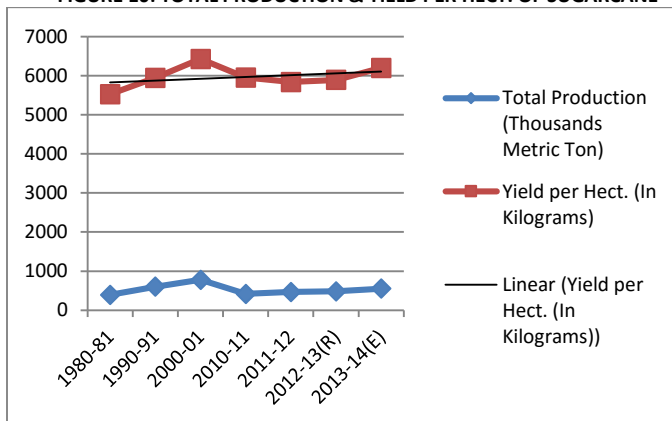


FIGURE 11: TOTAL PRODUCTION &amp; YIELD PER HECT. OF POTATO

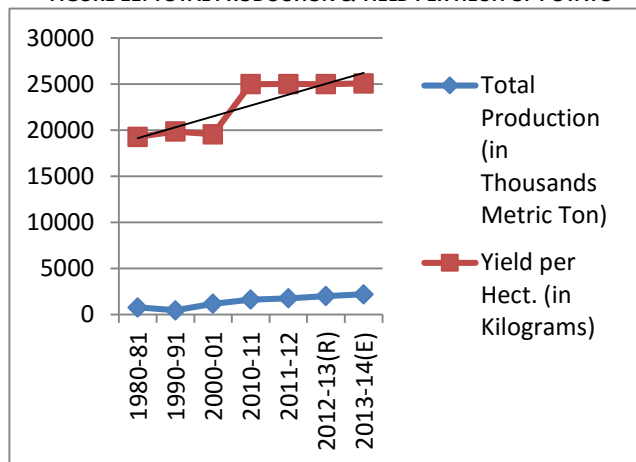


FIGURE 12: TOTAL PRODUCTION &amp; YIELD PER HECT. OF COTTON AMERICAN

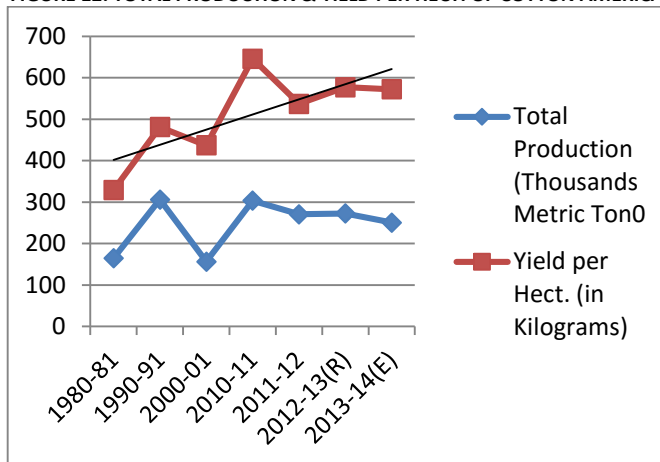
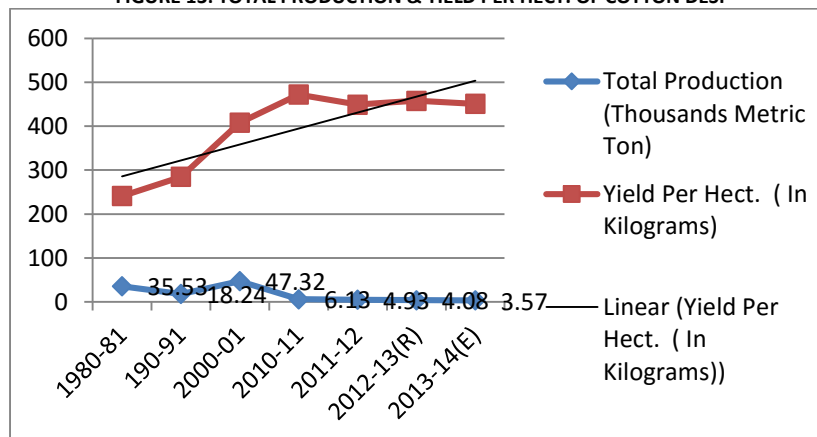


FIGURE 13: TOTAL PRODUCTION &amp; YIELD PER HECT. OF COTTON DESI



Source: Figures 5-13 is Statistical Abstract of Punjab 2014

R means Revised, P means Provisional, E means Final Estimates of Agriculture Department of Punjab.

Analysis of table 6 shows that around 82% area is sown which was 74% in 190-91 in Punjab. During 2013-14(P) are under the crop production which is sown more than once in a year is 7870thousands hectare. During 2013-14(P) kharif sessions, 68.69% of net sown area was under rice crop & 15.63% under cotton & 3.13% under maize and remaining area was under other cereals and pulses & other agriculture crop production. In 1991, during same Kharif session 4218 thousands hectare was net sown area & 47.77%, 4.45% & 16.61% area was under rice, maize & cotton respectively. During the 190-91 to 2013-14(P), major increases in the area under the rice crop. During rabi crop session in 2013-14(P), 84.62%, 28%, 04% area of net sown area under wheat, barley & gram. During that period a drastically change under the area of gram crop which was 258 thousand hectare in 1980s, in 2013-14(P) It was only 2000 hectare. Total food grain increased 14.99% as compare to 190-91. But from last three-four years, there is a little bit change which is indicator of stagnation in production rate.

From table7 it is clear point that there is reduction under the area of oilseeds. it is 1.15% (2013-14(P) of net sown area which was 2.46% of net sown area in 1991 & double of its in 1980s. Are under production has increased & sugarcane also. Yield per hectare has increased, but from last three year there are a little bit changes. Yield per hectare of maize has increased by 118% as compare to 1991. Production of Bajra is decreasing every year. In wheat, per hectare yield production increased by 35%, but from 2010-11 yields per hectare growth rate is stagnating. Similarly from 2011-12 in case of barley & sugarcane. If we analysis from figures 5 to 13, one point is clear that is stagnation in production from last five years as compare to input changes. That is the major challenge before the farmers of Punjab & other agriculture related research institutions.

TABLE 8: GROWTH ANALYSIS OF RICE WHEAT CROP ROTATION

Year	Rice			Wheat		
	Thousand hectare	Production (000 metric ton)	Yield per Hectare (in Kilograms)	Thousand hectare	Production (000 metric ton)	Yield per Hectare (in Kilograms)
1980-81	1183	3233	2733	2812	7677	2730
1990-91	2015	6506	3229	3273	12159	3715
2000-01	2612	9157	3506	3408	15551	4563
2010-11	2830	10833	3828	3510	16472	4693
2011-12	2814	10527	3741	3527	17977	5097
2012-13(R)	2849	11390	3998	3517	16614	4724
2013-14(E)	2851	11267	3952	3512	17620	5017
Growth rate (in %age)						
1990-91 over 1980-81	70.32	101.23	18.1	16.39	58.33	36.08
2000-01 over 1990-91	29.62	40.74	8.37	4.12	27.89	22.82
2010-11 over 2000-01	8.34	18.30	9.18	2.99	5.92	2.84
2011-12 over 2010-11	0.56	-2.82	-2.27	.48	9.13	8.60
2012-13 over 2011-12	1.24	8.19	6.86	-0.28	-7.58	-7.31
2013-14 over 12-13	0.07	-1.07	-1.15	-0.14	6.05	6.20

Production of fruits is important factor in agriculture to earn profits. To reap these profits, a set of efforts is required. During the decade 1990-91, area under fruit was increased by 138.72% over 1980s. In 2000-01 growth rate decreased -50.30% over 1990-91. Then once again it was increased by 104.07% during the decade 2000-01 to 2010-11 & 9.71% in 2013-14 as compare to 2010-11. Production fruits also increased 12.23% as compare to 2010-11.



Contract farming is also working in Punjab to produce different crops, but the scope of contract farming is not so much. We examine the data supplied by Punjab Agro Food grains Corporation Ltd., there are great fluctuations in the total area. In 2002-3, only 22312 acre land was under contract farming & in 2009-10 it was only 189175 acre which reduced to 84747 acre in 2010-11. Declining in the area under contract farming still continuous. Main crops of hyola, sunflower, durum wheat, malting barley, moong, basmati pur, maize, guar, castor, mantha, green pea & potato seed.

#### 4. IRRIGATION

Around 99% area of net sown area is under the proper irrigation system. The main source of irrigation is govt. Canals & tube wells. In 1981; it was only around 81% area. From the year 1980, there is no major change in the area which is irrigated by canals, but through tube wells around 55% area has increased. It happened due to supply of electricity. No. of electric operated tube wells increased by 55% as compare to 2000-01. On the other hand, no. of diesel operated tube wells has decreased.

**TABLE 9: IRRIGATION AREA UNDER DIFFERENT SOURCES (000 hectare)**

Year	Govt. Canals	Private Canal	Tube wells & Wells	Other Sources	Total	Percentage of net area irrigated to net area sown
1980-81	1430	-	1939	13	3382	81
1990-91	1660	9	2233	7	3909	93
2000-01	962	<500 hect.	3074	2	4038	95
2010-11	1113	3	2954	-	4070	97.9
2012-13	1133	-	2982	-	4115	99.2

Source: 1. Director of Land Records, Punjab; & 2. Statistical abstract of Punjab

**TABLE 10: NO. OF TUBE WELLS (Lakh)**

Year	Diesel Operated	Electric Operated	Total
1980-81	3.20	2.80	6.00
1990-91	2.00	6.00	8.00
2000-01	2.85	7.88	10.73
2010-11	2.40	11.42	13.82
2013-14 (Provisional)	1.79	12.26	14.05

Source: Director Agriculture, Punjab

#### 5. CONSUMPTION OF CHEMICAL FERTILIZERS

Rapid growth in production between the 1960s to 1990s but later it came on the stage of stagnation. In earliest, maximum yield happened due to High yield variety of seeds. But to maintain this level of production, Punjab farmers used chemical fertilizers at large scale. Mainly used chemical Fertilizers are Nitrogenous, Phosphate, Potassic. Total consumption of NPK, which was 762 nutrients tonne in 1980-81, increased 72.30% in 2000-01 as compare to 1980s. Consumption of nitrogen & phosphate increased by 91.63% & 36.23% over the 1980s. During decade of 2000-01 to 2010-11, total consumption of fertilizers once again increased at high level of 45.54% & 2010-13 this change was 3%. 39.18% and 54.25% consumption of nitrogen & phosphatic respectively increased. Now, high consumption of these fertilizers at high level has become threat for sustainable growth.

#### 6. WAGES PAID IN AGRICULTURE

Agriculture is a labour extensive sector. From ploughing to harvesting there is need of labour. But in these days, nobody is ready to do work in this sector. Wage rate are increasing. In 1980s, wage rate for ploughing was Rs. 10-11 & in 2000 it was Rs. 81-82 & in present days it has reached to Rs. 300-350. With a little variation, same rates are for sowing, wedding, harvesting, picking of cotton & other agricultural operations. In case of skilled labour, in 1980s, wages of black smith was Rs. 23.23 but in these days it has crossed Rs. 400 & same case in the wages of car painter.

#### 7. AGRICULTURE CREDIT

Sources of loan for farmers are mainly co-operative societies, agriculture credit societies & Punjab Agriculture Development Bank & Other financial Institutions. According data (Source: Registrar, Co-operative Societies, Punjab), no. of Primary Agricultural Credit Societies are decreasing from 2001. In 1990-91, 4,633 was total societies, in 2000-01 these were only 4,084 which reduced to 3656 in 2012-13. Among these 3656 societies 1082 societies are under loss. Amount of loss is increasing every year. In 2000-01 it was only 1,197.33 lak (Rs.). in 2012-13 it crossed double. It crossed 4767.16 Lakh Rs. In 2012-13, total no. of membership was 24.11 thousand. Punjab Agricultural Development Bank has some good indicators of growth. According to survey by a team of researchers of Punjabi University Patiala, more than 50% loan is given by Commercial banks to Farmers.

#### 8. DURING FIVE YEAR PLANS INVESTMENT IN AGRICULTURE

In each five year plan, percentage of investment to total expenditure is decreasing. In 4<sup>th</sup> five year plan in 1969-74 it was 10.29% for agriculture & now during 12<sup>th</sup> five year plan (2012-17) it is only 2.82% of total expenditure. This is indicator of worst conditions for improvements in agriculture sector.

**TABLE 11: PERCENTAGE OF TOTAL EXPENDITURE ON AGRICULTURE DURING FIVE YEAR PLANS**

Planning Year	Percentage of Total Expenditure
4 <sup>th</sup> plan (1969-74)	10.29
5 <sup>th</sup> plan (1974-78)	11.73
6 <sup>th</sup> plan (1980-85)	10.69
7 <sup>th</sup> plan (1985-90)	7.91
8 <sup>th</sup> plan (1992-97)	5.40
9 <sup>th</sup> plan (1997-2002)	4.62
10 <sup>th</sup> plan (2002-07)	2.98
11 <sup>th</sup> plan (2007-12)	3.21
12 <sup>th</sup> plan (2012-17)	2.82

Source: Statistical Abstract of Punjab, various issues

#### 9. AGRICULTURE SECTOR CONTRIBUTION TO STATE INCOME

Every year share of Agriculture in GSDP (Gross State Domestic Product) is decreasing. It happened due to stagnating in productions & large scale cost in this sector.

TABLE 12: PERCENTAGE CONTRIBUTION OF AGRICULTURE TO TOTAL STATE INCOME IN PUNJAB

Year	Net State Income		Gross State Income	
	At Current Prices	At constant (2004-05) Prices	At current Prices	At Constant (2004-05) Prices
2004-05	21.81	21.81	21.19	21.19
2005-6	21.35	20.21	20.63	19.58
2006-07	20.94	18.62	20.31	18.19
2007-08	21.78	17.91	21.05	17.51
2008-09	22.31	17.42	21.49	16.99
2009-10	21.19	16.15	20.58	15.93
2010-11	20.17	15.19	19.70	15.09
2011-12(Revised)	19.75	14.54	19.27	14.42
2012-13(Provisional)	18.85	13.59	18.53	13.64
2013-14(Quick)	18.21	13.05	17.86	13.20

Source: Economic and Statistical Organisation, Punjab

**CONCLUSION**

Punjab occupies 1.53% of country's geographical area & contributes 25-26% of rice & 43% of wheat production to central food grain pool. After the Green Revolution, stagnation in production rate has become major threat. Peoples are leaving this sector, it comprises only 10% of workforce which was the major source of employment on once time. Farmers are committing suicides due to burden of loans. There is negative trend in growths of small-marginal farmers & same in small-marginal operational holdings. Farmers are dependent of wheat-paddy crop cycle but growth rate of both crops is decreasing ever year. To maintain the same level of output, more dose of chemical fertilizers applied, it exploited the fertility of soil, threat for sustainable growth & leads to more input cost. This widening gap between inputs & profit puts pressure on farmers to end their life. Wage rate of agricultural labour has reached doubled & tripled as compare to wage rate in the year 2000. It happened due to non-interest of present generation in agriculture & no much profit. Govt. Expenditures in every five year planning is decreasing. Main sources for agriculture credit are co-operative societies, commercial banks & other sources. Contribution of agriculture sector to state income is decreasing every year.

State & central govt. Talks about Marginal Support Price, but in actual it is not applied. During the year 2014-15 & 2015-16, farmers sold their crop production on below rates at compare to MSP, although it was Paddy, Wheat, Maize, Cotton, and Sugarcane & Potato. Paddy with A grade quality was sold at Rs. 700-800 per quintal. Then question arises "WHAT IS THE MEANING OF MSP & ITS APPLICABILITY?" No answer due to monopoly of Arthias & joining hands of Govt.

There is need of study at ground level to develop the strategy to improve the agriculture sector; otherwise it is a passed stage.

**REFERENCES**

1. Ajit Newspaper, Page No. 4, date 28/01/2016
2. Economic & Statistical Organization of Punjab, Statistical Abstract 2014
3. Economic Adviser to Govt. Of Punjab, Disaggregated Estimates of Gross State Domestic Product Handbook Punjab (2004-05 to 2011-12)
4. Economic Adviser to Govt. Of Punjab, Economic Survey 2014-15.
5. Govt. Of India, Census 2001 & 2011, Census of India
6. H.S. SIDHU, Production Conditions in Contemporary Punjab Agriculture

**EFFECT OF BANK CREDIT ON FINANCIAL PERFORMANCE OF FIRMS IN INDIA**

**DR. NEELAKANTA N. T.**  
**ASST. PROFESSOR**  
**DEPARTMENT OF STUDIES & RESEARCH IN ECONOMICS**  
**TUMKUR UNIVERSITY**  
**TUMAKURU**

**ABSTRACT**

*The central role of banks is channeling funds from investors to those who lack in funds. At this conjecture, this paper investigates the effect of a bank credit in improving the firm's overall performance. To conduct the study on 'effect of bank credit on firms' performance, gross bank credit considered as an independent variable and the value of output is taken as dependent variable. The results show that there is significant positive effect of bank credit in improving the overall financial performance of the firms.*

**KEYWORDS**

bank credit, financial performance, corporate firms.

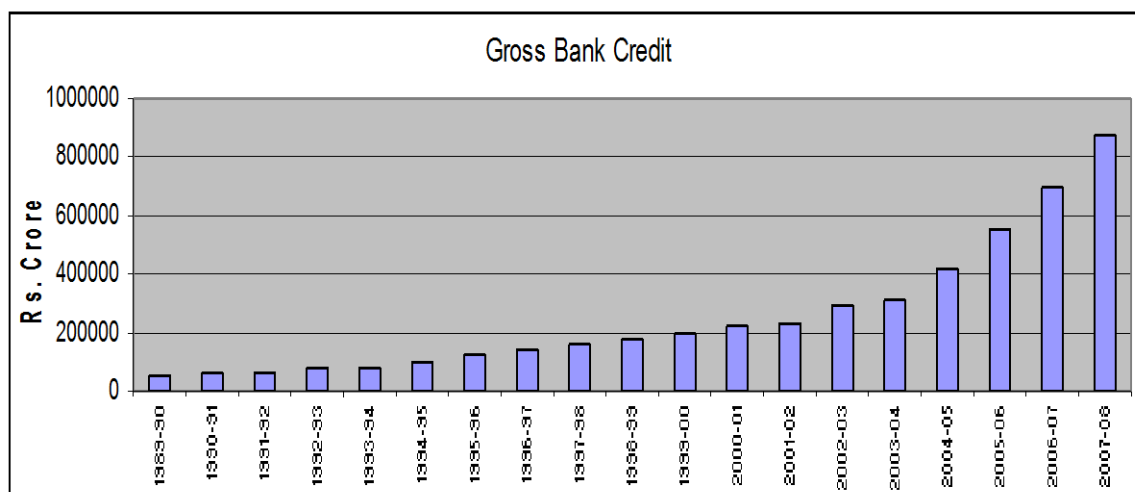
**1. INTRODUCTION**

The central role of banks is channeling funds from investors to those who lack in funds. Firms borrow funds from banks to meet their financing requirements. There are two main types of borrowings from banks. (1) short term bank borrowings; which are mainly used to meet the day to day working capital requirements of the firms and (2) long term borrowings which are used to make investment on fixed capital formation i.e. to increase the future productivity. During the period of interest rate declining, firms started to restructure their financing pattern, there by repaying the high cost loans and raising new loans from financial intermediaries like banks. In the recent period i.e. from 2002-03 the share of bank borrowings in total borrowings increased significantly (Figure 1). It is therefore, important to study the effect of bank credit in improving the overall firm's performance.

This paper investigates the effect of a bank credit in improving the firm's overall performance. To conduct the study on 'effect of bank credit on firms' performance, gross bank credit considered as an independent variable and the value of output is taken as dependent variable.

**1.1 GROSS BANK CREDIT TO INDUSTRY**

The gross bank credit to industry is presented in the following chart, it is noticed that the gross bank credit over the period of 20 years increased significantly from Rs. 53,803 crore in 1989-90 to Rs.8,71,900 crore during 2007-08. There is significant increase in the recent period that is from year 2003-04 onwards.

**FIGURE 1: GROSS BANK CREDIT TO INDUSTRY**

Source: www.rbi.org.in

To provide the background of the study, sources of corporate financing is presented in section 2. Relation between corporate performance and bank credit is discussed in Section 3. Section 4 presents the brief review of literature. Data sources, Methodology and results are presented in section 5. Concluding remarks are presented in section 6.

**2. SOURCES OF CORPORATE FINANCING**

The financing pattern of Indian firms is presented in the following table 1. Indian firms were almost dependent on internal and external sources for meeting their financial needs during 1999-00 to 2006-07. The share of internal sources is higher than external sources during the years 2000-01 to 2004-05. The share of internal sources was large during these period was mainly due to increase in retained earnings. Reserves and surplus and provisions (depreciation etc) were the prominent sources of internal financing. During the period of high internal sources of funds availability, Bank borrowings and trade dues are the prominent external sources financing. The share of internal sources in total sources declined in the recent period i.e. 2005-06 and 2006-07. Trade dues and other current liabilities occupied the significant share in meeting the financial needs of the firms during the period under review.

TABLE 1: SOURCE OF FINANCING OF FIRMS IN INDIA, 1999-00 TO 2006-07 (Values in Per cent)

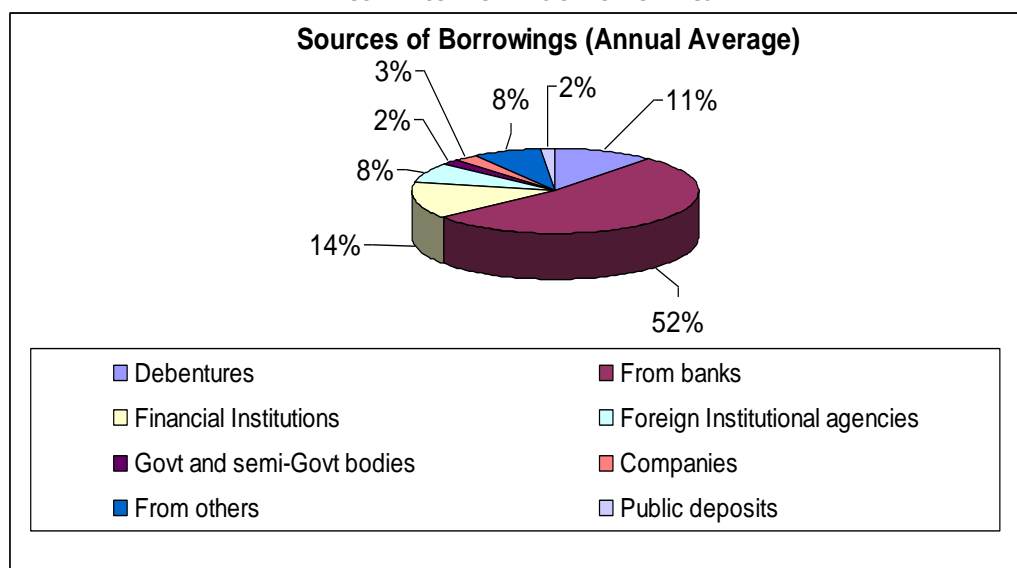
Sources of Funds	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Number of Companies	1927	1927	2031	2031	2214	2214	3016	3016
<b>Internal Sources</b>	<b>40.3</b>	<b>59.6</b>	<b>65.3</b>	<b>64.9</b>	<b>53.5</b>	<b>55.5</b>	<b>42.7</b>	<b>35.9</b>
Paid-up capital	0.5	0.7	0.4	-1.7	0.4	0.8	3.7	0.8
Reserves and Surplus	9.1	10.5	-18.8	10.3	20	26.6	23.2	24.8
Provisions	30.7	48.4	83.8	56.3	33.1	28.1	15.7	10.3
<b>External sources</b>	<b>59.7</b>	<b>40.4</b>	<b>34.7</b>	<b>35.1</b>	<b>46.5</b>	<b>44.5</b>	<b>57.3</b>	<b>64.1</b>
Paid-up capital	21.9	10.3	10.5	6.2	8.6	10.5	15.1	11.8
Borrowings	20.1	10.7	8.8	1.4	17	15.3	25.5	32.4
<i>Bank Borrowings</i>	<i>8.4</i>	<i>6.9</i>	<i>21.5</i>	<i>27.7</i>	<i>21.4</i>	<i>15.2</i>	<i>24.3</i>	<i>22.4</i>
Trade dues and other current liabilities	17.3	18.7	14.3	27.1	20.3	18.5	16.5	19.9
TOTAL	100	100	100	100	100	100	100	100

Source: Reserve Bank of India studies on Company Finances

## 2.1 COMPONENTS OF BORROWING OF FIRMS IN INDIA

The components of borrowings are presented in the pie chart (Figure 2). On average companies are raising around 52 per cent of total borrowings from banks. The other prominent sources of borrowings are the financial institutions and borrowings by way of debentures, foreign institutional agencies etc.

FIGURE 2: COMPONENTS OF BORROWINGS

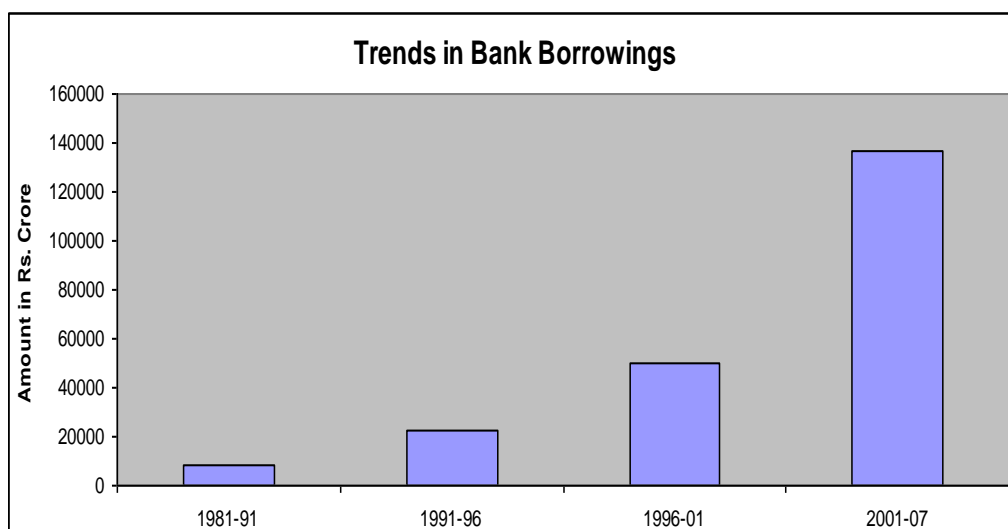


Source: www.rbi.org.in

## 2.2 TRENDS IN BANK BORROWINGS

The following Figure 3 provides the trends in bank borrowings from 1980-81 to 2006-07. It is observed that during the period 1981-91, the total borrowings from banks were amounting to only Rs. 7,967 crore. Over a period of 20 years bank borrowings were raised to 1,36,868 crore during 2001-07 (amounts are based on RBI sample studies on company finances). It is evident that Indian firms mainly depended more on bank borrowings for meeting their financial needs during the recent period.

FIGURE 3: TRENDS IN BANK BORROWINGS

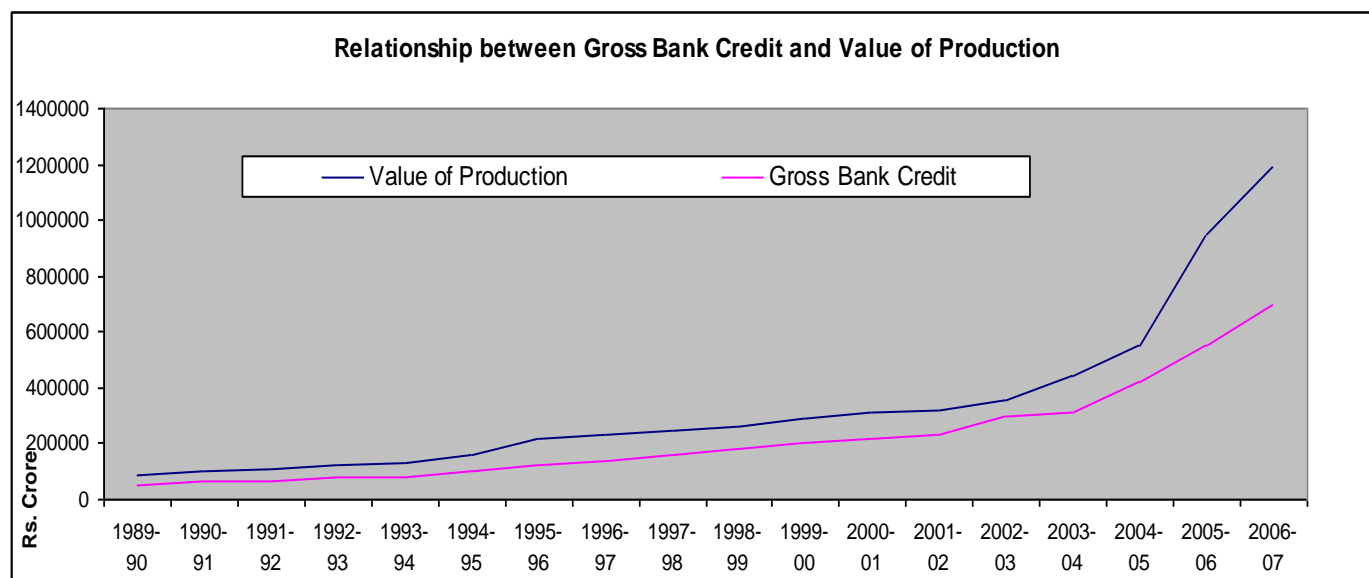


Source: www.rbi.org.in

### 3. RELATIONSHIP BETWEEN CORPORATE PERFORMANCE AND BANK CREDIT

To examine the relationship between bank credit and firms' performance an attempt is made to find out the correlation coefficient between them. It found that there is strong positive correlation of 0.9845 between the gross bank credit and value of production. The following figure 4 presents the line diagram of gross bank credit and value of production. From the graph it is evident that bank credit to industry increased significantly after 2004-05. It is also observed that the bank credit and value of output increasing in the same direction. The line graph of output in all the years is above the bank credit line graph, indicating that the increase in value of output is more than increase in gross bank credit in all years under study.

FIGURE 4: GROSS BANK CREDIT AND VALUE OF PRODUCTION



Source: www.rbi.org.in

### 4. LITERATURE REVIEW

There is not much literature exists to study the direct effect of bank credit on corporate performance. Few studies emphasize the bank relationship and firms performance in other words, how bank relationship matter for raising the finance. Firms that were more dependent on banks had better stock performance (Kang and Stulz, 2000). The central role of banks is for channeling funds from investors to firms when costly information asymmetries exist between them. If firms have a close banking relationship, they may obtain funds from banks relatively easily, which permits them to keep lower liquidity on hand. In other words, they are not financially constrained (Chung and Wang, 2005).

Leo and Hinloopen (2002) studied the financing hierarchies of 150 Dutch companies for the years 1984 through 1997, thereby distinguishing internal finance and three types of external finance: bank borrowing, bond issues, and share issues. They proved that most preferred financing hierarchy: (i) internal finance, (ii) bank loans, (iii) share issues, and (iv) bond issues. It may be said that when capital market is imperfect like India, lack of internal funds may negatively affect the firms performance. During the periods of lack of internal funds, the second preferred sources of financing is the bank financing.

Availability of bank credit is shown to be directly related to the creditworthiness of a firm. A firm with high creditworthiness will get bank credit more easily as compared with a firm with less creditworthiness. Investment decisions of firms with high creditworthiness are extremely sensitive to the availability of internal funds; less creditworthy firms are much less sensitive to internal fund availability. Investment outlays of the least constrained firms are the most sensitive to internal cash flow (Kaplan and Zingales, 1997).

### 5. DATA SOURCE AND METHODOLOGY

The section analyses the empirical relationship between bank credit and corporate performance. Gross bank credit to industry is collected from Hand Book of Statistics on Indian Economy, Reserve Bank of India. Corporate performance is measured by the value of output and this data is collected from various RBI studies on company finances. Both the data series are available on annual basis.

The econometric model to measure the effect of bank credit on corporate performance is given below.

$$\text{Value of Production} = A + B (\text{Bank Credit}) + U$$

The analysis of the effect of bank credit on value of production is performed by running the simple regression analysis and testing whether the test produces significant result. The regression analysis is done using the EVIEWS package. In the analysis, the dependent variable is value of production and the independent variable gross bank credit. The time period is 1989-90 to 2006-07 (for a period of 18 years).

#### Regression analysis

The output of the analysis is presented below. It is observed that, around 97 per cent of variation in value of output is explained by the bank credit (i.e.  $R^2 = 0.9701$ ). The fitted regression line is

$$\text{Value of Production} = -24368.1 + 1.6426 (\text{Bank Credit}) + U$$

The results of the regression analysis show that bank credit is having significant effect in increasing the firms' value of production. The coefficient of bank credit (1.6426) is significant at 0.05 level of significance.

### 6. SUMMARY AND CONCLUSION

The effect of bank credit in improving the firms' performance is studied in this article. Gross bank credit to industry is taken as independent variable. To measure the firms' performance, value of output is taken as the proxy variable. The results show that there is significant positive effect of bank credit in improving the overall financial performance of the firms.

### REFERENCES

1. Chung-Hua Shen, Chien-An Wang (2005), "Does bank relationship matter for a firm's investment and financial constraints? The case of Taiwan", *Pacific-Basin Finance Journal*, 163 – 184
2. Kang jun-koo, Stulz. Rene M, "Do banking Shoks Affect Borrowing Firm Performance? An Analysis of the Japanese Experience", *Journal of Business* 2000.
3. Leo de Haan, Jeroen Hinloopen, "Preference hierarchies for internal finance, bank loans, bond, and share issues: evidence for Dutch firms", *Journal of Empirical Finance*, 10 (2003) 661– 681
4. Reserve Bank of India Bulletin, Various issues.

## FACTORS INFLUENCING PASSENGERS' SATISFACTION TOWARDS SERVICES PROVIDED BY KADAMBA TRANSPORT CORPORATION WITH REGARD TO SHUTTLE SERVICES IN GOA

**GOURI K. MANERKAR**  
**ASST. PROFESSOR**  
**DEPARTMENT OF ECONOMICS**  
**M.E.S. COLLEGE OF ARTS & COMMERCE**  
**ZUARINAGAR**

### ABSTRACT

*In India, among the various infrastructure sector available, transport sector occupies an important position. It not only fulfills business requirements but also meets the social obligations. Now a days, there is a steep increase in the mobility of the people from one place to another in order to earn their livelihood. Among the various modes of transport available, road transport is a better means of transport. Goa being the tiny state in India has a well developed network facilities of road connectivity between different places. In Goa, there is simultaneous existence of both public and private transport. Public transport is owned by the Kadamba Transport Corporation. It is a state owned corporation owned by the Government of Goa. This Corporation also runs nonstop buses called shuttle services. These shuttle services operate in 6 major cities. This study is undertaken to analyse the factors influencing passenger's satisfaction towards shuttle services in Goa. A total of 470 passengers are interviewed with a well designed questionnaire in 6 different locations. Around 10 factors were identified and the passengers were asked to rank these factors in order of their preference. Gartell ranking were used to identify the most important factor influencing passengers to prefer shuttle services. The research paper concludes by stating that comfort, travelling distance and Convenience are the most important factors influencing passengers to select shuttle service while travelling.*

### KEYWORDS

Kadamba Transport Corporation, passengers, shuttle services, transport.

### INTRODUCTION

Transport system in India plays a very important role in the economic development of the country because it helps in creating employment opportunities and also performs economic activities. Transport is the channel of social and economic interaction involving the physical movement of people and goods. Public transport system is a popular mode of travel in India because it is affordable, convenient and user friendly. Goa is not exception to this. Goa, being the twenty-fifth state of India, is the paradise of India, with geographical area of 3702 sq. kms and a population of 14,58,545. The State is divided into two districts, eleven talukas and has fifteen towns. A variety of transport facilities are available in Goa, including ferry and railways services, but road transport plays an important position in the overall transport system in the State of Goa. Travelling around Goa is fairly easy because there is an extensive road network which connects most places in Goa. There are private as well as State owned Transport Corporation running bus services which connect all the major locations. Government-run buses are maintained by the Kadamba Transport Corporation Ltd, linking major routes and some remote parts of the state.

Kadamba Transport Corporation is a State Owned Corporation owned by Government of Goa. It was established in the year 1980 under Companies Act, 1956 with the objective to provide safe, reliable, comfortable, punctual effective & efficient passenger to the traveling public. The main aim of Kadamba Transport Corporation is to provide "safe, reliable, time-saving, efficient, comfortable and affordable" services for Goa. It is heavily subsidized by the Government like most of India's state run road transport undertakings. The Corporation Registered office is located at Parasio de Goa, Alto Porvorim, Goa. The Corporation has major four depots at Margao, Panaji, Porvorim and Vasco with a Central workshop at Porvorim. The corporation in tune with its objective of providing comfortable and efficient services provides these point to point services through mini buses called shuttle services connecting the major commercial towns like Panaji, Margao, Vasco, Mapusa, Ponda, Curchorem. These Services are non-stop without standees and hence, travel time is less, besides passengers are dropped inside the City during office timings. The shuttle bus service by Kadamba Transport Corporation in Goa is useful and convenient for blue collar job holders and daily commuters. Since most of the working population in Goa depends on public transport, Kadamba Transport Corporation plays an important role in economic and commercial development of the State.

### OBJECTIVES

1. To find the factors influencing passengers' satisfaction towards services provided shuttle services in Goa.
2. To offer suitable suggestions based on the findings of the study to improve the services of shuttle services

### SCOPE OF THE STUDY

The study is confined of analyzing the factors influencing passengers' satisfaction towards services provided shuttle services in Goa. For this study, a survey of 6 places has been undertaken namely, Panaji, Vasco, Margao, Mapusa, Ponda and Curchorem. Since the sample passengers are mobile population and they remain busy and hectic to catch their respective buses a total of 470 passengers have been interviewed in different locations. Out of the 470 passengers interviewed, around 300 passengers are daily commuters availing the pass system. These daily commuters are working people and students who travel regularly and they have availed concessions on these passes. The period of the study is from December 2015 to February 2016. In spite of some private buses and local buses of KTC operating in certain place like Vasco, Margao, Ponda, Curchorem, people still prefer to travel by shuttle services of Kadamba Transport Corporation Ltd. Hence this study has been undertaken know the passenger's satisfaction towards services provided by shuttle services in Goa.

### RESEARCH METHODOLOGY

This study mainly focuses on the passengers' satisfaction towards services provided shuttle services in Goa. This research is mainly based on primary data and secondary data. Primary data is based on empirical research based on survey method and secondary data availed from the respective Corporation.

**PRIMARY DATA:** The primary data have been collected survey method with a pre-tested, well structured Interview Schedule. This questionnaire is administered to passengers who prefer to travel by shuttle services. The sample consists of 470 passengers who are travelling from six destinations namely Vasco, Margao, Panaji, Mapusa, Ponda and Curchorem.

**SECONDARY DATA:** Secondary data were collected through Annual Reports published by Kadamba Transport Corporation Ltd., newspapers magazines and internet websites.

### REVIEW OF LITERATURE

Cristina Alpogi, Cristina Manole (2012) conducted a research on "Qualitative Analysis of Urban Public Transportation in Bucharest" Their analysis aimed at evaluating the quality of public transport services in Bucharest. The analysis was performed from two perspectives: the perceived quality of passengers and the quality desired by them. The conclusion that emerges from their study is that even though the travelers in most cases are satisfied with local public transport service, they



still want an improvement in their quality. Hence they have suggested that in order to reduce waiting time at stations, there should be an increased means of transportation, especially during peak hours, besides that the government should prioritize the introduction of traffic lights, traffic control systems, etc. Gunu, Umar (2011) has conducted a research on "Consumer focused study of transport service Quality: A case study of selected state transport Corporations in Nigeria" The author has concluded by highlighting the fact that if transport corporations in Nigeria put their customers at center stage, it will help them create a culture that is appropriately responsive to customers. This in turn will ensure that they get the basics right because exploiting new opportunities will require a company to build on existing capabilities. The stronger these capabilities the more other profitable opportunities a company is likely to have. High quality of service can only come from a solid foundation of knowing one's customers and how they choose, and delivering consistently whatever it is matters most to them. Kokku Randheer, Ahmed A. AL-Motawa, and Prince Vijay. J (2011) has conducted a research on Measuring Commuters' Perception on Service Quality Using SERVQUAL in Public Transportation. The study examined the commuters' perception on service quality offered by the public transport services of twin cities of Hyderabad and Secunderabad, India. The SERVQUAL scale is administered to measure the commuter's perception on service quality. A survey was conducted among the commuters who were regularly availing public transport services for travelling. The research has concluded highlighting the expectations required by the commuters in terms of service quality that are delivered by the public transport services

### LIMITATIONS OF THE STUDY

1. The Study area was confined to Goa only.
2. Only passengers travelling by shuttle services were taken for the study.
3. The survey period covers only from December 2015 to February 2016.

### FINDINGS OF THE STUDY

In order to survive in a freely competitive market driven economy, the consumer is considered as a king. In the same way, for the survival of any transport services in the long run, the opinion of the passengers is of utmost importance. In Goa, besides private bus services operating in the state, there are State Operated transport facilities run by Kadamba Transport Corporation Ltd. which operates both local buses and shuttle services. In this study passengers travelling by shuttle services are interviewed and they are asked to assess each factor according to their own significance. Each passenger is asked to indicate their level of satisfaction by assigning ranks. The most importance influencing factor by asked to assign the first, the second important factor was assigned second rank and so on. Based on the ranks assigned by the passengers, in order of their level of satisfaction, factors influencing the passengers to prefer shuttle services of Kadamba Transport Corporation were identified. To find out the most satisfied parameter influencing the sample passengers to prefer the shuttle services of Kadamba Transport Corporation, Garrett's Ranking Technique is employed. It is calculated as percentage score and the scale value is obtained by employing Scale Conversion Table given by Henry Garrett.

The percentage Score is calculated as

$$\text{Percentage Score} = \frac{100 (R_{ij} - 0.5)}{N_j}$$

Where  $R_{ij}$  = Rank given for  $i^{\text{th}}$  item  $j^{\text{th}}$  individual

$N_j$  is the number of items ranked by  $j^{\text{th}}$  individual

The percentage score for each rank from 1 to 10 are calculated. The percentage score thus obtained for all the ten ranks are converted into scales using Scale Conversion Table given by Henry Garrett. The score value (fx) is calculated for each factor by multiplying the number of respondents (f) with respective scale values (x). The total scores are found by adding the score values (fx) of each rank for every factor. The mean score is then calculated to know the level of satisfaction given by the respondents for each factor. The mean score of then calculated to know the order of satisfaction given by the respondents for the factors. Based on the mean score, the overall ranks are assigned for each. The ranking analysis of the factors influencing the passengers satisfaction towards shuttle services of Kadamba Transport Corporation using Garrett's Ranking Technique is shown in Table 1:

TABLE 1: FACTORS INFLUENCING PASSENGERS' SATISFACTION TOWARDS SERVICES PROVIDED BY KTC WITH REGARD TO SHUTTLE SERVICES IN GOA

Ranks	I	II	III	IV	V	VI	VII	VIII	IX	X	TOTAL	TOTAL SCORE	MEAN SCORE	RANK
<b>Factors</b>	<b>82</b>	<b>70</b>	<b>63</b>	<b>58</b>	<b>52</b>	<b>48</b>	<b>42</b>	<b>36</b>	<b>29</b>	<b>18</b>				
<b>Economy f</b>	72	71	64	40	54	38	37	31	27	36	470			
fx	5904	4970	4032	2320	2808	1824	1554	1116	783	648		25959	55.23	4
<b>Facilities available f</b>	24	27	35	63	49	48	64	67	41	52	470			
fx	1968	1890	2205	3654	2548	2304	2688	2412	1189	936		21794	46.37	8
<b>Travelling distance f</b>	53	63	72	87	34	56	32	22	28	23	470			
fx	4346	4410	4536	5046	1768	2688	1344	792	812	414		26156	55.65	2
<b>Convenience f</b>	75	65	66	34	51	53	44	25	32	25	470			
fx	6150	4550	4158	1972	2652	2544	1848	900	928	450		26152	55.64	3
<b>Speed f</b>	20	35	32	30	60	70	72	66	59	26	470			
fx	1640	2450	2016	1740	3120	3360	3024	2376	1711	468		21905	46.61	7
<b>Punctuality f</b>	62	56	37	39	44	59	44	48	42	39	470			
fx	5084	3920	2331	2262	2288	2832	1848	1728	1218	702		24213	51.52	6
<b>Safety f</b>	39	44	77	55	65	52	34	44	31	29	470			
fx	3198	3080	4851	3190	3380	2496	1428	1584	899	522		24628	52.40	5
<b>Comfort level f</b>	87	59	52	45	65	45	37	43	20	17	470			
fx	7134	4130	3276	2610	3380	2160	1554	1548	580	306		26678	56.76	1
<b>Travelling during peak hours / festive season f</b>	22	30	20	55	31	35	54	67	76	80	470			
fx	1804	2100	1260	3190	1612	1680	2268	2412	2204	1440		19970	42.49	9
<b>Cleanliness f</b>	16	20	15	22	17	14	52	57	114	143	470			
fx	1312	1400	945	1276	884	672	2184	2052	3306	2574		16605	35.33	10
<b>TOTAL</b>	<b>470</b>	<b>470</b>	<b>470</b>	<b>470</b>	<b>470</b>	<b>470</b>	<b>470</b>	<b>470</b>	<b>470</b>	<b>470</b>				

Note: x= Scale value; f= Number of passengers; fx= Score

It is clear from the above table that the passengers prefer travelling by shuttle services due to comfort level (56.76), followed by travelling distance (55.65), Convenience (55.64), Economy (55.23), Safety (52.40), Punctuality (51.52), Speed (46.61), Facilities available (46.37), travelling during peak or festival season (42.49) and the least importance is given to Cleanliness (35.33).

### RECOMMENDATIONS

- 1) There should be uniformity in the frequency of buses especially during peak time as the passengers' faces a lot of problem during this time.

- 2) Kadamba Transport Corporation should try to display the appropriate time table boards showing timings of arrivals and departures of shuttle buses as and when required. It should also be in clear, legible, simple and precise to see, so that there will be no confusion among the passengers.
- 3) It was also suggested that First aid facilities should be made available both in the buses and at the bus stations. The first aid boxes should have all the necessary medicines which are required at the time of emergency and if medicines expire, they should to be replaced with new ones.
- 4) The Government should make alternative arrangement to ply additional buses especially during peak and festival seasons so that the daily passengers who are travelling are not put at loss.
- 5) Old buses should be replaced with new ones so that the passengers find convenient while travelling.
- 6) The Government should try to appoint some officers so that they can inspect the cleanliness in the buses and also in different bus depots.
- 7) It is also necessary that the Government should provide the basic infrastructure and basic facilities such as pure drinking water, good sanitation and user friendly infrastructure for disabled persons and senior citizens Wheel chairs should also be made available in the bus station premises so that the elderly and physically challenged persons will not have the trouble of walking distances long distances to catch their buses. Also suitable ramps have to be built where ever necessary.

## CONCLUSION

The survival of any service industry depends on how well they serve and satisfy their passengers. Hence satisfied passenger is always the biggest asset of any service industry, especially, in the era when global and private players enter the market. The study on factor influencing passengers' satisfaction towards services provided by Kadamba Transport Corporation with regard to shuttle services in Goa revealed that the passengers' are satisfied services of the shuttle services in Goa. However, cleanliness and frequency of buses are two important aspects of quality of services which are required to be considered by KTCL inorder to survive in the long run.

## REFERENCES

1. Hanumantha Rao (1990) "Nationalized Passenger Road Transport in India-A Perspective" Journal of Transport Management, pp15-18.
2. Jegadish Gandhi (1999) "State Transport Undertakings in Southern States- A Comparative Study", Southern Economics, pp 26-30.
3. Patil S. D. (1989) "Socio-Economic Study of Maharashtra State Road Transport Corporation (MSRTC) Drivers with Special Reference to Sangli Depot", Unpublished M. Phil. Dissertation Submitted to Shivaji University, Kolhapur.
4. S. Padam (1990) 'Bus Transport in India: The structure, Management and Performance of Road Transport Corporation', Ajantha Publication, New Delhi.
5. Sudarsanam Padam (1990) "Bus Transport in India-the Structure, Management and Performance of Road Transport Corporations", Ajantha Publications, Delhi, pp 54-62.
6. V. Vijay and Durga Prasad (2011) "Passenger Amenities of Andhra Pradesh State Road Transport Corporation (APSRTC)", Asian Journal of Business Management Studies 2(2), pp76-83.

## WEBSITES

7. [www.ktclgoa.com](http://www.ktclgoa.com) viewed on January 15, 2016
8. [www.goakadamba.com](http://www.goakadamba.com) viewed on January 30 2016

**A DESCRIPTIVE STUDY ON THE CHALLENGES FACED BY THE MANAGEMENT IN PSEUDO-MODERN ERA****SAI JANANI****STUDENT****DEPARTMENT OF MANAGEMENT STUDIES****KARPAGAM COLLEGE OF ENGINEERING****COIMBATORE****A. ABIRAMI****ASST. PROFESSOR****DEPARTMENT OF MANAGEMENT STUDIES****KARPAGAM COLLEGE OF ENGINEERING****COIMBATORE****ABSTRACT**

Over the last decade, the business world has been thoroughly evolved. Some businessmen, who were visionary enough to forecast the upcoming changes, survived this change successfully and flourished. On the other hand, many managers and executives fell behind. Now-a-days, each management not only has the traditional issues and problems to tackle, they also have to deal with the modern challenges of management. The contemporary challenges require skills, in-depth management knowledge and a vision to anticipate what is to come. However, there is lot of businesses that is still not optimizing their resources. Just by tweaking their management a bit, they can explore a lot of different possibilities and avenues of success. After all, we live in a world of endless possibilities. Knowing the modern challenges in management can be a good start in the right direction. The paper intends to enlighten the challenges faced by the management during and after the transition phase according to the changing trends. The study has been developed through an extensive literature survey to determine the most common challenges that are being faced by the management in the pseudo modern era.

**KEYWORDS**

challenges for management, changing trends, adoptability, learning.

**INTRODUCTION**

*Management is doing things right; Leadership is doing the right things"*

- Peter Drucker

The paper aims to explore the standing challenges faced by the management in the changing environment. Even, the globalization has changed the way managers used to work. The biggest change of the 21st century is that the world has now become a global village, which has brought the whole world as a big, grand global market with lots of problems and headaches for today's managers. This research examines the challenges faced by the management in getting accustomed to the current trend, with regard to all aspects. The management faces many intricacies in adapting to the changes to the pseudo-modern era, which is becoming the biggest management challenge of the 21st century.

Over the last decade, the management of an organization does not only have the traditional issues and problems to tackle, they also have to deal with the modern challenges of management. These modern challenges in management, which are also commonly referred as the management challenges of the 21<sup>st</sup> century, require skills, in-depth management knowledge and a vision to anticipate what is to come. Knowing the modern challenges in management can be a good start in the right direction. This research work is intended to shed light on the challenges faced by the management in pseudo-modern era with respect to few aspects like diversity in workplace, information technology, learning organizations etc.

**CHALLENGES FACED IN PSEUDO MODERN ERA**➤ **STRATEGIC SENSE MAKING**

Recently, the new managers face challenge in the area of examining the assortment of information's, an overwhelming array of messages and ideas from various groups like competing stakeholder's interests as they take upon the leadership of the company. Added, the challenges include delivering a successful implementation of performance management which is considered to be a most significant HR process and has gained significant attention from both researchers and practitioners owing to its complexities and perceived problems. For example, the IT companies represent challenges for manager and employees, as knowledge workers are often asked to address multiple goals and projects simultaneously. Thus the management faces multi facetal challenges in setting up the vision and mission according to the changing environment.

➤ **DIVERSITY IN WORKFORCE**

Managing people, who are very different to each other, is also one of the modern challenges of management. The workforce diversity means a lot to the organizations and is now becoming a mixture with different age groups, genders, cultures, races and ethnicities. Managing such a workforce has become a global concern and management challenge. The Management cannot expect the same rule to be followed by everyone. Since people have different values, cultures, ethics, perceptions and personalities, they also have different preferences, needs and requirements. It is, indeed, a challenge for the management people to cater to the entire workforce successfully.

➤ **INFORMATION TECHNOLOGY**

The technology advances rapidly and shows up in media on all sides. This means users, managers at all levels and even competitors pressure the staffs to implement new technology just because it is new. so in the 21st century, it is mandatory for the management and top level people in administration to learn more about computers, internet and other information technology. As the businesses are undergoing a major IT transformation the management requires a collaborated platform to work with more efforts to cope up with the upcoming big challenges around security, data management and new channels. Even the rapid rate of technology change significantly affects ongoing as well as pending strategic ventures across a wide range of organizations and industries.

➤ **THE CHANGE LEADER**

Human resource managers strive to hire employees who fit in with a company's culture. In a period of rapid structural change, the only ones who survive are the Change Leaders, because Change is the norm in our present situation. They must also keep an eye on diversity and equal opportunity as well as both ethical and legal hiring practices. As the people and organizations need to develop the practice of balance in management, the new management assumptions, strategies, and change leadership practices may be implemented in a more balanced and effective way. In other words, a company's culture can be at odds with what's the right thing to do for HR managers. As issues arise, the HR manager must be adept at resolving conflicts between the demands of company culture and those of ethical behavior.

➤ **LEARNING ORGANIZATIONS**

The concept of 'learning organizations' was first presented by Peter Senge. According to his concept, employees, who are committed to an organization, work harder and produce better results. That's why he proposed that organizations should invest in their employees and facilitate the learning of their members. As a result of that, the organization actually develops and transforms itself. To tackle the world-wide shift in the management philosophy and practice is another modern challenge in management. Actually there are many organizations that actually invest a lot of time, efforts and money into their employees' learning and development. However, the challenge for the managers is to strike a balance between facilitating the learning and maximizing outputs and profits. So the business owners may need to overcome challenges in their organizations.

➤ **SECLUSION**

Seclusion (Privacy) is always a delicate matter from the view point of Management. Though the company policies and culture are cordial and open, the Management should come forward to encourage the employees to freely discuss personal details and lifestyles, the HR manager has an ethical obligation to keep such matters confidential. This particularly comes into play when the competing company calls for a reference on an employee. To remain ethical, HR managers must stick to the job-related details and leave out knowledge of an employee's personal life.

➤ **OTHER CONSIDERATIONS**

Business owners may choose to grow their businesses slowly in order to limit the number of management challenges. Growing slowly also allows a business owner to learn various business management techniques for improving their company business operations. Business owners can also outsource certain administrative tasks. Outsourcing helps business owners use other individuals or companies to complete business functions and save time during the business management process.

**CONCLUSION**

We have thus discussed the dominant issues and challenges faced by the managers and organization and it is clear that the role of today's managers is becoming more and more difficult as these modern challenges in management require a lot of experience and skills, along with the ability to foresee future changes. The foremost work by the HR is to develop sound organizational structure with strong interpersonal skill to employees. Training employees by familiarize them with the concept of globalize human resource management to perform better in the global organization context.

All such challenges like work force diversity, leadership development, learning organizations, seclusion, Globalization, E- Commerce, etc, should be adopted according to the changing environment. This can be best managed by the management should adopt proper HR practices to encourage rigid recruitment and selection policy, division of jobs, empowerment, encouraging diversity in the workplace, fostering innovation, proper assigning of duties and responsibilities, managing knowledge etc. By enthusiastically following all the above aspects the value of human resource can be improved, organization efficiency can be enhanced, and the organization will sustain to survive, by managing all the challenges.

**REFERENCES**

1. Bennet-Alexander DD, Harrison If & Hass me. 1996. The legal, ethical and regulatory environment of business. Cincinnati: south western.
2. Kruger s. 1995. New management thinking into the 21st century. Unpublished class notes. Johannesburg: Rau.
3. Vasumathi, R. Subashini, Issues and challenges faced by organised and unorganised retail outlets of food and grocery in India - An Empirical Study.
4. Michael Maccoby, Narcissistic Leaders, Harvard Business School Press, 2007.

## COMPARATIVE ANALYSIS OF INDIAN Vs. GLOBAL SMARTPHONE MARKETING STRATEGY IN INDIAN MARKET

**ASHISH KUMAR**  
**STUDENT**

**SYMBIOSIS INSTITUTE OF MANAGEMENT STUDIES**  
**PUNE**

**VARUN KHARE**  
**STUDENT**

**SYMBIOSIS INSTITUTE OF MANAGEMENT STUDIES**  
**PUNE**

**DR. KOMAL CHOPRA**  
**ASST. PROFESSOR**

**SYMBIOSIS INSTITUTE OF MANAGEMENT STUDIES**  
**PUNE**

### ABSTRACT

*The Indian smartphone market is in a very dynamic stage. Which enables various players in the market to play around with various strategies in order to maximize their hold in the market. The paper aims at reviewing the various strategies being employed by two major players in the market. Micromax is chosen as a shining example of Indian origin, whereas Samsung represents the other end of the spectrum with it being of foreign origin and the current leader in the segment. The comparisons are to be done while keeping the constantly varying market dynamics in mind. This study will also look at the various influences that the buyer bring while selecting a device of their choice, which in turn effects the market performance of the various firms in the market. An analysis would also be performed for the other payers in the market to know their standing and their strategies to counter the big players.*

### KEYWORDS

smartphone, Samsung, Micromax, strategy.

### INTRODUCTION

The smartphone industry in India over the last four years has seen rapid growth and just to illustrate the magnitude of this growth, the Indian smartphone market was declared the fastest growing smartphone market registering a year-on-year growth of 44% in Q2 2015. As a result, the India smartphone market outshone other emerging markets in the Asia/Pacific region in terms of quarter-over-quarter growth. The growth in the market is driven by the two major drivers namely increasing consumer preference for smarter devices coupled with narrowing price differences. The Indian smartphone market can be divided broadly into three segments namely:

- Segment 1- The low cost range/ economy range -Sub \$100,
- Segment 2- The mid-priced range- Sub \$250
- Segment 3-The premium range- In excess of \$ 350

Samsung has continued its dominance, holding 23% of smartphone market share while the Indian handset maker Micromax stands next to Samsung with 17% market share. However, it is interesting to note that if feature phones into the mix, the line between the top two contenders blurs more than ever. Intex entered the top 5 smartphone vendor rankings for the first time in a quarter, capturing 11% of the market share during the quarter. It surpassed Lava, Karbonn and Motorola to become the third largest smartphone vendor in the quarter. Intex smartphones enjoyed a strong demand in sub-\$100 smartphone.

The competition for the third to fifth spots in India smartphone market is a close race between the fast growing smartphone brands such as Intex, Lava, Lenovo (Including Motorola), Karbonn, Xiaomi, Sony and others. A majority of these players operate in Segment 1 and Segment 2 of the market. Therefore, the market is extremely competitive (on cost and features), however the burgeoning aspirational levels of the Indian consumer also add to the dynamism of the smartphone market.

A large part in the change in dynamics of the market is also due to the change in usage of the smartphone. India has been hooked on to the internet bandwagon. This can clearly be observed as telecom service providers start to divert from calling services and concentrate more on data services. New innovations in technology such as 4G are being launched and tariffs of existing are being revised. This is a clear indication to what the users are expecting from their devices. There is a rise in the shipment of smartphones, whereas there is a decrease in the sale of regular feature phones.

The next factor that largely influences the performance of these companies is the consumers buying behaviour and preferences. There are various articles present which study the various factors that influences the buying behaviour for a consumer. These can be quantified into various elements. Some of these are: Brand, Physical Design, Price, Value Proposition, Availability etc.

The smartphone market goes through a cyclic phase in terms of what the manufacturers are trying to sell. Some phases which the industry has gone through are: Multicore Processor, Larger Megapixel Cameras, Software Gimmicks, Higher resolution Displays, Slimmer Design Hardware etc. These phases represent what all the manufacturers are trying to achieve in that time frame. In each of these phases competitors tried to take advantage by bringing these technologies first to the market. In a bid to outdo the competition some manufacturers even resorted to reducing the handset refresh rate for their flagship.

The current trend is to move towards value proposition. Consumers are moving towards smartphones which provide better value for money for the consumer. With a majority of Indian as well as foreign manufacturer entering into the sub \$250 category, are providing the consumers with a variety of choice. Manufacturers are also trying new and innovative ways of distribution of their product. This is being implemented by clubbing product launch with online retail partners for distribution. This provides a lot of benefits in terms of pricing of the product by the manufacturers.

Key drivers for the smartphone market: Increase in spending capital, Introduction of online content, newer technology, availability and price factor.

These patterns can be identified and can be used by manufacturers to take strategic decisions in order to ensure future revenues. These can also be used to get insights as to what innovations to be brought into the devices for the consumers.

Though enough research has been done on the smartphone industry, there is no research showing the comparative analysis of Indian and global smartphone manufacturer. The objective of the researcher is to compare the strategies adopted by Indian as well as global companies in the Indian market. This has been done through thorough review of literature.

## 1. CONSUMER ORIENTATION

India has become one of the most lucrative market for the telecom providers. With a high percentage of population presenting the youth, companies see this as a market opportunity that they can exploit to enhance their market presence. This is also being fuelled by the fact that mobile telecom services are also being consumed by the Indian consumer more widely than before. The smartphone has become from an amenity to an essential commodity. People apart from communication now use their phones as entertainment hubs and other features that reflect their self-image and lifestyle. Understanding the various factors what motivates the consumer to buy a particular product is of utmost importance. This information can then be used by the various organisations to present themselves to the consumer in a certain way.

Indian Market represents a large demographic spread in terms of the variation of consumers. India is a continent which is geographically defined by separate states to add to this there are variation in the vast variety of cultures that are present. There is a market for any kind of product here. Organisations spend tremendous amounts of money to research and find out what is the actual requirements of the customer and aim to target the same. All sorts of permutations and combinations are being implemented on the product creation, promotion, advertisements front from them. This is to attract as large a base as they can for their product. Understanding the consumer behaviour and working towards it may provide the organisations with an opportunity to have a sustainable future.

The consumers appeal can be broadly classified into two segments:

**Emotional Appeal:** In its basic nature it is non quantifiable and cannot be pin pointed. It depends on a variety of factors, the culmination of which results in this appeal. Factors such as design, brand, and status value attached etc.

**Rational Appeal:** Factors that can be quantified and measured. These are more to do with the products and its attributes. Factors that fall into this category are used as a reference by the consumers to measure the amount benefit they can derive from the product. Product features, warranty period, and specification etc. can be used for rational appeal.

The price of the smartphone bears a direct relationship with emotional appeal. Considering smartphone as a product they provide more or less the same benefit to the user between various price categories. The difference here comes from the factors that appeal to the consumer emotionally. As an example a \$150 smartphone can perform all the tasks that a \$ 500 smartphones would. Still there is a potential for the \$500 smartphone out there as people may be interested in buying the brand which provides them with a certain status as compared to the cheaper option. This comes from the emotional attachment that the consumer has with the brand.

Buying behaviour had a large number of factors. Some more than others stand out as prominent for the consumers. Some of these factors are:

**Brand:** A brand represents the interface which connects the product being offered to the consumer with the organisation that has produced it. In itself brand stands for the promise, quality, and peace of mind which stands behind the product. In the consumers mind the brand represents an intangible value, which may be considered as snob value for some. Certain brands more than others stand out in the market. These are used as benchmarks by the competition in order to mimic what is being done by them. Some very apt examples would be Samsung and Apple. Their brand presence and value amongst the customer is very high. This results in competitive advantage for them while being present in the aggressive market.

**Features:** This term has been used vaguely in order to influence the customers. Companies are relying on software gimmicks a lot so as to push their product. These gimmicks form a part of certain add on features offered by the companies which form a part of their product differentiation strategies. A very low percentage of these have an actual practical application. These form a big part of the marketing process, as these are used as external motivators for the consumers to make a purchase.

**Novelty factor:** This has in recent times become a major factor. The ability of a product to differentiate itself from the various options available in the market is of great importance. Uniqueness is a factor which influences the consumers in an intangible way. The smartphone market has become stagnant in terms of design and hardware innovations for quite some time. The various companies are now using physical appearance and software gimmicks.

**Physical Appearance:** This factor has in fact become a new strategy for the companies to exploit. Design is the first thing that the consumers interact with and observe in a product. This forms part of the experience that the consumers encounter while using the product. As the interaction medium has unanimously turned into touch screen based system, there was very little room left for innovation in the design department. Companies try their best to bring maximum to the table within that defined spectrum of what can be achieved.

**Lifestyle:** Consumers lifestyle effects their buying behaviour a lot of ways. This includes their spending behaviour, preferences among brands, preferences for Indian vs foreign origin brands, purchasing frequency etc. This factor plays an important role as it helps organisation segregate their target audience and use this information to design products specific to their needs. It can be seen that in the Indian context while the middle to upper class prefers foreign goods, a segment of the lower class would still vouch for a product with Indian origin.

## 2. SMARTPHONE MARKET SCENARIO IN INDIA

Samsung holds the top spot in the Indian smartphone market with a 24.5 percent market share (as per Counterpoint research, Hong- Kong for Q2 2015). The Korean smartphone maker was followed by Micromax which had a market share of 16.7% for Q2 2015. This was an improvement of 1.4 % over the previous quarter.

An increase in Micromax's sales can be attributed to increased sales on the e-commerce platform and the Bolt series performing well. In addition to the performance of the Bolt series, the introduction of the brand Yu under which the second model Yupiter also propelled sales further.

Micromax has also scaled up domestic manufacturing capability with the Rudrapur facility now producing 2 million units every quarter. This is also another factor in Micromax regaining its market share.

In the premium smartphone segment Samsung has maintained its aggressive stance with respect to promotions with the launch of Galaxy S6 and Galaxy S6 Edge launch. As a consequence, Galaxy S6 series sell thru was encouraging and outperformed the iPhone 6 series.

Intex with 10% of the market share was third in the smartphone market. Intex's growth has been spurred by the rise in demand for the sub-\$100 smartphone.

Lenovo and Lava were fourth and fifth respectively.

Xiaomi also witnessed a growth in its shipments during the latest quarter while Apple's iPhone shipments remained robust as it expanded its distribution network-online & offline. Apple has crossed a million shipments within a span of seven months i.e. since October 2014(7 months). It achieved the same in twelve months in the last fiscal year.

Recent research conducted has also shown that close to 30 percent of the smartphone sales during the current year were via online channel. Moreover, it is interesting to note that 20 percent of the smartphones sales can be attributed to the 'exclusive' online channel.

Also 25 percent of the smartphones sold in Q2 2015 were LTE enabled and 20% of the smartphones sold during the latest quarter were manufactured in India.

As a whole the smartphone industry has grown by 34 percent (YoY) and 25 percent (QoQ). On the other hand, feature phones saw a decline in shipments- 19 percent (YoY) and 9 percent (QoQ).

### 2.1 Shifting focus to manufacturing in India

China has been the hub when it comes smartphone manufacturing, however, two factors namely- the slowing down of the Chinese economy and the burgeoning demand for smartphones in India has got major Chinese smartphone manufacturers viz. Lenovo, Gionee and Huawei contemplating manufacturing and selling smartphones in India.

However, the average Indian smartphone consumer has been known to be price sensitive and prefers smartphones which are cheaper than the Chinese smartphones. Recent data (Q2-2015) has shown that close to half the smartphones belonged to the sub- \$100 category. Whereas, 20% of the smartphone market in China is characterized by the low-end smartphone category. Moreover, experts have predicted that by the year 2018, the average price of a smartphone in India will hover close the \$100 mark. The current average price is \$135 dollars.

For instance, the Galaxy J1 and other such offerings which were priced at \$100 were the major drivers for Samsung in India in the first half of 2015. So much so that Samsung's market share (in the smartphone market) went upto 24.5%. On the other hand, sales in other markets for Samsung were driven by its top of the line offerings such as the Galaxy S6 which was priced at \$600(U.S price).



The penetration of smartphones in India is increasing at a rapid pace, so much so that the India's numbers are similar to those of China's from four years ago. This penetration has outstripped the penetration levels of the Internet. Apple Inc. has recognized this fact and has recently offered attractive financing schemes to make the iPhone available to the Indian smart phone user.

However, for other smartphone manufacturers such attractive financing schemes might not be all that appealing as they operate on very thin margins. Nonetheless, it's in the favour of the Indian consumer and the economy at the same time.

All this also explains why giant manufacturers like Foxconn want to invest heavily in setting up smartphone manufacturing hubs in India. Xiaomi has also announced the launch of its first Indian made smartphone- Redmi 2 Prime, priced at \$107. Moreover, with the new government pushing the Make in India initiative, tax incentives are being offered to electronics manufacturers. This means a lean supply chain, quicker availability for consumers and reduction in inventory costs.

### **3. MICROMAX'S INDIA STRATEGY**

When Micromax entered the mobile phone industry it adopted a strategy that bucked the trend followed by other firms. It decided to focus on rural markets and meeting the needs of rural people. It did so by introducing offerings that catered to the rural consumer. For instance- Micromax came with the XLi that had a 30-day battery backup to overcome the issue of constant electricity cuts in rural areas, dual SIM and phones that could switch between networks- GSM to CDMA. Moreover, user friendly QWERTY keypads and remote controls were also part of the product offerings. The Xli was priced at Rs. 2150 and was an instant success in the rural segment.

Micromax entered the mobile phone market in 2009 garnering 0.59 % market share in the first half of the year. However, by the end of the year (FY 10), its marketing and distribution paid rich dividends, gaining 6.24 % of the market share.

#### **Defining their segment**

The top management at Micromax realized quickly that launching phones that competed with the bigger players on price will not reap the returns expected. They, however, found that the fierce competition between mobile operators would lead to users keeping two connections. Hence, Micromax decided to launch dual SIM phones to address this need and at attractive prices.

Hence delivering optimum value at an ideal price is at the heart of the company's strategy. Moreover, Micromax also ensures that at a given time it has multiple offerings in a market that is extremely competitive and bases itself on off the shelf technology as compared to the more expensive proprietary channel. Additionally, it has a solid distribution network and reach with 130,000 retail outlets across 560 districts in India.

#### **Connecting with the people:**

Micromax has also been aggressive in its promotion strategy and has associated itself with popular mediums such as cricket and Bollywood stars with traction with the masses. As per experts, the firm's spend on marketing and advertising in the last financial year was close to Rs. 150 crore, which is what major FMCG companies like Britannia spent on brand communications in the same year.

#### **Understanding the market**

Another facet of Micromax's strategy that has set it apart from is the speed with which it has pushed its product profile and at the same time identifying their markets where the demand exists. Therefore, Micromax hardly takes two months to launch products whereas international brands take 18 months to launch a similar product through retail.

#### **Core Strategy**

To add to this, Micromax's strategy has evolved as it has grown. Initially it would source handsets from China, brand them and sell them in the Indian market. However, after a detailed research it realized that some of the consumer requirements were not being met and hence it began some of the product development in India. In the latest phase, it is following a mixed strategy, in that some of the products are manufactured in China and other locations, some of the parts are sourced from outside India and some manufactured in the new production lines within India.

Hence, a comprehensive marketing and operations strategy has seen Micromax claim second spot in the smartphone market, only behind Samsung.

### **4. SAMSUNG'S INDIA STRATEGY**

Samsung has over the last five years utilized a number of factors like its engineering excellence, manufacturing capacities and aggressive marketing to provide stiff competition to its main rival the iPhone in both sales and brand appeal.

In this section we aim to gain insights into how Samsung built its smartphone brand and the recent challenges it has faced.

#### **Product Development**

In terms of design and software prowess, Apple had the upper hand compared to Samsung. Even though, Samsung's premium smartphones were pegged at similar prices as the iPhone, the smartphones were heavily discounted at times (less than 25% of the retail price in some cases), giving consumers access to premium phones.

#### **Manufacturing Prowess**

Moreover, Samsung had fully owned manufacturing facilities where it built screens and chips along with other parts which enabled it to build a cost advantage. On the other hand, even though Apple did design its smartphones, it had to rely on other OEM's including the like of Samsung to manufacture its phones.

#### **Variety on offer**

Samsung also as a part of its strategy in the premium smartphone segment gave the market more product options and variants in different shapes and sizes with varying features at different price points. Apple on the other introduced only one new model each year within a restricted price band.

#### **Keeping up with technology**

Samsung's swiftness in adopting the Android platform which was catching on with the smartphone consumers enabled the smartphone maker to gradually capture the market. As a result of this, by the end of 2012 Samsung had established itself as the top player in the smartphone market in India.

#### **Newfound Competition**

Following the success of fall 2013 Samsung began to slip and, there were factors (in addition to stagnant product development) that led to Samsung slipping in terms of market share in 2014. The prime factor was the emergence of Chinese smartphone manufacturers. These manufacturers namely Xiaomi, Oneplus, Gionee among others found the right balance to making high quality smartphones at half the cost that Samsung manufactured its phones at. For eg- Xiaomi was a runaway success with phones that were made out of high quality materials like metals and specifics like high quality cameras, excellent screens and processors.

#### **Changing trends (methods of shopping)**

The Indian consumers had started sifting on to the E-Commerce bandwagon. A major motivation for the same was the price advantage that they obtained, goods online being cheaper. Samsung in order to stabilise its prices and to stop dealers from selling online through their own or other E-Commerce website, threatened to ban them from being their sellers. This strategy backfired as Samsung lost out on the sales numbers which it could have gained otherwise.

Another reason for Samsung's decline in 2014 was the fact that it had leveraged its distribution network to the maximum and wasn't able to leverage it further. Apple on the other hand in 2013-14, decided to beef up its distributor network in India and Xiaomi on the other hand relied on the fast growing e-commerce channel to sell its smartphones in conjunction with a highly cost effective marketing strategy. Therefore, at the top end Samsung lost out to superior quality Apple iPhones and at the low end it was taken by surprise by Xiaomi.

#### **4.1 Building the Galaxy**

Around 2008-2009, after Apple had launched its first iPhone, most of the current players in the smartphone market were miles behind Apple. However, by 2009 Samsung decided to enter the market with its own brand of smartphones, running on the Android platform.

#### **Positioning the Brand**

The name Samsung though was not synonymous with high-end smartphones. Much to the contrary, Samsung was associated with low end flip phones. Never was Samsung considered in the same category as Apple, BlackBerry and Nokia. A research conducted by Samsung at the time, with the objective of testing itself against Apple revealed that Samsung was hardly a name in smartphones.

Therefore, to change this perception, Samsung in 2009 felt the need to create a new brand of top end smartphones to compete with Apple's iPhone. Therefore, it created the Galaxy sub-brand and in March 2010, Samsung unveiled the Galaxy S. The phone had hardware features which were similar to the iPhone but was also criticized for being similar to the Apple iPhone.

The launch of the Galaxy S was successful but didn't help Samsung to beat its Android counterparts. Therefore, to beat its competitors and give Apple a run for its money Samsung formulated a strategy for the launch of its new smartphone- the S2. The S2 was launched in 2011 and the marketing campaign named the "The Next Big Thing" was created to directly take on the iPhone and create a perception that there was something better than the iPhone.

This campaign was a success and Samsung capitalized on this by coming up with variants such as the Galaxy note phablet with a 5.3 inch display. The market now had something that Apple was not able to offer- bigger screens. Moreover, a perception was also being created where experts felt that Apple didn't have a revolutionary new product up its sleeves.

However, by fall 2013 Apple upped its game with aggressive product innovation and beefing up its distribution. Samsung on the other hand launched the Galaxy S4 which received negative reviews for packing in features like eye tracking which users felt were unnecessary. Although the product sold well but it was the beginning of a phase where Samsung's product development had hit a dead end.

#### 4.2 Regaining lost market share

As a part of its strategy to recapture the market share it has lost to its competitors Samsung will introduce ten new smartphones in the second quarter of 2015 in the Rs. 9000- 18000 price band. Here it will compete with Micromax, Lenovo and Xiaomi. This is an indication that Samsung has realized that the average Indian smartphone user is one who looks for the maximum value at an optimum price.

Moreover, the Rs. 9000- 18000 segment i.e. the mid-range segment accounts for 30% of the market volume in India and follows the entry-level category which accounts for 35% of the market. However, as the country's economy is slowly coming back on the growth trajectory so is this segment expected to be the fastest growing and also the largest by the end of the year. Samsung plans to aggressively spend on the promoting its models in this price band. The new models are slated to be introduced as part of the J series and will be equipped with 4G technology. The first models to be launched will be the Galaxy J7 and J5.

Even though Samsung has a well-connected distribution system in India, however, it has recognized the need to further exploit the online platforms which are growing at a rapid pace.

### 5. STRUGGLING INDIAN SMARTPHONE MANUFACTURES- RISE OF THE CHINESE SMARTPHONES

Several Indian smartphone manufacturers have over the last couple of years have faced issues regarding their quality compared to major firms like Samsung and LG. However, they have managed to stick it out in the market by virtue of the large price differential that exists between them and the major MNC's.

#### 5.1 Price wars

But the new rivals – aggressive Chinese brands like Huawei, Xiaomi and Lenovo, are not like the Japanese or the Koreans. They know how to play the price game equally well, if not better than, the Indian players.

But these Indian players now have much stiffer competition from new Chinese brands like Xiaomi, Gionee, Oppo and others. The Chinese manufacturers not only provide excellent quality but also offer this quality at an attractive price.

While bigger Indian brands have a role in the design stage of these OEM phones as well (some even design the phones and contract out the manufacturing), most of the smaller vendors basically pick a readymade design from OEM vendors in China, slap on their branding and sell them on.

Traditionally Indian smartphone manufacturers have sourced their phones from Chinese OEM and some of the bigger Indian players also play key roles in design of the phones. However, smaller players just pick designs from China and rebrand them in the market.

That said, the absence of one's own manufacturing capability is not a questionable business model. For example, the most premium smartphone maker in the world, Apple, also designs its phones and then outsources their manufacture to Chinese contractors like Foxconn.

Although, possessing one's own manufacturing facility is not possible for every smartphone firm- Apple itself only designs its phones but outsources its manufacturing-it is the absence of design capabilities that hamper Indian smartphone manufacturers. A design forges an identity for any product and helps it to distinguish itself from the competition.

This is the space that Chinese firms like Xiaomi and Huawei have exploited by virtue of them having extensive in-house research and development department that help them to differentiate itself from OEM smartphones that are sourced by Indian firms.

Huawei for example has its indigenous set of processors, named Kirin which helps it to be seen as different from ordinary Chinese OEM models.

#### 5.2 Cost

Japanese and Korean brands operate in a higher price band. However, Chinese brands work on fine margins like Indian brands but keep their volumes high. This enables them to achieve economies of scale and drive prices low. Hence, Indian brands' tactic of keeping prices low will not have much effect on Chinese brands. For example, the Micromax Yu Yureka priced at Rs 8,999 has a less powerful processor compared to the Lenovo A700 which is pegged at the same price.

#### 5.3 Technological Access

In the long term, access to new technology can play a big part in brands not being rendered obsolete. Any new technology that is launched cannot be radically produced in large quantities. As a result, there is high competition for that technology and big brands usually have the final say in such matters. For eg- the latest technology is LTE technology.

At present it is proving difficult for Indian brands to get 4G LTE technology on their offerings. Only Micromax has LTE and that too on one product only. None of the other Indian firms have 4G enabled sets.

Contrast this with Chinese manufactures who all have 4G LTE technology on their phones.

Indian firms in the past have relied on Taiwanese manufacturers to bridge this technological gap but in this particular case the Taiwanese manufacturers have also increased their prices due to the demand by big brands such as HTC, leaving Indian firms in the lurch.

### CONCLUSION

The Indian smartphone market represents a very diverse marketplace for the smartphone manufacturers that is full of opportunity. India holds a lot of potential penetration as a large part of the population has still not shifted on to the smartphones. Though one of the things the companies must be worried about is the fact that the India represents very diverse market. There is an opportunity for every product that is produced to be sold. The organisation must be sure of how it wants to position itself in the market for the consumer. Organisations have to try their best to leverage as much brand value as they can in order to attract the customer through emotional appeal.

The marketplace is an open playing field for all the competition that is present in the market, the ones who are able to use their resources to the fullest will be the ones who would come out on top. Not only is it a lucrative marketplace but now India is also coming up as a manufacturing centre for quite a few brands. Foxconn betting heavy on India and a multitude of manufacturers supporting the idea it does seem to be development in the right direction. Comparing the two given manufacturers we see that each has attempted a strategy that is unique to their brands and leverages their positioning. Micromax being the local brand understood the market well. Instead going head on with the big players in the upper segment it relied on the lower tier handset. They knew that the numbers could be raked in from the lower segments and accordingly targeted those. Instead of spending excessive money in product development they used models already available in china and rebranded them and sold them in the Indian market place.

Micromax has played it really well in the Indian market. They have positioned themselves as an affordable, youth oriented and unique brand which further enhanced their appeal. On the other hand, Samsung has tried to implement a different approach where they tried to appeal to the consumer by positioning themselves as a premium and technologically superior handset. They leveraged their product development and manufacturing prowess to do the same. Samsung flooded the marketplace with a variety of products at each price point. This led to the growth of Samsung as a major player. Samsung also established itself as a brand to reckon with by directly competing with the Apple. However, these two do not represent the only competition that is present in the market, with the upcoming manufacturers especially of Chinese origin.

Manufacturers such as Xiaomi, Lava, and Lenovo etc. are proving to be tough competition for the established players. They have certain advantages to them which cannot be as efficiently practised by the bigger brands. Being relatively new to the market they have the option they can price their products lower. They also have access to the latest technologies in terms of features in the product, manufacturing techniques and product development. This reduces their R&D effort in terms of cost employed. They also extract maximum from the distribution channels by opting for online retailers, by doing so they are able to keep the margins to a minimum.

Evaluating the market on all parameters we can conclude that the market is a very volatile place, where no brand can take anything for granted. In order to stay ahead of the race, they need to constantly innovate themselves and ensure that they utilise their resources to the best of their abilities.

## REFERENCES

1. Amrit Mohan. "CONSUMER BEHAVIOUR TOWARDS SMARTPHONE INDUSTRY IN INDIAN MARKET". Dublin Business School.
2. B.V. Sangvikar, Hemant J. Katole. "A study of consumer purchase behaviour in organized retail outlets". Journal of Business and Retail Management Research (JBRMR) Vol 7 Issue 1 October 2012
3. Chetan Sharma. "What (Really) drives mobile device market performance?". Mobile future forward research paper series, 2013.
4. Dr. A. C. Pandey, Mithilesh Kumar Pandey. "IMPACT OF LIFESTYLE ON BRAND PREFERENCE OF BUYER BEHAVIOUR A CASE STUDY OF UTTARAKHAND". International Monthly Refereed Journal of Research in Management & Technology, Volume II, August '13 ISSN – 2320-0073
5. Dr. F. Zafar, A. zahra, A. khan. "A STUDY INTO THE USAGE PATTERN OF SMARTPHONE OWNERS AMONG STUDENTS AND SERVICE CLASS". International Journal of Engineering and Management Sciences, Volume 4, Issue 2, July-2013, ISSN 2229-600X
6. Dr. F. Zafar, A. zahra, A. khan. "STRATEGIES ADOPTED BY MOBILEPHONE MANUFACTURERS TO ATTRACT MORE CUSTOMERS IN SMART PHONE INDUSTRY". International Journal of Advancements in Research & Technology, Volume 3, Issue 1, January-2014, ISSN 2278-7763
7. Dr. Monica Sainy. "BUYING BEHAVIOR OF SMARTPHONE AMONG B SCHOOL STUDENTS". BAUDHIK, VOLUME 5, NO.-1, JANUARY-APRIL -2014, pg: 24-35.
8. Dr. Ritesh K. Patel. "A STUDY ON CONSUMER BEHAVIOR AND OPPORTUNITIES FOR NOKIA SMART-PHONES IN INDIA". International Interdisciplinary Research Journal, Volume 2, Issue 1, January-2014, ISSN 2347-6915
9. Dr. Sanjay Hooda, Sandeep Aggarwal. "CONSUMER BEHAVIOUR TOWARDS E-MARKETING: A STUDY OF JAIPUR CONSUMERS". Journal of Arts, Science & Commerce, E-ISSN 2229-4686, ISSN 2231-4172
10. Emelie Andersson, Frida Frost. "The use values of smartphone apps". Master thesis- Marketing and Consumption, University of Gothenburg.
11. Jagwinder Singh, B B Goyal. "Mobile Handset Buying Behaviour of Different Age and Gender Groups". International Journal of Business Management, Vol 4 No.5, May 2009.
12. K. Vikram, Dr.K.V. Ramanathan. "A STUDY ON SMARTPHONE INDUSTRY AND THEIR EFFECTS ON INDIAN MARKET AN OVER VIEW". Asia Pacific Journal of Research, Volume 1, Issue 25, March-2015, ISSN 2320-5504
13. M. Vijaya Baskar, N. Sundaram. "Indian Consumer Purchasing Behaviour towards Branded Processed Food". Asian Social Science; Vol. 10, No. 11, 2014, Published by Canadian Centre of Science and Education, ISSN 1911-2017 E-ISSN 1911-2025
14. Manoj Kumar. "Impact of the Evolution of Smart Phones in Education Technology and its Application in Technical and Professional Studies: Indian Perspective". International Journal of Managing Information Technology, Volume 3, Issue 3, August-2011
15. "Mobile handsets: providing mobility to every Indian". Industry inputs for National Telecom Policy 2011.
16. Nasibu R. Mramba. "Does the Brand Name Matter to Purchase Decision? The Case of Mobile Phone". European Journal of Business and Management, Vol.7, No.4, 2015, ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online)
17. Prashant Singh. "Smartphones are keeping users in India plugged in". Nielsen Featured Insights.
18. Prof. Krishna Mohan Sharma, Dr. Kunal Bhattacharya, Dr. Vandana Sonwaney. "The Study of Changing Buying Behaviour of Consumer in Growing Economy of India, Specific to FMCG Segment, and Its impact on Unorganized Retailers". The International Marketing Trend Conference on Venice, Jan 2012
19. Sheetal Singla. "Mobile Phone Usage Patterns among Indian consumer – An Exploratory Study". Asian Journal of Management Research, April-2010, ISSN 2229 – 3795
20. Sunanda Sharma, Dr. Kashmiri Lal. "CHANGING CONSUMER BEHAVIOUR A CHALLENGE FOR SUSTAINABLE BUSINESS GROWTH". International Journal of Marketing, Financial Services & Management Research. Vol.1 Issue 8, August 2012, ISSN 2277 3622
21. Young Ju Lee. "Emotional Preferred Type of Smart Phone Based on the Quality Factor". International Journal of Software Engineering and Its Applications Vol.7, No.5 (2013), pp.369-378

## WEBSITES

22. <http://apjor.com/downloads/1605201521.pdf>
23. [http://articles.economictimes.indiatimes.com/2014-01-20/news/46374660\\_1\\_gionee-micromax-and-karbons-smartphone-market](http://articles.economictimes.indiatimes.com/2014-01-20/news/46374660_1_gionee-micromax-and-karbons-smartphone-market)
24. <http://blogs.wsj.com/indiarealtime/2013/06/21/samsung-smartphones-take-lead-in-india/>
25. <http://csinsit.org/techbytes/index.php/2015/09/03/changing-times-for-the-indian-smartphone-market-moving-past-the-brand-image/>
26. [http://esource.dbs.ie/bitstream/handle/10788/1812/mba\\_mohan\\_a\\_2014.pdf?sequence=1](http://esource.dbs.ie/bitstream/handle/10788/1812/mba_mohan_a_2014.pdf?sequence=1)
27. <http://gadgets.ndtv.com/mobiles/news/samsung-success-story-more-about-marketing-than-innovation-350582>
28. <http://internationaljournals.co.in/pdf/giirj/2014/january/6.pdf>
29. <http://internationaljournals.co.in/pdf/giirj/2014/january/6.pdf>
30. <http://tech.firstpost.com/news-analysis/samsung-vs-indian-brands-why-micromax-karbons-are-steadily-gaining-214946.html>
31. <http://www.androcid.com/evolution-micromax-brand.html>
32. <http://www.bgr.in/manufacturers/samsung/why-is-samsung-in-a-mess-in-india-despite-being-the-number-one-smartphone-brand/>
33. <http://www.businessinsider.in/Indian-smartphone-market-grows-by-44-Samsung-leads-the-pack/articleshow/48450596.cms>
34. <http://www.businesskorea.co.kr/article/11569/winning-somewhere-samsung-outperforms-apple-india-popularity-galaxy-s6-z1>
35. [http://www.business-standard.com/article/companies/the-samsung-strategy-better-faster-cheaper-112090400001\\_1.html](http://www.business-standard.com/article/companies/the-samsung-strategy-better-faster-cheaper-112090400001_1.html)
36. <http://www.counterpointresearch.com/indiahandsetmarket2q2015>
37. <http://www.emarketer.com/Article/Smartphones-Closing-Retail-Ecommerce-Device-Gap/1012467>
38. <http://www.ericsson.com/res/docs/2015/consumerlab/ericsson-consumerlab-the-changing-mobile-broadband-landscape-india.pdf>
39. [http://www.exchange4media.com/advertising/innovation-and-masculinity-a-case-study-of-micromax-and-thums-up\\_39914.html](http://www.exchange4media.com/advertising/innovation-and-masculinity-a-case-study-of-micromax-and-thums-up_39914.html)
40. <http://www.ijird.com/index.php/ijird/article/view/41142/32756>
41. <http://www.intellectdigest.in/micromax-canvas-series-india-3724/>
42. <http://www.livemint.com/Home-Page/DUSMbDi7fo2IU2AcvYSTQ/Karbons-to-open-assembly-lines-factory-in-India.html>
43. <http://www.rediff.com/business/slide-show/slide-show-1-tech-how-micromax-used-china-to-build-its-business/20130204.htm#3>
44. <http://www.tele.net.in/company-stories/item/7942-samsung-mobiles-smartphone-strategy-for-the-indian-market>
45. <http://www.thehindu.com/business/Industry/micromax-launches-worlds-slimmest-lightest-4g-phone/article7329890.ece>

## ANNEXURE

**TURNITIN REPORT**  
Similarity %- 14%

turnitin

Class Portfolio Peer Review My Grades Discussion Calendar

NOW VIEWING: HOME > MBA 14-16 DIS

**Welcome to your new class homepage!** From the class homepage you can see all your assignments for your class, view additional assignment information, submit your work, and access feedback for your papers. ×

Hover on any item in the class homepage for more information.

**Class Homepage**

This is your class homepage. To submit to an assignment click on the "Submit" button to the right of the assignment name. If the Submit button is grayed out, no submissions can be made to the assignment. If resubmissions are allowed the submit button will read "Resubmit" after you make your first submission to the assignment. To view the paper you have submitted, click the "View" button. Once the assignment's post date has passed, you will also be able to view the feedback left on your paper by clicking the "View" button.

**Assignment Inbox: MBA 14-16 DIS**

	Info	Dates	Similarity	
Dissertation		Start 28-Aug-2015 5:38PM Due 10-Nov-2015 11:59PM Post 05-Sep-2015 12:00AM	14%	Resubmit View

Windows taskbar: 4:23 PM 11/8/2015

**RECURRING FAILURES IN CORPORATE GOVERNANCE: A GLOBAL SYNDROME?**

**KRISHNA A KAPADIA**  
**LECTURER**  
**NARMADA COLLEGE OF MANAGEMENT**  
**ZADESHWAR**

**ABSTRACT**

*The recurrence of corporate governance disasters in highly developed, as well as developing, economies reminds us that the price of economic growth and opportunity is indeed eternal vigilance. Understanding the differences in the institutional contexts helps us to realize that what works to curb governance failures in one context may be less effective in another, and that the timing and focus of reforms should reflect the realities of the economic and institutional conditions that different nations face. Ultimately, the most effective and sustainable governance reforms would be those that simultaneously increase the costs of corporate frauds and decrease the benefits that individuals and corporations can derive from ignoring governance norms and laws.*

**KEYWORDS**

corporate governance, economies, growth.

**INTRODUCTION**

Corporate governance is a multi-faceted subject. An important theme of corporate governance is to ensure the accountability of certain individuals in an organization through mechanisms that try to reduce or eliminate the principal-agent problem. A related but separate thread of discussions focuses on the impact of a corporate governance system in economic efficiency, with a strong emphasis shareholders' welfare. There are yet other aspects to the corporate governance subject, such as the stakeholder view and the corporate governance models around the world.

Corporate governance is the set of processes, customs, policies, laws, and institutions affecting the way a corporation is directed, administered or controlled. Corporate governance also includes the relationships among the many stakeholders involved and the goals for which the corporation is governed. The principal stakeholders are the shareholders, management, and the board of directors. Other stakeholders include labor (employees), customers, creditors (e.g., banks, bond holders), suppliers, regulators, and the community at large.

This article reveals various reasons for failure of Corporate Governance in developed economies as well as developing economies.

Article also describes various mechanisms of Corporate Governance like (1) Company's Act (2) Security law (3) Discipline of capital market (4) Nominees on company board (5) Statutory audit (6) Codes of conduct etc. Some factors that influence the Corporate Governance like Ownership structure, Structure of company board, financial structure, Institutional Environment etc. Various systematic problem in Corporate Governance and Recent Corporate Governance failures.

**INDIA'S IT GIANT? SATYAM COMPUTER'S BILLION DOLLAR CORPORATE FRAUD**

On January 7, 2009, B. Ramalinga Raju—founder and chairman of Satyam Computer Services, one of India's largest and most respected software and IT services companies—admitted that he had committed India's biggest corporate fraud, having manipulated the company's income statements, cash flows, and balance sheet for more than 7 years. The \$1.47 billion fraud on the Satyam financial statements and balance sheet included overstated revenues and profits, acts that were perpetrated by the founder and his brother, the company's CEO, to attract more business and avoid any possible hostile takeover. "It was like riding a tiger, not knowing how to get off without being eaten," Mr. Raju wrote in his confession statement (India's Enron, 2009). Prior to this turn of events—which resulted in the arrests of the chairman, the CEO, and the CFO of the company, and pending criminal indictments as well—Satyam had been widely recognized for exemplary corporate governance, and Raju hailed as a role model for successful business and entrepreneurship. The founder and his co-conspirators reported fictitious cash deposits, misstated accounts receivables and accounts payables, understated liabilities, and overstated assets; these falsities only came to the fore when Raju tried to buy two other firms owned by his family. Shareholders revolted against the acquisition proposal because they viewed the planned purchases as attempts to prop up other failing family businesses by tapping cash out of the profitable software firm.

Even before the Satyam scandal erupted, Indian shareholders had already lost more than \$2 billion from corporate frauds and bad governance since 2003 (Corporate India's Governance Crisis, 2009). In a January 7, 2009 report issued by an analyst at one of India's leading investment houses, only 4 out of 68 Indian companies were found to adhere to "highly desirable" disclosure standards; more than half the companies on the list that did not make the grade were well known firms with significant global presence (Bal and Vadyak, 2014).

**CHINA'S TOXIC MILK SCANDAL: IGNORANCE OR CRIMINAL INTENT?**

In September 2008, the Sanlu Group—maker of one of the oldest and most prevalent brands of infant formula in China—was charged with a monstrous act: the company was alleged to have added the toxic chemical, melamine, to its baby milk powder in effort to boost the mixture's protein content. By the time of the discovery, Sanlu's adulterated baby milk powder had affected nearly 294,000 Chinese infants, and killed 6. Sanlu, which is 43% owned by New Zealand's Fonterra, received a bankruptcy order from a Shijiazhuang Court in December 2008, and four of its top executives were given long prison sentences in January 2009. Under the Chinese Civil Servants Law, which took effect in 2005, and the State Council Regulations on the Punishment of Civil Servants of Administrative Organs, enacted in 2007, heads of administrative bodies who fail to fulfil their duties and cause serious problems that could have been avoided face removal from their jobs and other, more severe, punishment. Indeed, several senior government officials in China have been brought down by the scandal, including the head of the General Administration of Quality Supervision, Inspection, and Quarantine (AQSIQ).

Milk powder from 22 other Chinese companies tested positive for melamine, too, with Sanlu's product at the top of the ranking. Apparently, adding melamine to increase the protein content of dairy products had been an industry-wide practice. Some of the affected companies recalls their dairy products, and other countries began testing Chinese dairy products or removing them from stores. The scandal decimated Chinese dairy exports, and re-exposed long-standing concerns about food security, corruption, malpractices and lack of political willingness and balances (Das and Roy, 2013).

**U.S. FINANCIAL GIANTS QUESTIONABLE CONDUCT: EXECUTIVE PAY-OUTS**

Since mid-2008, the U.S. banking industry has experienced the deepest recession since the Great Depression of the 1930s. While investors have borne the bulk of the losses and taxpayers have shelled out trillions of dollars to keep financial giants afloat, executives and employees of these banks appropriated disproportionate shares of the profits when the market was booming (Bank Incentives, 2009). In the 3 years prior to its collapse, Bear Stearns paid \$11.3 billion in employee compensation and benefits, while its shareholders only received around \$1.4 billion of J.P. Morgan Chase stock—currently worth only half of that amount—after its fall. Lehman Brothers distributed \$21.6 billion in the 3 years before 2007, while its shareholders got nothing because the company went bankrupt. Merrill Lynch paid staff over \$45 billion during the 3 years prior to 2007, but its shareholders got shares in Bank of America that are now worth just \$9.6 billion, less than one-fifth of the original offer value. Citigroup paid \$34.4 billion to its employees in 2007, but is now valued at just \$18.1 billion. The most outrageous case is probably AIG, the insurance and financial services giant: it lost \$61.7 billion in the fourth quarter of 2008 and received more than \$170 billion in federal bailouts.



However, AIG paid over \$165 million in bonuses to executives by March 21, 2009 as part of a total pay-out of \$450 million. These highly visible and notorious examples have reinforced the public perception that banking is simply a “gravy train” for employees (Attacking, 2009).

While the specific form of corporate governance failure, the magnitude of the fraud, and the final effects on employees, customers, or shareholders may be different across these three national contexts, what is common is the frequency of occurrence of large-scale breakdowns in corporate governance in both developed and developing economies. Understanding why these failures recur, and the intended and actual effects of proposed governance solutions in each of these contexts, is a worthwhile exercise—even if it only serves to illuminate the complexity and magnitude of challenges confronting regulators and governments keen to restore confidence in their country’s corporate sector and financial markets.

## WHY DO GOVERNANCE FAILURE OCCUR?

### GOVERNANCE FAILURE IN THE DEVELOPED ECONOMY (UNITED STATES)

Roe (2012) traces the recurring breakdowns in American corporate governance to two core and enduring instabilities in the American governance context:

1. The separation of ownership and control, with ownership resting with distant and diffuse shareholders while control is exercised by hired managers.
2. A decentralized and porous regulatory system, in which multiple regulators with partial authority contribute to a flexible, specialized, and comprehensive regulatory framework while there is no single, unified regulatory agency that oversees the disparate regulatory efforts and resolves potential conflicts and inconsistencies across regulatory agencies. These two core attributes of the United States governance framework have obvious strengths, but they are also tormented by weaknesses that come to the fore each time U.S. corporations and stakeholders experience a governance crisis.

For instance, the separation of ownership and control are acknowledged as facilitating significant economies of scale in the operation of large firms, the hiring and retention of highly qualified managerial talent, the ease of entry into and exit from markets, and the availability of capital to meet the financing needs of entrepreneurs and start-up firms, and so on. However, on the down side, this separation exacerbates the problems posed by incentive misalignment, self-serving behaviours pursued by managers, entrenchment of powerful managers who may lack the skills and knowledge to manage in changing environments, and so forth. Indeed, Roe argues that the separation of ownership and control explains the recurrent breakdowns the United States corporate sector and financial markets have witnessed over several decades, including the problems associated with hostile takeovers and failure of competitive forces in the 1970s and 1980s, insider trading in the 1980s, excessive executive pay in the 1990s, and the collapse of Enron and other corporate giants in the 21st century.

The porous and decentralized regulatory structure, on the other hand, poses challenges that serve to restrain the power of regulators and the effectiveness of governance reforms intended to check egregious corporate conduct. Managers of large firms and their auditors and accountants can influence both the formulation as well as the implementation of regulations and laws through lobbying the SEC, pre-emptively litigating, influencing Congress through elected representatives, and so on. In sum, these fundamental characteristics of the governance system result in instabilities that can never be solved once and for all; instead, each crisis leads to a specific set of solutions that are intended to fix the immediate problems, even though the next breakdown is inevitable given the inherent instabilities of the underlying system. While Roe’s conclusions are quite alarming, and some may disagree that governance breakdowns are inevitable, it cannot be disputed that for all practical purposes it is impossible to design a fail-proof governance system that conserves the benefits of separation of ownership and control and decentralized regulation while preventing the abuses of power and privilege that inevitably accompany these institutions. Interestingly, the governance failures in developing world contexts, including the examples discussed earlier from India and China, cannot be attributed to either separation of ownership and control or decentralized regulation, because neither of these factors exists in these countries to a degree that they can be blamed for recent acts of corporate fraud.

### GOVERNANCE FAILURES IN DEVELOPING ECONOMIES (INDIA AND CHINA)

In contrast to the problems that inspire the governance context in the United States, the governance failures witnessed in developing nations like India and China stem not from the separation of ownership and control, but from the concentration of ownership and control within state-owned, public-sector units, or family owned businesses, and from the pyramidal ownership structures that dominant shareholders use to achieve greater control of the firm (Rajagopalan and Zhang, 2008).

For instance, in India a majority of the largest companies are family owned, and their founders—for example, as in the Satyam case discussed earlier—often exercise control to such an extent that they can misstate financial reports and create shadow companies through complex cross-holdings that deal with one another in financially dubious and even potentially illegal ways. In China, the government controls about 70% of the stakes of publicly listed companies in the Shenzhen and Shanghai Stock Exchanges, and most business people believe that corruption, especially bribery of government officials, is a necessary condition and a norm for conducting business (Rajagopalan and Zhang, 2008).

In both countries, the fundamental problem of concentration of ownership and control in the same hands is further exacerbated by:

1. The lack of incentives for firms and their managers to implement governance transformations.
2. Underdeveloped external monitoring systems and weak controlling agencies.
3. A shortage of qualified competent independent directors.

While India’s formal financial reporting standards essentially meet international standards for accountability and transparency, and its principal regulator—the Securities and Exchange Board of India—is set up to be independent of the government (Bank Incentives, 2013), enforcement of governance laws is often weak and characterized by significant loopholes. Political connections also often undermine the independence and would of enforcement agencies. In other words, while the United States governance context needs to deal with the challenges posed by a decentralized and porous regulatory system, developing countries lack a regulatory structure with the political willingness and judicial support to enforce reforms that are enacted.

## GOVERNANCE REFORMS: WHY DON’T THEY FUNCTION?

### RECENT REFORMS IN THE DEVELOPED ECONOMY (UNITED STATES): MIXED EVIDENCE ON THEIR EFFECTIVENESS

In the wake of Enron and other major scandals in the financial sector that contributed to the recent financial collapse and ensuing global economic crisis, the United States government and regulatory agencies have focused on enacting new laws, such as the Sarbanes-Oxley Act of 2002, and developing a broader range of stricter monitoring and enforcement mechanisms. These mechanisms are intended to not only generally align managerial interests with those of shareholders, but also to ensure greater and more complete transparency in financial accounting, to increase the accountability of executives and directors for reckless and irresponsible risk-taking that results in significant losses to shareholders, to deter potential frauds, and to allow more effective apprehension and prosecution of the perpetrators of these frauds.

A quick review of the most common safeguards in place, however, reveals significant disconnects between the intended benefits and realized effects, and many of these gaps can be attributed to the two fundamental instabilities of the United States governance system discussed earlier in this article (Roe, 2012). On the one hand, managers who control a corporation are inevitably in a better position to manipulate governance mechanisms to promote their own economic well-being, often exploiting legal loopholes, and the dispersed shareholder base can do little to prevent such abuse. On the other hand, decentralized and “siloed” regulatory agencies are unable to coordinate monitoring and enforcement efforts at a level needed to prevent the commission of frauds that cut across regulatory boundaries. The information gaps and significant lapses in regulatory vigilance that preceded the Enron fiasco were repeated with even more dire consequences in the more recent sub-prime mortgage crisis and ensuing financial meltdowns that decimated once-venerated and iconic Wall Street firms. One widely used government practice that has failed to achieve the desired objective is equity based executive compensation. Agency theory suggests that “the most direct solution to [the] agency problem is to align the incentives of executives with the interests of shareholders by granting (or selling) stock and stock options to the CEO” (Hall and Liebman, 1998). At their peak in 2001, stock options accounted for over 50% of the pay of CEOs of major United States firms. However, stock options give executives a strong incentive to take excessive risk because the downside risk is zero, because the lowest value of stock options is zero, while the upside gain is unlimited. Research has shown that options-loaded CEOs deliver more big losses than big gains (Sanders and Hambrick, 2007). Moreover, the use of options in executive compensation also gives executives an incentive to manipulate the options grant dates, leading to the corporate fraud of stock option backdating. In a recent stock option backdating case, a firm picked a past date when its stock price was particularly low to be the stock option grant date, and thereby increased



the value of the stock options. Heron and Lie (2009) estimated that 13.6% of all option grants to top executives during the period 1996–2005 were backdated or otherwise manipulated. Indeed, some have argued that equity-based compensation is partly responsible for the recent meltdown of the financial sector. The base packages, including pay and bonuses, for executives in the financial sector were sufficiently large to make them feel financially secure. That gave bankers a license to gamble their equity-based pay in hopes of earning the huge pay-outs that would take them into the ranks of the u'ber-wealthy (Bank Incentives, 2009).

## GOVERNANCE REFORMS IN DEVELOPING ECONOMIES (INDIA AND CHINA): FAILURES IN IMPLEMENTATION

As noted in the previous section, the contexts in India and China pose different challenges compared with the United States and other advanced economies when it comes to governance failures. This is primarily because the broader institutional, economic, and legal-regulatory environments in these nations are in the initial stages of evolution as compared with economies in which the governance context has evolved over many decades of experience with capitalism.

In both India and China, regulatory bodies have advocated comprehensive and rigorous reforms intended to bolster the credibility and integrity of listed companies, to facilitate access to capital for new businesses and expansion of existing businesses, to achieve more transparency and accountability of corporate managers, and to enforce adherence to international standards of accounting and financial reporting. For instance, China's Company Law, enacted in December 1993, was an important starting point in the evolution of governance reforms; it was followed by the China Securities Law in December 1998 and, more recently, the Code of Corporate Governance for Listed Companies in China, enacted in January 2002. The latter, in particular, was designed to further strengthen the requirements related to accounting procedures and information disclosure, selection of independent directors, and shareholder rights and protection.

According to Rajagopalan and Zhang (2008), in India, the most significant milestone in the evolution of corporate governance was the establishment of the Securities and Exchange Board of India (SEBI) in 1992, an event followed by a series of over-arching and comprehensive governance reforms implemented by the Indian government based on the recommendations of four independent governance committees: the Bajaj Committee in 1996, the Birla Committee in 2000, the Chandra Committee in 2002, and the Murthy Committee in 2003. For more details on the recommendations from these committees and the ensuing governance reforms. Notwithstanding the scope and urgency of the reforms enacted in both countries, however, there is widespread agreement that both countries are very weak when it comes to enforcing these reforms. Indeed, in a 2004 report on the implementation of corporate governance codes in India, the World Bank noted serious gaps and lapses, particularly in relation to the role of nominee directors from financial institutions, stock-listing laws and regulations, insider trading, and dividend and share-transfer transactions (World Bank, 2004).

While appropriate in many ways, the response of the Indian government following the Satyam crisis was still criticized as being too slow. For instance, while the disclosure of fraud was made on a Wednesday morning, the first resulting crucial decision—which was to dismiss the entire board of directors—was only made on Friday night. In a scathing critique of the Government's response timing, published in India's leading business journal, Dubey (2013) sarcastically notes:

So what if crucial time was lost in the intervening 70-odd hours when the company, its finances, its accounts, and IT infrastructure remained in the hands of people who were part of the management that committed the fraud. So what if the Centre and the State debated for three days about who would initiate legal action against the Raju's. So what if incriminating evidence may have been destroyed as Satyam investigators have discovered . . . they are unable to locate the company's bank statements.

Dubey (2013) goes on to note: India must also build a consensus on separating economic fraud investigators and offices such as the SIFO from political clutches such as the Ministry of Corporate Affairs. Business and politics are so well intertwined in the country that political control can potentially influence investigators. All of this could be avoided if business fraud or bankruptcy investigators were given the statutory authority and the independence to swing into action without waiting for a political nod.

As a direct result of the Sanlu milk powder scandal, China passed its first food safety law—effective June 1, 2009—in an effort to restore consumer confidence. Under the new law, consumers can get financial compensation of up to 10 times the price of the product, in addition to compensation for any harm caused by tainted food. The law also bans food safety supervision agencies from advertising food products and states that individuals, including celebrities, who advertise for a substandard product may also be held liable for damages. While this new law represents an important step in the monitoring and strengthening of food safety standards, some are sceptical about its chance of success. The new law did not create a single, powerful body—akin to the U.S. Food and Drug Administration (FDA)—to handle food safety. China's Departments of Health, Agriculture, Quality Supervision, Industry, and Commerce Administration would all share the responsibilities of monitoring the country's food supply. In addition, China has 450,000 registered food production and processing enterprises, with the vast majority employing just 10 people or less. A United Nations report last year noted that the challenge of overseeing these small businesses is one of China's biggest hurdles in ensuring food safety.

## DAUNTING GOVERNANCE FRAUDS: A COST BENEFIT APPROACH

Because financial frauds, product tampering, and many other violations of governance laws can be viewed as corporate crimes, we draw on the broader, well-established economics of crime literature (Eide, et al, 2006) to argue that the likelihood of such violations is contingent upon two factors:

1. The costs associated with committing a fraud, and
2. The benefits derived from committing that fraud. The higher the costs imposed on the perpetrator and the lower the benefits associated with the fraud, the lower the likelihood that the fraud would be committed.

### DAUNTING FRAUD BY INCREASING THE COSTS

The costs associated with committing a governance fraud generally depend upon three factors. The first is the probability that the deviant behaviour would be discovered, which substantially depends upon the monitoring mechanisms in place. The greater the probability that the fraud would be discovered, the less likely it is that a company or its management would commit a fraud.

The second factor is the size or extent of the punishment (e.g., financial fines, loss of liberty) if a fraud is detected and, relatedly, who would be affected, monetarily or otherwise, by the punishment. Severe punishment—for example, being banned from an industry/functional area if certain violations are uncovered—would discourage a company and the management. In many cases, however, because the company pays for the punishment, the threat of punishment may have limited effect in disciplining management behavior. For instance, in May 2002, Merrill Lynch paid a \$100 million fine to settle with the State of New York after its analysts were caught denigrating the companies they touted to investors during the technology bubble era. Indeed, the major purpose of the SEC's recent requirement for CEOs and CFOs to personally certify their companies' financial statements is to narrow the legal loophole between a company's financial statements and its senior executives' individual responsibilities, thereby enhancing the quality of a company's financial disclosures (Zhang and Wiersema, 2010). Once they have certified their companies' financial statements, subsequent revisions of the statements could potentially expose executives to criminal charges.

The third factor is the likelihood that the punishment would be enforced, which depends upon the effectiveness and speed of the legal system in place. Especially in emerging markets such as China and India, the major problem regarding corporate governance is not the absence of laws but the lack of timely and consistent enforcement of the laws that already exist (Rajagopalan & Zhang, 2008).

Because of the relative maturity and sophistication of governance laws, and the legal and regulatory frameworks in developed economies like the United States, the costs associated with corporate frauds are quite significant; white-collar criminals can access the best legal representation, though, which can sometimes reduce the probability and size of the punishment. In comparison, as noted earlier, monitoring and enforcement of governance laws is particularly lax in both India and China, albeit for somewhat different reasons, and the breakdowns in implementation serve to reduce the costs associated with committing these crimes, especially because the most powerful business people and corporate families are also very well connected with leading politicians, who can in turn often influence regulatory agencies. Therefore, the potential cost of committing a fraud is relatively lower in developing countries than in developed countries.

### DAUNTING FRAUDS BY REDUCING THE BENEFITS

The benefits associated with a fraud depend upon the utility function of the individual or group committing the fraud. Of course, this utility function can also be generated at more aggregate levels for a top management team or an entire corporation, depending upon growth and profitability targets, schemes for division of profits, and so on. The utility derived from fraudulent acts reflects both financial and nonfinancial benefits (e.g., political power, prestige, social standing). In

both developed and developing economies, the benefits associated with corporate frauds can be substantial although, again, the magnitude and nature of these benefits can vary across these environments. In developed nations, the winner-take-all syndrome, the increasing disparity between pay and performance, and the excessive risk-taking witnessed in the recent collapse of large financial institutions have resulted at least partly from the disproportionate benefits bestowed on a few at the uppermost echelons of the corporate sector. Whether CEOs and senior managers are paid for their performance or not is a topic of continued debate in both academic and business circles. However, the prevalence of huge financial pay-outs for top executives and the low personal risk associated with performance failures have clearly increased the pecuniary benefits associated with deviant corporate behaviours.

In developing nations, the benefits appear to stem from the spurt of economic opportunities created by the opening of once-closed economies and the encouragement of private enterprise in industries once dominated by the public sector. While the overall opportunities for wealth creation have increased, the distribution of such wealth continues to be lopsided. Business press articles in recent years have documented the increasing number of millionaires and billionaires in both China and India, the rapid growth and profitability experienced by the largest business houses and families, and the rapidly increasing salaries and benefits at the top executive levels. The winner-take-all syndrome that may have driven individual and corporate excesses in developed nations is now permeating emerging economies as well, where the asymmetry in the distribution of rewards is further exacerbated by lax governance regimes and poor enforcement mechanisms.

In summary, the recurrence of corporate frauds depends upon both the potential costs and benefits of committing the frauds. Developed nations have been able to deal with the cost side of governance failures relatively effectively, although recent corporate excesses have renewed concerns about these aspects. Developed nations, though, are faced equally with the twin challenges of increasing the costs and decreasing the benefits associated with corporate frauds and excesses. These differences have implications for the direction in which reforms need to be directed, especially because as we argue later, attempts in developing nations to curb the benefits may have the costly effect of curbing individual and corporate ambition and entrepreneurship, with serious debilitating effects on overall growth and prosperity.

### GOVERNANCE ASSESSMENT IN DEVELOPED ECONOMY (UNITED STATES): COSTS Vs. BENEFITS

While there is certainly room for bolstering the monitoring and enforcement sides of the governance situation in the United States, especially in relation to coordinating and sharing information across different regulators, we believe that influencing the payoffs associated with corporate and individual misconduct should be more of a priority than tweaking the regulatory code further. It is indeed gratifying to note that the new Obama administration is beginning to focus on this issue, especially in the context of executive compensation, given that compensation and equity ownership are after all the most significant benefits. Reforms being considered include, among other things, the following:

- (1) Banks receiving federal rescue money must agree to executive pay restrictions and to a ban on big pay checks for departing executives, known as golden parachutes.
- (2) Advisory voting on executive compensation
- (3) Restrictions on deferred compensation
- (4) A clearer definition of performance-based pay
- (5) Limits on severance payments for senior executives
- (6) Broader "claw back" provisions to recoup bonuses
- (7) Higher levels of engagement of the SEC in different aspects of corporate governance, especially in the compensation of senior executives
- (8) Greater transparency in company disclosures, and enhanced personal accountability of senior executives (Attacking, 2009; Solomon and Paletta, 2009).

At the same time, changes to executive compensation systems have to be made very cautiously because past attempts—such as the 1984 decision in the United States to cap severance payments at three times base pay by imposing a special tax on payments above that level and the \$1 million cap imposed on the tax deductibility of executive salaries—have often had unintended negative consequences leading to even higher financial benefits for top executives (Attacking, 2009). Instead, strengthening the ability of shareholders to monitor pay deals ex-ante and making "say on pay" votes by shareholder's mandatory at public firms may curb compensation abuses more effectively than one size-fits-all reforms that unintentionally incentivize the exploitation of loopholes or, even more troubling, thwart innovation and entrepreneurship.

### REDUCTION IN CORPORATE FRAUDS IN BOOMING DEVELOPING ECONOMIES (INDIA AND CHINA): COST Vs. BENEFITS

In developing nations like China and India the governance regime is characterized by relatively low costs of committing corporate frauds, due to lax monitoring and weak enforcement, as well as high benefits, due to rapid growth opportunities and windfall economic gains for the winners. For practical and policy reasons, however, it is difficult for these economies to simultaneously and aggressively tackle both challenges. Attempting to tackle the benefits side too aggressively by controlling/ regulating salary levels, hiring and promotion decisions, investment decisions, and so forth—can have the unintended and potentially disastrous effect of curbing much-needed entrepreneurship, talent retention, and ambitious growth and profitability targets. Given the nascent stage of economic development in countries like India and China, we believe that it may be more prudent to concentrate on the cost side, and focus on stricter implementation and enforcement of monitoring and punishment mechanisms, at least in the short- to mid-term.

For instance, the Reports on the Observance of Standards and Codes (ROSC) noted that many of the sanctions and enforcement rules currently in place in India were inadequate, and that monetary sanctions were particularly in need of adjustment (World Bank, 2008). While the sanctions imposed by the stock exchange included warnings, suspension of trading, and delisting, it did not include monetary fines that were high enough to deter noncompliance. The ROSC also recommended better coordination of the roles and responsibilities of the three regulatory agencies charged with enforcing governance norms over listed companies in order to minimize regulatory lapses and oversights.

Any benefits-side reforms that are considered should be carefully assessed for their potential adverse effects on the managerial talent market, and on the corporate growth and wealth-creation strategies. Given that even developed nations have only recently begun to worry about the benefits side of the equation, a "wait and learn" attitude may be advisable for developing nations. We hasten to add that we are not arguing in favour of completely eschewing benefits-side reforms in developing nation contexts. Indeed, governance reforms should aim to increase the costs and reduce the benefits associated with corporate frauds for maximum deterrence. For example, China's new food safety law has increased consumers' financial compensation for tainted food, from the price of the product up to 10 times the price of the product. While this change certainly increases the costs for a firm to commit the sort of fraud that Sanlu did, it may not be a sufficient deterrent if the economic gains to be reaped from fraudulent acts are potentially huge in relation to the costs. Indeed, to minimize the likelihood of corporate frauds and related crimes, it is imperative not only to increase the costs associated with the crime (ex-post punishment), but also to reduce the benefits derived by the person or group considering such acts (ex-ante utility).

### CONCLUDING REMARKS

The recurrence of corporate governance disasters in highly developed, as well as developing, economies reminds us that the price of economic growth and opportunity is indeed eternal vigilance. Understanding the differences in the institutional contexts helps us to realize that what works to curb governance failures in one context may be less effective in another, and that the timing and focus of reforms should reflect the realities of the economic and institutional conditions that different nations face. Ultimately, the most effective and sustainable governance reforms would be those that simultaneously increase the costs of corporate frauds and decrease the benefits that individuals and corporations can derive from ignoring governance norms and laws.

### REFERENCES

1. Attacking the corporate gravy train. (2009) *The Economist*, pp. 71–73.
2. Bal, G.R. and Vadyak, A. (2014) Adherence of Corporate Governance Policies with a Special Reference to Clause 49 of the Listing Agreement: A Case Study of Indian Oil Corporation Ltd. *Golden Research Thoughts*, Vol. 04 (03), pp. 01-08.

3. Bank Incentives are All Wrong. (2013) *The Economist*, pp. 93-121.
4. Corporate India's Governance Crisis. (2009) *Business Week*, pp. 78—79.
5. Das, T. and Roy, D. (2013) Arsenic Its Extent of Pollution and Txicosis: An Animal Perspective. *Veterinary World*, Vol. 06 (01), pp. 53-58.
6. Dubey, R. (2013) Create a special force. *Business World*, pp. 64—65.
7. Eide, E. et al. (2006). *Economics of crime. Foundations and Trends in Microeconomics*. Boston: World Scientific Publishing Co.
8. Hall, B. J., and Liebman, J. B. (1998) Are CEOs really paid like bureaucrats? *Quarterly Journal of Economics*, Vol. 113 (3), pp. 653—691.
9. Heron, R. A., & Lie, E (2009) What fraction of stock option grants to top executives have been backdated or manipulated? *Management Science*, Vol. 55(4), pp. 513—525.
10. India's Enron (2009) *The Economist*, pp. 56-78.
11. Lie, E. (2005) On the timing of CEO stock option awards. *Management Science*, Vol. 51(5), pp. 802—812.
12. Rajagopalan, N. and Zhang, Y. (2008) Corporate governance reforms in China and India: Challenges and opportunities. *Business Horizons*, Vol. 51(1), pp. 55—64.
13. Rajawat, Y. K. (2009) Anatomy of a fraud. *Business World*, pp. 66—68.
14. Roe, M. J. (2012) The inevitable instability of American corporate governance. *Corporate Governance Law Review*, Vol. 1(1), pp. 01—19.
15. Sanders, G. and Hambrick, D. C. (2007) Swinging for the fences: The effects of CEO stock options on company risk taking and performance. *Academy of Management Journal*, Vol. 50(5), pp. 1055—1078.
16. Solomon, D., & Paletta, D. (2009) U.S. eyes bank pay overhaul. *The New York Times*, pp. 13-16.
17. Wikipedia. (2009) Timeline of the 2008 Chinese milk scandal. Retrieved from [http://en.wikipedia.org/wiki/Timeline\\_of\\_the\\_2008\\_Chinese\\_milk\\_scandal](http://en.wikipedia.org/wiki/Timeline_of_the_2008_Chinese_milk_scandal)
18. World Bank. (2004) Report on the observance of standards and codes (ROSC), Corporate Governance Country Assessment: India. Washington, DC: World Bank—IMF.
19. World Bank. (2008) Reports on the observance of standards and codes (ROSC) for corporate governance. Corporate Governance Country Assessment: India. Washington, DC: World Bank—IMF.
20. Zhang, Y. and Wiersema, M. (2010) Stock market reaction to CEO certification: The signaling role of CEO backgrounds. *Strategic Management Journal*, Vol. 30 (7), pp. 693—710.

# A REVIEW PAPER ON LEADERSHIP AND POLITICAL COMMITMENT TO GREEN ECONOMY: THE CASE OF ETHIOPIA

**YESUNEH GIZAW CHERNET**  
**RESEARCH SCHOLAR**  
**WOLAITA SODO UNIVERSITY**  
**ETHIOPIA**

## ABSTRACT

*This review paper aimed at identification of leadership and political commitment in attaining the green economy vision as well as to identify key actors and achievements following its implementation in Ethiopia. Accordingly, the leadership commitment of the Ethiopian government made it the pioneer country to design and implement transformational climate policy and devised latest relevant law in Forestry Development, Conservation, and Utilization Proclamation (542/2007). Key sectors involved in the strategy were Prime Minister Office, EPA, MoA, MoWE, among other national and international communities. Tremendous achievements were recorded following the implementation of the strategy via afforestation, reforestation and clean energy generation with great commitment and mobilization of the community. Finally, measures that need to be taken in to account for the success of the green economy strategy were recommended.*

## KEYWORDS

green economy, leadership commitment, political commitment, afforestation, reforestation, sectors, clean energy, ethiopia.

## ABBREVIATIONS

CDM	:	Clean Development Mechanism
CRGE	:	Climate Resilient Green Economy
CRS	:	Climate Resilience Strategy
EPA	:	Environmental Protection Authority
EU	:	European Union
GDP	:	Gross Domestic Products
GHG	:	Green House Gases
GTP	:	Growth and Transformation Plan
ILO	:	International Labor Organization
OECD	:	Organization for Economic Co-operation and Development
MoA	:	Ministry of Agriculture
MoFED	:	Ministry of Finance and Economic Development
MoWE	:	Ministry of Water and Energy
NTFPs	:	Non-Timber Forest Products
OPM	:	Office of Prime Minister
REDD	:	Reducing Emissions from Deforestation and forest Degradation
UNDP	:	United Nations Development Program
UNEP	:	United Nations Environment Protection

## INTRODUCTION

Ethiopia aims to achieve carbon-neutral middle-income status before 2025. As set forth in the first national Growth and Transformation Plan (GTP), this leap required increasing agricultural productivity, strengthening the industrial base, and fostering export growth. Economically, it means growing fast enough to increase the current gross domestic product (GDP) per capita of around USD 380 to USD 1,000 (the lower threshold of middle-income status), decreasing the share of GDP contributed by agriculture from more than 40% to less than 30%, and migrating from farming and herding to jobs in the services and industry sectors. Ethiopia has good prospects for growth. The International Monetary Fund forecasted that Ethiopia achieve real GDP growth of more than 8% annually over the next five years. Of the countries with more than 10 million inhabitants, only China and India are expected to grow at a faster pace (EPA, 2011).

Ethiopia launched its Climate Resilient Green Economy (CRGE) Strategy as a central element in its ambition to become a low carbon middle income economy by 2025. This will develop a green economy to enable the country to strengthen its adaptive capacity to the effects of climate change; its intent to become a “green economy front runner” is an expression of both its potential for and its belief in a sustainable mode of growth. Ethiopia, in fact, is fully aware of the impediments that conventional development paths cause by their unsustainable use of natural resources. It has over the few years registered unprecedented and continuous growth as a result of policies and strategies carefully tailored to respond efficiently to the existing socio-economic context. The Climate Resilient Green Economy strategy is yet another positive step to resist the adverse effects of such problems as climate change and build an economy that will provide sustainable development (Foreign Minister, 2015).

To tackle the challenges of global climate change and related problems, the government of Ethiopia has identified four major economic pillars to underpin the ‘Green Economy’ strategy. These are: improving crop and livestock production practices to allow for better food security and higher farmer incomes while reducing greenhouse gases emissions; protecting and re-establishing forests for their economic and ecosystem value, specifically including an increase in carbon stocks; expanding electricity generation from renewable sources of energy (clean energy) for domestic and regional markets; and leapfrogging to modern and energy-efficient technologies in the transport, industrial and construction sectors. Establishing these parameters for the relevant parts of the economic development plan is preventing the economy from being locked into any unsustainable paths, and will also help to attract the investment required for their development. Additionally, as part of this strategy, the government has selected four areas for fast-track implementation: exploiting Ethiopia’s vast hydropower potential; large-scale promotion of advanced rural cooking technologies to minimize the use of charcoal; large scale efficiency improvements to the livestock value chain; and reducing emissions from deforestation and forest degradation (REDD) (Foreign Minister, 2015).

## OBJECTIVES

1. To identify the commitments of leadership and politics in green economy of Ethiopia
2. To describe the achievements of green economy in Ethiopia
3. To identify core sectors involved in green economy
4. To recommend important issues for the success of Green economy

## THE CONCEPT OF GREEN ECONOMY IN ETHIOPIAN CONTEXT

There is no unique definition of “green economy”, but the term itself underscores the economic dimensions of sustainability. It responds to the “growing recognition that achieving sustainability rests almost entirely on getting the economy right”. It also emphasizes the crucial point that economic growth and environmental

stewardship can be complementary strategies, challenging the still common view that there are significant tradeoffs in pursuing these two objectives. In other words, synergies prevail over the tradeoffs. The concept of green economy should be seen as consistent with the broader and older concept of sustainable development. The specificities of the broader concept are its holistic character, as it encompasses the three pillars of development – economic, social and environmental – and its particular focus on inter-generational equity (UNDP, 2011).

Although climate change poses significant threats, the international response to climate change also offers considerable opportunities for Ethiopia. Within the broader global agenda on climate change, developing countries like Ethiopia stand to gain from both adaptation and carbon finance. Carbon finance – payments for activities which reduce global carbon emissions such as planting new forests and foregoing dirty technologies – has the potential to be a major revenue source for Ethiopia. Although it is an early estimate and needs to be refined and assessed for feasibility, and it will require changes in the way carbon finance is transacted, it has been calculated that under a carbon neutral growth trajectory, Ethiopia could offset in the region of 250 million tons of carbon a year. Even with the low current carbon price of US\$10-20 per tone, this could generate billions of dollars for the country. The opportunity is not just financial. Climate change offers a lens through which Ethiopia can revisit some of its most intractable development challenges. The key is to position Ethiopia at the forefront of the low carbon revolution promised by the climate agenda. Ethiopia has huge low carbon potential – it is rich in forests and has ample renewable resources of hydro, solar, wind and geothermal energy. To make the most of this potential, the country will need to (a) ensure that its long-term planning is compatible with a low carbon future and (b) make it as attractive as possible to carbon investors.

In the business-as-usual (BAU) scenario, Ethiopia will use hydropower and renewable sources of energy to create a near-zero GHG emission electric power supply by 2030. On the other hand, the planned scaling-up of domestic power production capacity, combined with successful implementation of energy efficiency measures, offers opportunities for power exports. These exports could reduce the emissions of neighboring countries and represent the single most important abatement lever compared with BAU for the Ethiopian power sector. Ethiopia has an average export potential of 25TWh per year during 2011 – 2030, which could result in an annual abatement potential of 17 Metric tons of carbon dioxide equivalent (Mt CO<sub>2</sub>e) on average and nearly 20 Mt CO<sub>2</sub>e in 2030 (UNDP, 2011).

## LEADERSHIP AND POLITICAL COMMITMENT

Ethiopia is one of the first countries in Africa to develop a green growth strategy. Ethiopia's leadership, and its early attempts through greening its economy to achieve more inclusive growth, are of real interest for a world in which alternative growth models for long-term sustainable development and social equity have rapidly become a priority in government, business and civil society. This is why the OECD and Ethiopia's Environmental Protection Authority (EPA) agreed to produce a brief case study of Ethiopian progress and prospects – principally to showcase Ethiopia's existing progress in going "green", i.e. what has been done in the country to produce the strategy, how to transform the strategy into an implementation plan, and the next steps for crystallizing individual components of the strategy, but also to offer a small space for reflection within Ethiopia on where the work might go next (OECD, 2013).

His Excellency Mr Meles had a vision for sustainable development and was a pioneer in Africa's green thinking where the need for such thinking is most urgent. This first came to light at the Lem (Green) Meeting in Addis Ababa in June 1992. The post-colonial development model in Ethiopia had failed dramatically and the country was in ruins. In his address at the meeting, one year after assuming responsibility for what is one of the most challenging countries on earth, Mr Meles encapsulated the thinking of the day by calling for "conservation-based, people-led, people-centred development" requiring a "multi-disciplinary and broad-spectrum approach for there is no piece-meal solution to the problem at hand." This speech was the first step on the road to a green economy in Ethiopia. Over the following 20 years, despite, or perhaps because of, the perennial ravages of drought, war and outside shocks, Mr Meles continued exploring sustainable development in Ethiopia and today there are countless green success stories throughout the country with vast green growth potential. Perhaps his greatest green legacy from his time in office will be the Climate Resilient Green Economy strategy, the first of its kind in the world, announced in Oct 2011 just before the UN climate talks in Durban. This was Ethiopia ahead of the curve (Open Democracy, 2012).

Prime Minister Meles Zenawi contributed to leading Africa's active engagement in the UN climate change negotiations in his role as Chair of the Meeting of the Committee of African Heads of State and Government on Climate Change. His efforts in mobilizing Africa's voice on climate change are a clear example of his legacy in advancing Pan-Africanism through intergovernmental processes and dialogue (UNEP, 2012).

The current decentralized forest governance of Ethiopia is part of its recent constitution. According to the constitution, Ethiopia established a federal government system in which the regional states are semi-autonomous and responsible to manage their natural resources, including forests. Specific to the forest management, the latest relevant law is the Forestry Development, Conservation and Utilization Proclamation (542/2007) and subsequent regional state laws. At both Federal and State levels, the policy recognizes the importance of community participation for ensuring the sustainable utilization of the country's forest resources (Banana *et al.*, 2013).

Calls to promote 'transformational climate policy' are gaining prominence within the international climate discourse (Kates *et al.*, 2012). Its proponents argue that the breadth and scale of responses needed to deal with the climate challenge can, in many cases, no longer be addressed simply through incremental adjustments (Bahadur & Tanner, 2012). Rather, transformational approaches – both with regards to mitigation and adaptation – are needed as a means of achieving large step-changes for traditional modes of development and growth. The call for transformation is even more pronounced when considered in the context of slow progress in international climate negotiations, and the relative failure to embed nationally-owned climate-relevant policies within wider growth and development plans' (Dimitrov, 2010; Van Den Berg & Feinstein, 2010; Preston *et al.*, 2011).

Given the scale of reform that transformational approaches imply, care needs to be taken to ensure that new policies are flexible and robust in dealing with a range of possible future outlooks. Moreover, longer-term commitments and investments needed to deliver many mitigation and adaptation objectives will inevitably have important economic and social impacts on a wide variety of stakeholders. With this in mind, alongside the technical challenges of designing transformational climate policies, a number of key considerations are largely missing from the discourse: what are the key political and economic opportunities and barriers in driving forward transformational climate policy? What roles do vested interests, incentives and power play in its development? And whose voices and needs are represented in the process? Despite the emphasis, few countries have undergone a process of designing transformational climate policies. Fewer still have gone about implementing them. The Ethiopian government experience in relation to CRGE strategy clearly make it the first country among the developing economies to prepare domestic transformational climate policies that are meaningfully embedded within the country's vision for the economic growth and development where the design and delivery of Ethiopia's CRGE offer a number of unique insights (Lindsey, J. and Elizabeth, C, 2013).

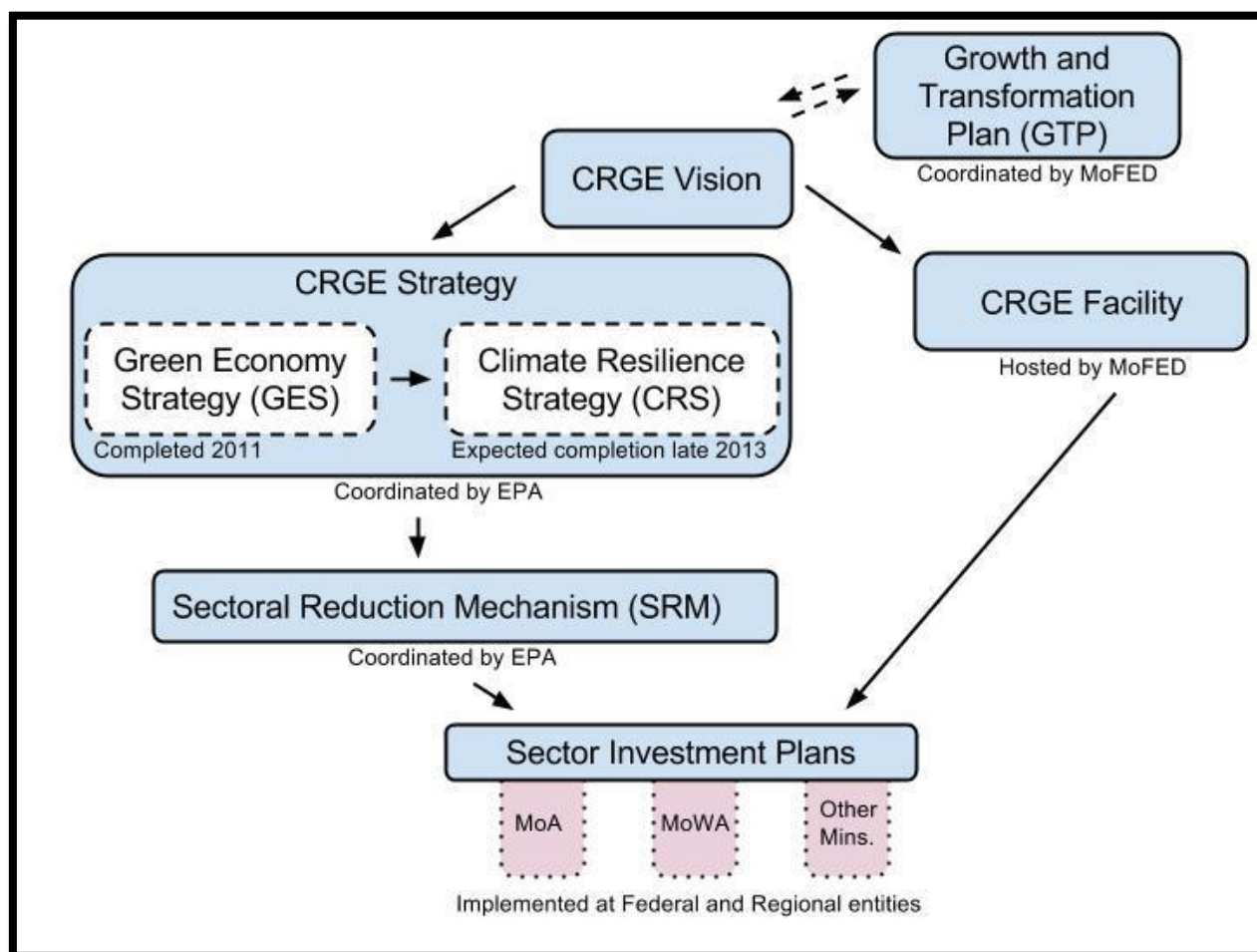
Ethiopia has made extensive efforts to implement its green economy plan through efficient use of finance and sets to build a Climate Resilient Green Economy (CRGE) by 2025. While building its resilience; it also takes steps to ensure that the economy is green and sustainable. The CRGE Vision aims to provide Ethiopia with a common goal and road map for achieving a climate resilient green economy. Through the leadership of the Prime Minister, Ethiopia is taking a leading role in both the regional and global response to climate change. Despite the burden of climate change, the country's adaptation to Climate Change and carbon emissions abatement initiatives and similar strategies has made a strong start; as a result, the nation has come out to be a leading global player in building climate resilient economy. And it had demonstrated a strong commitment towards climate change mitigation and emission reduction.

## SECTORS PARTICIPATE IN GREEN ECONOMY

In 2011, Ethiopia's late Prime Minister laid out a forward-looking and ambitious vision for the country: to transform Ethiopia into a carbon-neutral middle income country by 2025 (EPA, 2011a). Named the CRGE 'Vision', this was soon accompanied by a more detailed CRGE 'Strategy', which presented a framework for promoting Ethiopia as an early-adopter of low carbon growth and exploiting opportunities to transform the country's development model towards greater economic and environmental sustainability (EPA, 2011b). As part of this, the Strategy has three overarching objectives: fostering economic development and growth; ensuring abatement and avoidance of future emissions; and improving resilience to climate change.



FIGURE 1: CORE INSTITUTIONAL STRUCTURE AND MAKEUP OF THE CRGE PROCESS



Source: Lindsey, J. and Elizabeth, C, 2013

A wide range of actors and groups are involved in the development of the CRGE's Vision and Strategy (see Figure 1 and Table 1). From amongst them, the OPM, MoFED, and EPA constitute the three primary actors involved in the process. OPM assumes overall leadership of the CRGE, with EPA responsible for the coordination and design. Insights from key informant interviews point to tension between the EPA and Ministry of Agriculture (MoA) over designation of the lead role in developing the CRGE Strategy, particularly during the early stages of the process. Despite being an Authority, and thus not carrying the same weight as conventional line ministries, the EPA was able to secure ownership in developing the CRGE. MoA nevertheless remains influential in the design of the CRGE, particularly as agriculture has been fast-tracked as a sector priority and developed its own sectoral CRS. Given MoFED's role in developing Ethiopia's GTP and its high degree of leverage and influence within central government, the ministry plays a central role in the on-going development of the CRGE. This relates particularly to the Strategy's implementation and funding mechanisms as MoFED assumes responsibility for the management of the CRGE Funding Facility (MoFED, 2012).

TABLE 1: INSTITUTIONS INVOLVED IN THE DEVELOPMENT OF CRGE'S VISION AND STRATEGY

Sector	Role	Involvement in vision and strategy consultation process	Influence and leverage
OPM	Overall leadership of the process	Principal actor involved in the oversight of all activities	High degree of influence
EPA	Lead in the design and delivery of the vision and strategy, coordination and budgeting	Main actor	High degree of influence
MoFED	Responsible for the delivering of the GTP, financing	Core partner alongside EPA	High degree of influence and leverage
MoA	Implementation of the program	Inputs to inter-ministerial steering committee as well as representative in the technical and sub-technical committee	Moderate degree of influence and leverage. Influence growing as agriculture fast-tracked as a priority sector
Other line Ministries	Development, implementation and preparation of program units	Inputs to inter-ministerial steering committee as well as representative in the technical and sub-technical committee	Some degree of influence and leverage
Donors (DFID, CDKN, UNDP, JICA, NORAD, GIZ, WB)	Partial funding for inputs	Limited involvement in the design of the strategy but greater support in shaping and implementing it	Some degree of influence and leverage
Technical consultants and research institutions	Provision of technical inputs	Advisory services	Moderate Leverage
Regional Governments	Support implementation	Involvement in GTP through regional consultations. Partial consultation with technical subcommittee.	Some degree of influence and leverage
NGOs, Civil Society and Private sectors	Limited formal involvement	Limited	Limited degree of influence and leverage

Source: Adopted from Lindsey, J. and Elizabeth, C, 2013



## ACHIEVEMENTS IN GREEN ECONOMY

Various evidences show that the country's agriculture, forestry, energy, industry and transport sectors are ripe for low carbon development, thus a huge possibility is there to seize the opportunities presented by low carbon technologies and attracting investment in green industries. There is an enormous potential for action on climate change to deliver multiple co-benefits for the well-being of the population and the country's economy. Climate change has the potential to hold back the vibrant economic progress, or reverse the gains made in the holistic transformation and could exacerbate social and economic problems. At the same time, a changed climate may bring more rather than less rainfall, that bring benefits for more agricultural and livestock production and enable higher value crops to be grown, or more hydro-electric power to be generated. In addition, new financial support from industrialized countries for low carbon and climate resilient development, such as REDD + (Reducing Emissions from Deforestation and forest Degradation), are likely to become available. Ethiopia can, therefore, benefit from charting a low carbon development path in an increasingly carbon constrained world (Ethiopian Herald, 2015).

The Humbo Community-based Natural Regeneration Project was started in 2005 and is Ethiopia's first carbon trading initiative. Both sustainability and inclusiveness have been key features of the project, which has protected 2,728 hectares of degraded forest, and is now restoring and sustainably managing them. The Humbo forest had largely been destroyed by the late 1960s. Following two years of consultation, planning and negotiations, a farmer-managed natural resource regeneration approach was used to restore the degraded natural forests, with village-level cooperatives subsequently managing the restored forests. Apart from local social, economic and environmental benefits, this project has also attracted a new funding stream in the form of the Clean Development Mechanism (CDM) and the local communities are benefiting from the global market in carbon – albeit this is still a volatile one. The project got recognition and was the first project in Ethiopia (also in Africa) to receive temporary certified emission reductions. About 73,000 credits were issued, and the credits were purchased by the World Bank's BioCarbon Fund, which generates income for Humbo residents (World Bank, 2012).

Under Mr. Zenawi, Ethiopia played a key role in UNEP's Billion Tree Campaign, planting a total of 1.7 billion trees since early 2007. Some 12.6 billion trees have been planted worldwide in 193 countries, with Ethiopia's contribution the third-largest behind India and China (UNEP, 2012).

More than 480 species of wild trees and shrubs have been recorded as important traditional or forest-food sources in Ethiopia. Most coffee, spices and honey for local consumption and export come from forests. Coffee produced in the managed forests in Yayu Coffee Forest Biosphere Reserve area accounts for over 70% of cash income for the local community (Seyoum 2009). Nationally, coffee is the most important export commodity, earning over 30% of the foreign currency. In general, forests are the second largest sources of non-agricultural income for the rural household. For example, in Southwestern Ethiopia, where forest cover is high like the Bench Maji Zone, 52% of annual cash income is obtained from NTFPs (Non-Timber Forest Products) while in Sheka it is about 41%.

In Ethiopia, households living in and nearby forest areas earn a significant part of their income from forests. For instance, forests in Bale Mountains contribute about 34% and 53% of the per capita household income and per capital household income, respectively (Yemshaw, Y. 2007)

The Oromia Coffee Farmers' Cooperative Union (OCFCU) brings together smallholder coffee growers. Established in June 1999 by 34 cooperatives with 22,691 farmers, the cooperative today comprises 197 individual cooperatives with a total of over 200,000 members. Oromia's mission is to make small producers economically self-sufficient and to ensure household food security. A key objective is to improve and maintain the sustainability of the coffee industry by supporting biodiversity, enhancing soil health through the use of organic compost and to promote environmental protection. Oromia's coffee is organic, and forest-grown, and no herbicides, insecticides nor chemical fertilizers are used in its production. Harvesting is carried out by hand. Supervision and inspection are undertaken once a year by BCS Öko-Garantie, a private agency implementing EU Regulations on organic production (ILO, 2010).

The country has been constructing so many hydroelectric power projects for generation of clean energy. It has also devised wind mill and waste, and geothermal energy generating projects for the success of its green economy. To mention few:

- Amerti Nesha (2011, hydroelectric, 98 MWs)
- Ashegoda (2013, wind, 30 MWs)
- Adama I (2012, wind, 51 MWs)
- Gibee III, Adama II, and the Grand Renaissance Dam are under construction
- Geothermal energy from Abaya and Afar areas
- Koshe Project (To generate 50MW energy from waste in Addis Ababa)

## CONCLUSION AND RECOMMENDATION

Ethiopia is a pioneer country that has launched Climate Resilient Green Economy Strategy and devised domestic transformational climate policy with strong leadership and political commitment. Afforestation and reforestation campaigns through mobilization of people have been conducted to improve forest coverage. Core sectors that have critical role in the implementation of Climate Resilient Green Economy strategy at Federal and Regional level exerted much effort in generation of clean energy and assurance of sustainable environment development. Although key government institutions/sectors and local community with collaborative support of International community and NGOs have attempt to strengthen the policy and strategy, the realization still demands great sacrifice to assure the success of the already commenced green economy. Thus, based on the aforementioned facts, the following points are recommended:

- As forests and natural resources continue to decline, decentralized reforms aimed to improve natural resources management and forest development, conservation and proper utilization by transforming management power to the local and international communities should further be strengthened
- Community based forest management with proper awareness on utilization of Non-Timber Forest Products to improve the livelihoods of rural people should receive special attention
- Intersectoral collaboration for the full implementation and achievement of Climate Resilient Green Economy strategy and domestic transformational climate policy need to be emphasized
- More comprehensive scientific investigations have to be conducted on the leadership and political commitment together with community mobilization in achieving the green economy vision of the country

## REFERENCES

1. Bahadur, A. and Tanner, T. 2013. Transformation: Theory and practice in climate change and development. IDS Briefing Note. Institute of Development Studies (IDS): Brighton.
2. Banana, A.Y., Ongugo, P.O., Gomboya-Ssembajjwe, W.S., Tadesse, W.G., Senbeta, F., Namaalwa, J., Louga, E., Bahati, J., Mbwambo, L.A., and Gatzweiler, F.W. 2013: Forest Governance in East Africa: A comprehensive analysis of institutional livelihood and forest sustainable outcomes.
3. Dimitrov, R. S. 2010. Inside Copenhagen: the state of climate governance. *Global Environmental Politics*, 10(2), 18-24.
4. EPA, 2011. Climate Resilient Green Economy Strategy, Addis Ababa.
5. EPA. 2011a. CRGE Vision: Ethiopia's Vision for a climate resilient green economy. Federal Democratic Republic of Ethiopia, Environmental Protection Agency. Addis Ababa
6. EPA. 2011b. The path to sustainable development: Ethiopia's Climate-Resilient Green Economy Strategy. Federal Democratic Republic of Ethiopia, Environmental Protection Agency. Addis Ababa
7. Ethiopian Herald, 2015: Ethiopia; strong advocate for green economy. Addis Ababa
8. ILO. (2010). *Global Dialogue Forum on New Development and Challenges in the Hospitality and Tourism Sector and their impact on Employment, Human Resources Development and Industrial Relations*. Sectoral Activities Department, Geneva. Available at: [http://www.ilo.org/sector/activities/sectoral-meetings/WCMS\\_162201/lang-en/index.htm](http://www.ilo.org/sector/activities/sectoral-meetings/WCMS_162201/lang-en/index.htm)
9. Kates, R. W., Travis, W. R. and Wilbanks, T. J. 2012. Transformational adaptation when incremental adaptations to climate change are insufficient. *Proceedings of the National Academy of Sciences*, 109 (19): 7156-7161.

10. Lindsey, J. and Elizabeth, C. 2013: Exploring Political and Socio-economic drivers of transformational Climate Policy. Overseas Development Institute. London
11. Ministry of Foreign Affairs, 2015: Ethiopia and the Green Economy. Addis Ababa
12. MoFED (Ministry of Finance and Economic Development, Federal Democratic Republic of Ethiopia). 2012. Ethiopia's Climate Resilient Green Economy (CRGE) Facility Terms of Reference. Addis Ababa
13. OECD (2013), Putting Green Growth at the Heart of Development, OECD, Paris Open Democracy, 2012: Ethiopia ahead of the curve: the green legacy of Meles Zenawi. [Http://www.opendemocracy.n](http://www.opendemocracy.n)
14. Preston, B. L., Westaway, R. M., & Yuen, E. J. 2011. Climate adaptation planning in practice: an evaluation of adaptation plans from three developed nations. *Mitigation and Adaptation Strategies for Global Change*, 16(4), 407-438.
15. Seyoum B. 2009: Formal Institutions and Foreign direct investment. Thunderbird International Business Review, Vol. 51, No 2
16. UNDP Statements to CSD 19, May 2011, CSD 19 Multi-Stakeholder Dialogue – Remarks by UNDP, and CSD 19 High-Level Dialogue on the road to Rio+20 – Remarks by UNDP
17. UNEP (2012). *Green Economy Policy Briefs – key issues for the transformation towards the Green Economy*, UNEP.
18. Van den Berg, R. D., & Feinstein, O. 2010. *Evaluating climate change and development* (Vol. 8). Transaction Pub.
19. World Bank (2012). Ethiopia Climate Project Receives Africa's First Forestry Carbon Credits under the CDM, <http://www.worldbank.org/en/news/2012/10/090/ethiopia-climate-project-receives-africa-s-first-forestry-carbon-credits>.
20. Yemshaw, Y. 2007: Collaborative Forest Management in Africa. In Limbo? In: Participatory Forest Management, Biodiversity and Livelihoods in Africa, E. Kelbessa and C. De Stoop(Eds), Proceedings of the International Conference March 19-21, 2007, Addis Ababa, Ethiopia, pp. 190-290

**ENGINEERING EDUCATION IN INDIA: YESTERDAY AND TODAY**

**SONY KURIAN**  
**RESEARCH SCHOLAR**  
**DEPARTMENT OF ECONOMICS**  
**GOVERNMENT BRENNEN COLLEGE**  
**KANNUR UNIVERSITY**  
**THALASSERY**

**ABSTRACT**

*The importance of education, especially in higher education, has been continuously growing and the knowledge based industries are now occupying the centre stage in development. Though the modern higher education system in India is almost 135 years old, its growth has been much faster after India became independent. Over the past 50 years, there has been a significant growth in the number of new universities and institutions of higher learning in specialized areas. Modern society is technology based and the quality of life of the people is directly or indirectly related to the quality and level of technical education in vogue. In this fast changing world, technology is the pivot around which the human needs and services revolve. Technical education in India contributes a major share to the overall education system and plays a vital role in the social and economic development of our nation. This paper suggests that highest growth in basic occupation that has large base and in high skill category having a very small base. A large number of people require vocational skills and their number is also growing.*

**KEYWORDS**

engineering & technical education, professional education, growth and development of technical education.

**INTRODUCTION**

The number of institutes has grown phenomenally. In 1947, there were only 46 engineering colleges and 53 polytechnics with an annual intake of 6,240 students. By the end of the 1980s, higher education in India has become one of the largest systems in the world, with about 10 million students enrolled in 188 universities and about 14 thousand colleges and with 400 thousand teachers. More than Rs.10 thousand million is invested every year in higher education, which forms 0.9% of GNP. There were a total of 85 college grade engineering schools in 1880, 63 of them had been founded between 1862 and 1876. And the institution of Engineers in India AMIE was established in 1920 in Kolkata, West Bengal and is acclaimed to have pioneered non- formal education in Engineering. Due to initiatives taken during successive Plan periods, and particularly because of large-scale private sector participation, the number of All India Council of Technical Education (AICTE) approved technical and management institutions has risen to 4,791 in 2001-02 with an annual intake of 6.7 million students. The individual NITs, after the introduction of the NIT Act, have been functioning as autonomous technical universities and hence can draft their own curriculum and functioning policies. In India, there are several engineering colleges imparting undergraduate and graduate courses in engineering, applied engineering and sciences. The Government of India has introduced the National Institutes of Technology (NIT) Act 2010 to bring 30 such institutions within the ambit of the act and to provide them with complete autonomy in their functioning. The NITs are deliberately scattered throughout the country in line with the government norm of an NIT in every major state of India to promote regional development. Nearly one- third of the total education budget goes for higher education with about one-twentieth of the total student population in the country. The National Institutes of Technology (NIT) is premier colleges of engineering and technology education in India. They were originally called Regional Engineering Colleges (RECs). In 2002, the Ministry of Human Resource Development, Government of India, decided to upgrade, in phases, all the original 17 Regional Engineering Colleges (RECs) as National Institutes of Technology (NITs). There are currently 30 NITs, with the inception of 10 new NITs in the year 2010.

The Indian higher education system is one of the largest in the world in terms of the number of colleges and universities. From 350 universities and 16,982 colleges in 2005-06, the numbers have gone up to 713 universities, 36,739 colleges, and 11,343 diploma-level institutions in 2013-14. There is need to match the supply with demand and to dovetail education policy to employment opportunities. Therefore, higher education needs to be futuristic and envision areas that will generate future employment opportunities and accordingly offer suitable courses for students. The gross enrolment ratio (GER) in higher education has nearly doubled from around 11.6 per cent in 2005- 06 to 21.1 per cent in 2012-13 (Provisional), with 29.6 million students enrolled in 2012-13 as compared to 14.3 million in 2005-06. However, the lower penetration into higher levels of education leads to higher dropouts, especially among the secondary and upper primary students, consequently to accumulation of less educated and less skilled job seekers at the bottom of the pyramid. The percentage educated also falls progressively with higher levels of education.

While only 73 per cent literacy has been achieved as per Census 2011, there has been marked improvement in female literacy. Male literacy at 80.9 per cent is still higher than female literacy at 64.6 per cent but the latter has increased by 10.9 percentage points compared to 5.6 percentage points for the former. The Right of Children to Free and Compulsory Education (RTE) Act 2009 was enacted by the centre to increase the quality as well as accessibility of elementary education in India in April 2010. Sarva Shiksha Abhiyan (SSA) is the designated scheme for implementation of the RTE Act. The framework of the SSA has been revised to include reimbursement for expenditure incurred for at least 25 per cent admissions of children belonging to disadvantaged and weaker sections in private unaided schools from the academic year 2014- 15. Between 2007-08 and 2013-14, according to the DISE (District Information System for Education), total enrolment in primary schools increased from 134 million to 137 million in 2011- 12 and then declined to 132 million in 2013-14 while upper primary enrolment grew from 51 million to about 67 million. This is in line with the changing demographic age structure. India has achieved near universal enrolment and enhanced hard and soft infrastructure (schools, teachers, and academic support staff).

**LITERATURE REVIEW**

The history of Technical education and its challenges has been the focus of a number of studies carried out in recent times. A brief review of some of these studies has been made here.

Though the contribution of higher education to develop is quite significant, India, like many other developing countries, has not paid adequate attention to it. There has been a strong tendency in the country to neglect higher education, focusing rather exclusively on elementary, more particularly, and primary education. While a major positive outcome of the 1990 Education for All conference in Jomtien, Thailand, was that elementary education received the somewhat serious attention of the national government, culminating in the passing of the Right of Children to Free and Compulsory Education Act (2009), it has had an undesirable effect on other levels of education, particularly higher education (Tilak 2012). Future engineers should receive knowledge of basic principles, which consent to them to progress on their own in studies in non- technical subjects. This should lead to the chance of treating systems from a holistic point of view. Technical goals and decisions must be seen with all possible implications in a broad general sense. Science is not neutral the development of science and technology is strongly coupled to the development of society (Davis and Schaufelberger 2007). The history of technical and vocational education in African countries has in many ways been characterized by conflict and controversy: disputes and failures always seeming to achieve more prominence than achievements and successes. The discrepancy between manpower supply and demand has always been acute, particularly in skilled trades and the more senior levels of management (Godwin 2007). Equality of educational opportunity in higher education is considered essential because higher education is a powerful tool for reducing or eliminating income and wealth disparities. If higher education is fully privatized and priced at its full cost, only those who can afford will buy it. The stability of the society will be disturbed

if it consists of sections of the population which get higher education obtain income and assets at increasing rate while large proportion of the population remains deprived of higher education and remain poor. The idea of equalizing educational opportunities also lies in the fact that "the ability to profit by higher education is spread among all classes of people. There are great reserves of untapped ability in the society; if offered the chance they can rise to the top. A great deal of talent of the highest level is, in fact, lost by an egalitarian system of education (Balachander 1986).

## OBJECTIVES AND RELEVANCE OF THE STUDY

Technical Education is one of the most significant components of human resource development spectrum in improving the quality of life of the people. In recognition of the importance of this sector, the planners have accorded priority to this sector. There has been phenomenal growth in the field of technical education during the previous plan periods. The established the Indian Institutes of Technology, Indian Institutes of Management and Indian Institutes of Science were a vital step in the development of technical education in the Indian subcontinent. The ability of these institutions to produce competent and hard core intelligent scientists and engineers had managed to change the outlook of Indian on the global front. India was earlier known for yoga, meditation and holy places, but now it is reckoned for computer engineers. The technical and management education sector has made immense contribution to the country's economic and industrial development. It has produced high quality skilled, technical and managerial manpower. Therefore, the major objectives of this paper are:

1. To analyze the need of education in India.
2. To examine the coordination between higher education and labour market.

## METHODOLOGY

For analyzing such facts, data for the study has been gathered from secondary sources including Tenth Five Year Plan 2002-07, Economic Survey 2014-15, Books on technical education and other articles written by eminent authors.

## ROLE OF HIGHER EDUCATION

Education has a vital role in economic development of societies and nations. Development of education benefits individuals, societies as well as the nation. The educational development makes rising demands for human resources and the quality of education. Education may influence economic development of the world and also it influences the process of skill formation. Education is not for earn a huge benefit but it is regarded as a great equalizer. With the help of education, the society can improve the income distributions and reduce poverty and disparity.

On the other hand, the financing of higher education has been a critical issue. Especially in the case of fee structure, but in the universities the fees are dreadfully low and have remained the same. The state universities seem to the UGC for academic guidance as well as financial support. In the case of other universities, academic guidance is available, but in most cases financial support is usually tentative as well as inadequate. Some universities get state support, some others do not. Many of the colleges are having financial problems, the students and the colleges need more financial support from the government. Especially for the weaker sections of the society, the state should provide financial support by offering loans repayable in easy installments. If it is available for the students, it will make possible to choose from a wider option of courses. In any case the government should take proper decision, regarding the financial support; otherwise it will affect the student's feature.

The Twelfth Five Year Plan's proposal is for an explanation of higher education system in private sector and suggests strategies for value development in it. With the objectives and suggestion of the plan, the report mentions that the private sector has played an active role in the growth of the sector. India has one of the largest higher education systems in the world, with 25.9 million students enrolled in more than 45,000 degree and diploma institutions in the country. It has witnessed mainly high growth of 9% in the last decade. Moreover, the Government intends to attain enrollment of 35.9 million students in higher education institutions, with a GER of 25.2%, by the end of the Twelfth Five Year Plan period. The private sector can be predictable to play an influential role in the success of these outcomes through the creation of knowledge networks.

## HIGHER EDUCATION AND LABOUR MARKET

There have been three key developments in the Indian Labour market in recent years. First the country's high economic growth created new jobs in the IT and IT enabled services, pharmaceuticals, biotechnology and engineering design sectors. In addition, several new economy sectors such as finance, insurance, organized retail; aviation, hospitality, animation, media, real estate and infrastructure opened up a wide variety of Job opportunities, not all necessarily requiring graduate qualification. Secondly many Indians are new hired for jobs abroad and a wide range of jobs are offshore to India. At the same time, Indian companies are also hiring foreign nationals. Thus, there is a global labour market. More and better jobs are being created for Indians, who are playing an important role in this global labour market. Finally, due to technical changes, most jobs in both developed and services sector are new clustered at the low productivity end, while some are at the high productivity end, with the middle hollowing out. Thus, a majority of the work force is engaged in jobs requiring basic of intermediate skills.

In the coming year, real GDP growth at market prices is estimated to be about 0.6-1.1 percentage points higher vis-a-vis 2014-15. This increase is warranted by four factors. First, the government has undertaken a number of reforms and is planning several more. Their cumulative growth impact will be positive. A further impetus to growth will be provided by declining oil prices and increasing monetary easing facilitated by ongoing moderation in inflation. Simulating the effects of tax cuts, declining oil prices will add spending power to households, thereby boosting consumption and growth. Oil is also a significant input in production, and declining prices will shore up profit margins and hence balance sheets of the corporate sector. Declining input costs are reflected in the wholesale price index which moved to deflation territory in January 2015.

Higher education in India is skewed of favours of humanities and arts and about 4/5th of the graduates do not have any employable skills with rigid academic structures, there is little student choice and large variation in quality across institutions. Ordinary graduates that the country's higher education system churns out (Produce mechanically and in Large quantities) are unfit for the new jobs being created.

This opening has arisen because facts and luck have aligned in India's favour. The macro-economy has been rendered more stable, reforms have been launched, the deceleration in growth has ended and the economy appears now to be recovering, the external environment is benign, and challenges in other major economies have made India the near-cynosure of eager investors. Daunting challenges endure, which this Survey will not ignore, but the strong political mandate for economic change has imbued optimism that they can be overcome. India, in short, seems poised for propulsion.

In sum, in overall terms, India does not have a problem of supply of graduates; the problem lies in the uneven quality of graduate and skill mismatch and small number of people with rapid economic growth, investment boom and accompanying structural changes, the situation had aggravated in certain segments, bringing focus on higher education and skill development in recent years.

Now with slowdown, with media reporting job losses and weak placements, people are voluntarily opting for further education and skill up gradation. Thus skill shortages are not general, but specific and often temporary and cyclical. The solution may, therefore, not lie in large scale expansion of higher education, but in identifying the shortages and finding context specific solutions and building adaptive capacity in the system.

Linkage between higher education and the labour market are tenuous. Addressing the problem of unemployment and underemployment of graduates on the one hand, and the problem of skill shortages on the other requires interventions that make the connections between higher education and the jobs more efficient.

## OUTLOOK INTO A BRIGHT FUTURE

To ensure the quality of education, it is necessary to make our accreditation process more transparent, time-bound and free from the regime of controls. Institutions like the NAAC and AICTE should make public the benchmarks as well as other normative standards, which are absolute minimum requirements for starting colleges and institutes of technical education. There is a need to enforce these minimum standards without any dilution or compromise. Modernization of syllabi, examination reforms and greater attention to issues of governance of universities and colleges, all require urgent attention. There is found that the students of

Engineering Colleges of each state of this country should be given apprenticeship, and on job training opportunities. The result is that students either drop out after class ten or twelve or enroll in degree colleges for want of anything better to do. We thus spend huge amount on producing a large number of unemployable youth who hold university degrees. Any employer will tell you how trying it is to get the right people for available jobs. Construction companies do not get adequately trained masons, carpenters, blacksmiths, electricians, etc. Offices cannot get good stenographers, computer operators, accountants, etc. Factories and workshops cannot get mechanics and technicians. These graduates do not possess employable skills even if they are considered educated.

All the inventions and innovations stem out from the developed nations, which is a result of tremendous effort that they put in R & D. Thus R & D facilities have to promote in the industries. Globalization has compelled industries to produce standardized, calibrated and quality products, here; Institutes can help industries of the region in providing easy access to this.

In times of rapid change, institutions have to become more responsive to changing labour markets and students interests. This will lead to availability of trained human resources to the industries of the region. Further, it will also widen the placement opportunities of the students in the industries, and service sector. Unfortunately, universities are not particularly innovative institutions they are not well suited to quickly pulling together whatever resources are needed to respond to a new problem or challenge. This problem is more serious in India due to the structural rigidities of the system, near absence of competition between institutions, and mindset problems.

Economic growth is good for the poor, both directly because it raises incomes and because it generates resources to invest in the public services and social safety nets that the poor need. Growth – and the prospects and opportunities that it brings – also encourages individuals to invest in their own human capital. A recent study found strikingly that merely informing families in villages outside Bangalore that call centres were hiring educated women increased the likelihood that teenager girls in those villages completed school. However, growth must be complemented with effective state-delivered programs that raise the living standards of the most weak in society. To be successful, anti-poverty programs must recognize that policies shape the incentives of individuals and firms, and also acknowledge the limited completion capacity of the state to target and deliver public services to the poor. Since technology has become the key factor in deciding the course of development of any nation, there is a need to encourage technology up-gradation of the industries, therefore enhancing the research potential of the industries.

It is indisputable that higher education, it leads to modern technological development in the society. And also it provides a large number of job-oriented courses which should be attractive to thousands of Young people to get a career of employment or self-employment. The Previous Prime Minister, Dr. Manmohan Singh (2005) has positively predicted that the 21<sup>st</sup> century will be the “knowledge century”, which refers to the socio-economic transformation that the century is projected to go through in the 21<sup>st</sup> century as a result of knowledge revolution. Experience has shown that private institutions are for more adaptable and non-formal provision is better in responding to the students’ demand. Thus, a suitable mix of the public and the private, the formal and the non formal provision for higher education and training provides an optimal solution and would meet the changing needs of economy and society. The problem lies in the fact that our education system is designed for those who wish to pursue higher studies in universities or in technical institutions [medicine /engineering etc.] making no allowance for those who do not have the aptitude for higher studies. Deemed Universities have also mushroomed and it does not belong to the same class as those familiar as such twenty years ago. This provision was kept for a few truly wonderful education and research institutions, with a deliberation that they would bring deepness and diversity into the education system.

## CONCLUSION

Pure specialist knowledge gained through study is often not enough for this. Basic knowledge in method and system expertise for the entire value chain are now also required – starting from the business idea through to realization, distribution, operation and on to the disposal of devices, equipment and systems of technical applications. Business acumen, methods of system and project management, basic company management skills and process-oriented action in broader contexts are also becoming important. Science, vocational and technical education revolves around the advancement of technological, industrial and entrepreneurial objectives that will eventually manifest in employment generation, poverty eradication and self reliance. No nation can make any meaningful socioeconomic stride without functional vocational-technical institutions. What is required now is to begin to empower our students for self-employment through vocational-technical education. Therefore, it is important to understand technology not as an isolated discipline, but as a solution embedded in different contexts. Engineers of today are more than technical tinkers, because the working environment has become much more complex. They are managers who develop solutions according to customer requirements as part of the team, develop market-oriented thinking and take social contexts into account. While the task previously consisted of developing new technical components, devices and equipment, it now includes designing, implementing and integrating complex hardware and software systems.

## REFERENCES

1. B.K. Saha, “Making Secondary Education more relevant” Yojna-2009
2. Balachander, K. K (1986), *Higher education in India: Quest for Equality and Equity*, Mainstream
3. David, S. Joan and Schaufelberger, Walter (2007), *Non- Technical Education in the Electrical Engineering Department of the Swiss Federal Institute of Technology*, European Journal of Engineering Education, Vol.11, No. 1, 15 October, 2007, P 5
4. Economic Survey 2014-15
5. *Engineering education in India*, from Wikipedia, the free encyclopedia
6. Godwin, David, (2007), *The Vocational Aspect of education, Technical education in sub-saharan African countries: a review of developments and strategies*, 28 February, 2007, P 91
7. Gupta D.P. and Aravind Dewanga, “Challenges Before Engineering Education in India”, *Researchers World – Journal of Arts, Science and Commerce*, Vol.III, Issue 2 (1), April 2012 [100]
8. Main article: *Higher education in India*
9. Pawan Agrawal, “Aligning Higher education with the Labour Market” Yojana-2009
10. Tenth Five Year Plan 2002-07
11. Tilak, J.B.G (2001), *Higher Education and Development in Kerala*, Working Paper No. 5, Centre for Socio-economic and Environmental Studies, Kochi
12. *Twelfth five-year plan (2012-17)*
13. Yashpal, “Management of Universities” Yojana-2009



## FINANCIAL REGULATORY ARCHITECTURE: A REVIEW OF LITERATURE

MANAS SHANKAR RAY

RESEARCH SCHOLAR, INDIRA GANDHI NATIONAL OPEN UNIVERSITY, NEW DELHI; &  
PRINCIPAL COMMISSIONER OF INCOME TAX (AHMEDABAD)  
INDIA

## ABSTRACT

*Sound Financial regulatory architecture is a pre-requisite for creating an efficient, vibrant and mature financial market. In this paper, we review important committee reports including their observations and recommendations for developing various elements of financial regulatory system. The committee reports deal with Indian financial system and also with financial systems of other countries. The paper also critically reviews the academic papers and identifies important research gaps on the subject. The discussion in the paper is highly useful for policy makers, existing market regulators, financial institutions, market players as well as the academic community. It highlights the key issues that should be kept in mind while developing a comprehensive financial regulatory architecture in India.*

## KEYWORDS

capital market, financial regulation, principle based regulation, SEBI.

## INTRODUCTION



Supervision and regulation of the financial markets, has been an important area of discussion and research amongst the academicians as well as policy makers. There has been intense study worldwide on the optimal institutional structure of the financial supervision and regulation. This is because it is important to design the structure of responsibility, accountability and powers that synchronises with the overall objectives of regulation and ensures efficient operation of the financial markets.

In the present paper, an attempt has been made to present a review of literature on various issues relating to financial regulatory architecture. The literature on the subject is available in the form of committee reports and research papers. In view of this, the paper has been divided into two sections. While Section –I covers the observations and recommendations of various committees on financial regulation in India, Section –II provides critical review of research papers on the subject.

## SECTION I

A number of committees have dwelled on various issues relating to financial regulatory architecture. Some of these have been constituted by Government of India whereas others deal with similar issues for other countries.

## 1.1. COMMITTEE REPORTS IN INDIA: OBSERVATIONS AND RECOMMENDATIONS

There is a need to fill in the increasing gap which has come about between the requirements of the financial system and the present legal and regulatory arrangements. There have been several studies by committees appointed by Government of India with the objective of reforming the overall financial system in India. These reports dedicate special efforts on why and how the regulatory architecture needs to be reformed to ensure development of a modern financial system that India needs. In the following section, we summarize the principal recommendations of these recent committee reports on the financial regulatory architecture in India.

## 1.1.1. MUMBAI - AN INTERNATIONAL FINANCIAL CENTRE REPORT, 2007

1. Shift towards Principle based Regulation: The report maintains that the rules-based approach followed in India currently faces variety of drawbacks as finance companies find ways to exploit the loopholes in the rules and regulations code. Moreover, the rigidity of the rules based approach blinds the regulators to the specific nature of the firm's business
2. The committee recommended two alternative paths to regulatory structure, both emphasising on some level of consolidation of regulatory agencies:

- a. *Alternative 1: Consolidation of regulatory functions to four regulators*

Under this path proposed by the committee proposed regulatory functions would be consolidated down to four regulators covering finance with one each for:

- i. banking with a regulator separate from the monetary authority;
- ii. capital markets, with a merger of securities markets functions on the fixed income, currency and commodity markets into a single securities and derivatives market regulator;
- iii. pensions with the consolidation of pension regulation into a single pensions regulator;
- iv. insurance regulator for the insurance space.

- b. *Alternative 2: Integration of all financial regulation into a single agency*

The other path the committee suggested was to integrate all financial regulation under a single agency. The principle of the single regulatory agency is that it is able to take a complete view of all activities of all finance companies and a holistic view of trends in financial market development.

3. Shift away from "entity-based regulation" towards "domain based regulation": The committee strongly recommended moving towards domain-based regulation, and away from the present entity-based regulation. This would entail, for example, that the banking regulator regulates the business of banking, but does not regulate all the activities of a financial firm that chooses to call itself a "bank".

## 1.1.2. THE COMMITTEE ON FINANCIAL SECTOR REFORMS REPORT, 2008

The draft report of the Committee on Financial Sector Reforms, chaired by Raghuram Rajan in 2008 titled as "A Hundred Small Steps": (Committee on Financial Sector Reforms, 2008) maintains that this framework is suboptimal due to three kinds of problems:

- a. It induces a loss of economies of scope and economies of scale for the government, exchanges, financial firm, and customers. There are strong commonalities between all kinds of trading.
- b. It fragments liquidity, and encourages regulatory gaming. Arbitrage tightly binds all financial securities related to a given underlying asset. However, fragmentation of regulation of financial securities creates all sorts of gaming opportunities for participants, as well as turf issues among regulators in favouring one or other venue for the firms they regulate, that leads to a loss of liquidity, price efficiency, and even stability.
- c. Loss of competitive pressure. At present, Indian markets are carved into three silos, each regulated (and protected) by a separate regulator. An exchange or a clearing corporation or a depository working in one silo is prohibited from competing with entities in other silos. India's interests would be served far better if all these entities were in a unified industry with vigorous competition and innovation.

Thus, the Committee recommended the unification of all regulatory and supervisory functions connected with organized financial trading into a single agency under SEBI with some coordination with RBI in some markets, such as the government debt market or the currency futures market.

Further, the report reiterated Narasimham Committee Report's suggestion to consolidate supervision of all banks and any other deposit taking entities should come under one supervisor. This would require a considerable increase in central regulatory capacity, as well as political initiatives and efforts. In addition to consolidating supervision, the system of prompt corrective action and resolution of weak banks should be strengthened and made more explicit, possibly under a revamped consolidated deposit insurer.

The current approach to protection of market participants is very different— various transactions, markets and participants are simply banned. This brings one to the heart of needed reform. India can progress by building on its demonstrated success of creating modern, efficient markets in financial instruments. The report



provides clear and blunt guidance in this area: encourage the introduction of missing markets; stop creating investor uncertainty by banning markets; have consolidated membership of exchanges for qualified investors; encourage the setting up of “professional” markets and exchanges for sophisticated products and investors; and create a more innovation-friendly environment, speeding up the process for approval of new financial products.

Similarly, there are several recommendations for modifying the current regulatory architecture, designed to improve coordination, coverage and quality. A key idea is the reduction of micromanagement. The report contains following pointers on the regulatory structure:

- a. *Principles versus rules-based regulation*: The report contends that the current rules-based system in India displays “low tolerance for innovation and excessive micro-management” (chapter 6, page 2) wherein financial institutions are required to follow a plethora of rules. It reiterated the recommendation by Percy Mistry Committee Report (Report of the High Powered Expert Committee, 2007) to have a gradual but time bound movement in the direction of principles-based regulation the way it is followed by The Financial Services Authority (FSA) in the UK. FSA has been engaged in putting into operation a principles-based system of regulation for the UK financial system since 2001. But before extrapolating the UK experience to other countries, it is best to remember two special circumstances prevailing in the UK – firstly, a strong tradition of oral convention and unwritten legislation (even the Constitution is largely unwritten) and secondly, an already existing risk-based and evidence-based system of regulation, for the principles-based system to be built upon. (Nachane, 2008) However, principle based approach often brings in ambiguity as the interpretation of the principles lies largely with the regulator.
- b. Regulatory and Supervisory Independence
- c. To avoid regulatory arbitrage, it is important that institutions serving essentially the same function face the same set of regulations whether they have a banking licence or not. For example, all deposit taking institutions should face same rules. Regulations should be in accordance to functions, not historical classification of institutions.

### 1.1.3. THE FINANCIAL SECTOR LEGISLATIVE REFORMS COMMISSION REPORT<sup>1</sup>

The Financial Sector Legislative Reforms Commission was set up to review, simplify and rewrite the legislations affecting financial markets in India. It was asked to make legislations to bring them in tune with the changing financial landscape in India and the world. The commission, headed by former Supreme Court Judge Justice Srikrishna, has been deliberating since April 2011, and consulting with a spectrum of experts and stakeholders in the financial sector and regulators.

Until now, the approach in Indian finance has been to give permissions for some products or markets. The rest of the financial products and markets for which no explicit permission is given, are banned. This approach has restricted innovation in financial markets unlike the modern approach followed in for example Australia where the emphasis is on the objective of regulation is to protect consumers. This envisages that the regulator’s objectives are clearly defined, his powers are clearly enumerated and that his decisions are appealable.

The FSLRC envisages creation of a new resolution agency for smooth firm resolution, with a view to protecting consumers and improving microprudential regulation of financial firms, the FSLRC has discussed a consumer protection law and a microprudential law which would outline the basic principles on the basis of which regulators would write regulations.

The UFA Act draws from some of the notable features of the US Dodd-Frank Act, the UK’s Financial Services and Markets Act of 2000, financial liberalisation in South Korea and recent Indian government committee reports. In particular, FSLRC proposes:

1. *Unified Financial Agency (UFA)*
  - a. Under the Commission’s proposed regulatory architecture, the Securities and Exchange Board of India (SEBI), Forward Markets Commission (FMC), Insurance Regulatory and Development Authority (IRDA) and Pension Fund Regulatory and Development Authority (PFRDA) would be merged into a new unified agency – a kind of super regulator – called the Unified Financial Regulatory Agency (UFRA).
  - b. The Reserve Bank of India (RBI) would be kept out of the purview of the UFRA.
  - c. Seven agencies should be set up — RBI, Unified Financial Agency (UFA), FSAT, Resolution Corporation, Financial Redressal Agency, Public Debt Management Agency and FSDC. The Reserve Bank will continue to exist with modified functions.
  - d. The existing Securities Appellate Tribunal should be subsumed into Financial Sector Appellate Tribunal (FSAT). The Financial Sector Development Council (FSDC) should also be given a statutory framework
  - e. A new Debt Management Office (DMO) should be set up and the existing Deposit Insurance and Credit Guarantee Corporation of India (DICGC) should be subsumed into the Resolution Corporation.
  - f. The existing laws which provide special privileges to entities like the State Bank of India (SBI) and Life Insurance Corporation (LIC) should be either amended or repealed “to create a level playing field between regulated entities, irrespective of their ownership structure”.
2. *Role of the Reserve Bank of India (RBI)*:
  - a) The actual functioning of the regulator should lie in three areas — regulation-making, executive functions and administrative law functions.
  - b) Any policy should be made not just by the RBI Governor but by a council comprising Governor and Deputy Governor from RBI and five more external members appointed by the Government.
  - c) The Government, in consultation with the Governor, should give the Central Bank quantifiable, measurable objectives; the RBI will need to state reasons why it has failed to achieve the objectives and what remedial action it will take to achieve the objectives.
  - d) The government and not the RBI should make rules with respect to capital inflows. This recommendation is irrespective of whether the inflows are FDI, FII, Forex loans or NRI deposits.
  - e) The RBI will also be the banking regulator but it won’t have any control over non-bank finance companies (NBFCs).
  - f) The Reserve Bank of India should be responsible only for overseeing the banking industry and for monetary policy, while the management of the government’s debt and of foreign remittances (thus far under the exclusive domain of the RBI) should be directly under the supervision of the government.
  - g) With regard to capital control, the Finance Ministry should make rules for inbound capital flows, while the onus of making rules for outbound capital flows should rest with the RBI.

A crucial element of the FSLRC approach is an emphasis on the governance of regulation. Regulators will be given independence under the law through the selection process, and mechanisms that determine the relationship between government and regulators. But they will be accountable. Accountability will be ensured through clear, well-defined objectives, avoiding conflicting objectives, a well-structured rule-making process involving a clear reference to the objective of the regulation being in sync with that of the law and to the appeals mechanism (through a newly created non-sectoral Financial Sector Appellate Tribunal that subsumes the present Securities Appellate Tribunal). All regulations made under the proposed Indian Financial Code, replacing existing financial laws, should be reviewed by a Unified Financial Agency (UFA) within three years of such regulations being issued. The review would consist of a cost-benefit analysis of regulations; an analysis of all interpretations of the regulations made by UFA, and judicial review of regulations by Financial Sector Appellate Tribunal (FSAT), any high court or the Supreme Court; and an analysis of the applicability of the regulations to any changes in circumstances since such regulations were issued.

### 1.2. COMMITTEE REPORTS ABROAD

**Group 30 report (2008)** reviews various national supervisory and regulatory approaches and place them within the context of the changing global financial system. The review of 17 major national supervisory systems has confirmed that while dealing with similar problems and challenges, such systems are fashioned through a process that includes a myriad of political, cultural, economic, and financial influences.

**IMF report (2009)** seeks to draw lessons for financial sector regulation and supervision and central bank liquidity management from the ongoing crisis, focusing principally on implications for the future rather than on immediate crisis management policies. Inadequacies in macroeconomic policies and the design of the international financial architecture exposed in the crisis will also have to be addressed to make the suggested changes in the regulatory framework effective.

<sup>1</sup> Report, The Financial Sector Legislative Reforms Commission (B. N. Srikrishna, Chairman), Mar 2013. Ministry of Finance, Government of India.

## SECTION-II

## 2. REVIEW OF PRIOR RESEARCH

This section provides a critical review of different academic studies undertaken in the field of financial regulation in different countries.

**Briault (1999)** considers the rationale for establishing a single national financial services regulator. In describing the formation of the UK Financial Services Authority (FSA), it presents a case for a single regulator, which is independent of market developments. Author concludes that such a regulator, covering a broad range of financial services activities and spanning both prudential and conduct of business regulation, should be well placed to deliver effective, efficient and properly differentiated regulation in the current financial environment in the UK. Drawing on the Scandinavian experience, **Taylor and Fleming (1999)** address three policy-related issues associated with the integrated model: Under what conditions should (or should not) a country consider moving toward an integrated model of financial supervision? How should an integrated agency be structured, organized, and managed? How should the integration process be implemented? The authors suggest that for a small transition or developing economy, or an economy with a small financial sector, the economies of scale from establishing an integrated agency outweigh the costs of moving to such a model. Further, there is no single obviously correct organizational structure, and existing agencies are experimenting with a variety of forms. Whatever the structure, integrated supervision requires active management to secure the potential benefits that the approach offers. Once the decision has been made, implementation should take place as quickly as possible. A well-conceived change management process should aim to overcome the cultural barriers associated with the previous fragmented structure.

**Abrams & Taylor (2000)** analyze the costs and benefits of unified supervision covering each of the main types of financial institutions (banks, insurers and securities firms). The strongest arguments for unification are the enhanced oversight of financial conglomerates and the economies of scale they can potentially deliver. However, these advantages vary across countries and there are also a number of potentially serious disadvantages to unification, especially the risk that the change process will be mismanaged and will result in a reduction in regulatory capacity. They conclude that no one model of regulatory structure will be appropriate for all countries. The issue requires careful deliberation and ultimately depends on a matrix of factors, which vary in importance from country to country.

In the field of bank supervision, **Barth, Caprio, & Levine (2002)** conducted an empirical research using data for over 107 countries for examining studying the relationship between differences in bank regulation and supervision and bank performance and stability. The results raise a cautionary flag regarding government policies that rely excessively on direct government supervision and regulation of bank activities. They conclude that countries with policies that promote private monitoring of banks have better bank performance and more stability. Further, countries with more generous deposit insurance schemes tend to have poorer bank performance and more bank fragility. Moreover, diversification of income streams and loan portfolios - by not restricting bank activities - also tends to improve performance and stability. Countries in which banks are encouraged to diversify their portfolios domestically and internationally suffer fewer crises.

**Martinez and Rose (2003)** study the implementation related issues of integrated supervision of financial sector in a sample of 51 countries. Based on survey results they concluded that group of integrated supervisory agencies is not as homogeneous. Important differences arise with regard to the scope of regulatory and supervisory powers the agencies have been given. Another finding of study is that in most countries progress towards the harmonization of prudential regulation and supervision across financial intermediaries remains limited. Interestingly, the survey revealed that practically all countries believe they have achieved a higher degree of harmonization in the regulation and supervision of banks and securities companies than between banks and insurance firms.

**Holopainen (2007)** puts forward a case against integration of financial supervision and highlights its inherent issues and challenges. According to the report, the inherent characteristic of integrated supervision is the monopoly position of single authority in the supervision of financial industry. Consequently, careful consideration and design is needed to ensure the effective functioning of integrated supervision as such a move necessarily results to a situation where a plurality of tasks gets allocated to a single authority giving rise to several potential multi-tasking related challenges.

**Borio (2003)** defines and contrasts the macro- and micro prudential dimensions that inevitably coexist in financial regulatory and supervisory arrangements, examines the nature of financial instability against this background and draws conclusions about the broad outline of desirable policy efforts. The author argues that in order to improve the safeguards against financial instability, it may be desirable to strengthen further the macro prudential orientation of current prudential frameworks.

**Masciandaro et. al (2008)** analyse recent trends in, and determinants of, financial supervisory governance. They first calculate levels of supervisory independence and accountability in 55 countries. The econometric analysis using multinomial logit by taking macroeconomic variables and binary outcomes of risk and regulation provide the determinants indicates that the quality of public sector governance plays a decisive role in establishing accountability arrangements, more than independence arrangements. It also shows that decisions regarding levels of independence and accountability are not well-connected. The results also show that the likelihood of establishing adequate governance arrangements is higher when the supervisor is located outside the central bank.

**Čihák and Tieman (2008)** in their study analyze the quality of financial sector regulation and supervision around the globe. They employ data from IMF-World Bank assessments of compliance with international standards and codes. Incorporating supervisory implementation into the study provides an improved means of assessing countries' regulatory systems. They concluded that countries' regulatory frameworks score on average one notch below full compliance with the standards (on a 4-notch scale). There are substantial differences in the quality of regulatory and supervisory frameworks across countries, with the income level being a major factor.

**Seelig and Novoa (2009)** in their study summarize the results of a survey of financial supervisory agencies in IMF member countries conducted in 2007. Responses were received from 140 financial sector supervisors in 103 countries. A majority of these are separate stand-alone agencies, most of bank supervisors are part of a central bank. The survey asked respondents about their governance structure and practices, as well as practices and policies related to public transparency and accountability. Most agencies reported having operational independence. Bank supervisors were unique in viewing financial stability as part of their mandate. The study has great implications in terms of implementing the unified regulatory authority and provides detailed explanations of nature of modes-operandi in sample countries.

**Black & Jacobzone (2009)** provides a comparative perspective on the application of quality regulation principles to financial sector regulators, in the US, Canada, Australia, the UK and France. The report analyses the independence and accountability of the regulators, as well as their powers. The analysis focuses on requirements for ex ante and ex post regulatory impact analyses, including burden reduction; for transparency and communication of decision making, as well as co-ordination and regulatory review; for improving the regulatory system over time and for regulating conflicts of interest. The report finds variation in the formal arrangements, and respective practices. The report points to a number of areas relating to regulatory practice where principles could be further developed, especially related to risk management and the need for a detailed understanding of the financial system.

**Pellerin, Walter, & Wescott (2009)** reviews the advantages and disadvantages of regulatory consolidation, explore the effects of consolidation on the regulators incentives in the context of USA and evaluates which entity is best suited for this role. It also examines the transition to consolidated regulation that took place in Germany, UK, Japan, and Australia and evaluates each one of them in the light of multiple factors playing role in each economy. Another proposition examined in this paper is whether to transfer the regulatory authority from the central bank leads to a desirable situation or not.

**Masciandaro and Quintyn (2010)** is based on updated information on 102 countries for the period 1998-2009 and evaluates both the existing settings and the proposals of reform in the US and at the level of the EU in the backdrop of crisis. It addresses two crucial questions: Which are the main features of the reshaping of the supervisory architectures? Which is the role central banks are taking in the changing environment of the financial supervision? They concluded that the inspection of this database highlights a trend of supervisory consolidation outside the central banks, where the outliers usually are central banks without the monopoly in monetary policy responsibilities.

**Vermorken & Vermorken (2011)** compare two opposite approaches of regulation systems i.e., Basel III and the Eurocodes and identifies how one system regulates financial institutions and the other civil engineering design. The paper shows that the financial regulation uses a cause-based approach to regulation, in which the causes of a crisis are found and controlled. The Eurocodes in civil engineering make no specific attempt to understand the specific causes of a failure; however, they provide a framework, which transfers full responsibility onto the designer if the designer decides not to adhere to a set of codes of practice. It is the trade-off between less regulation and increased responsibility. The paper shows how financial regulation in reality has limitations, which are its inherent weakness.

**Grosse (2012)** analyses the financial crisis of 2008- 2009 using a behavioural view and draws attention of regulators towards designing responses to the behaviours of market participants. It identifies that crisis cannot be prevented from happening completely, so focus should be on creating proper framework of rules to discourage non-rational behaviour, which exaggerate the crisis. The main factors identified here are anchoring, herd and hubris behaviour, over optimism as the elements of crisis. The author suggests that supervision of all the credit-extending agencies should come under the fed supervision, enhanced transparency, raising standards and limits for various financial institutions, identifying sources of systemic risks and managing them as far as possible.

**Vashishtha & Sharma (2012)** conducted a study based on a survey administered to three distinct interest-groups, namely, regulators, financial institutions and investors. Authors observed that unified model emerges as the consensus model, driven by its ability to ensure, communication and coordination among regulators for dealing with some of the major problems, in particular, regulatory arbitrage, posed by modern complex financial markets. Based on the analysis employing the logit model, the evidence from results suggests a shift in the direction of structural unification, or at least, establishment of some central 'lead' authority for ensuring communication and coordination among regulators until structural unification proposition is empirically validated.

## SECTION-III

### 3. CONCLUSION

The above review of literature on financial regulatory architecture helps us in identifying important research gaps on the subject.

Given the vast scope of the field of financial regulation, the existing literature has covered multiple dimensions of financial regulation. They include the study on relation between regulation and performance, the determinants of the quality of regulation, different approaches to the regulatory architecture, study of the importance of country specific factors, as well as the study of effectiveness of regulation in the backdrop of recent financial crisis. A large number of studies focus on the rationale, advantages and drawbacks of integrated regulatory structure. There is no absolute case for or against unification. Moreover, the choice of a regulatory approach and its implementation varies across countries based on the characteristics of their financial markets.

There are still some research gaps in the existing literature. It seems that there is virtually no research that focuses on Indian Financial Regulatory System. There is a need to study the state of current multi-regulatory system in India. Further, as the policy makers are inclined towards the proposed unified regulatory structure in India, it is important to gauge the impact of the framework from the perspective of the academicians, regulators, policy makers as well as those bearing direct impact of the change, that is, the financial services industry. It is also important to include these participants towards deciding on the operational and administrative structure of such unified regulator.

## REFERENCES

- Abrams, R. K., & Taylor, M. W. (2000). Issues in the Unification of Financial Sector Supervision. No 00/213, *IMF Working Papers*.
- Balling, M., Lierman, F., & Mullineux, A. (2004). Reforms enhancing the efficiency of the financial sector and implications of future EU membership. In M. Balling, F. Lierman, & A. Mullineux, *Financial Markets in Central and Eastern Europe: Stability and Efficiency* (p. 173). Routledge.
- Barr, N. (2012). The relevance of efficiency to different theories of society. In N. Barr, *Economics of the Welfare State* (p. 46). Oxford University Press.
- Barth, J. R., Caprio, G., & Levine, R. (2002). Bank Regulation and Supervision: What Works Best. *NBER Working Paper No. 9323*.
- Bischoff, S. (2011). *From Coordination to Integration: A Systems Change Approach to Organizational Alignment to Achieve Health Outcomes in Chronic Disease*. From Nonprofit Impact: [http://nonprofitimpact.com/cms/wp-content/uploads/2011/06/NI\\_CD\\_Integration\\_v4-pdf-FINAL1.pdf](http://nonprofitimpact.com/cms/wp-content/uploads/2011/06/NI_CD_Integration_v4-pdf-FINAL1.pdf)
- Black, J., & Jacobzone, S. (2009). Tools for Regulatory Quality and Financial Sector Regulation: A Cross-Country Perspective. *OECD Working Papers on Public Governance No. 16*.
- Briault, C. (1998). 'A Single Regulator for the UK Financial Services Industry', *Financial Stability Review*
- Briault, C. (1999) 'The Rationale for a Single National Financial Services Regulator'. *Financial Services Authority Occasional Paper, No. 2*
- Brunnermeier, M., Crockett, A., Goodhart, C., Persaud, A. D., & Shin, H. (2009). *The Fundamental Principles of Financial Regulation*. Geneva: International Center for Monetary and Banking Studies.
- Committee on Financial Sector Reforms, P. C. (2008). *A Hundred Small Steps*. New Delhi: Sage Publications.
- Dodd, R. (2002). The Economic Rationale for Financial Market Regulation. Special Policy Report 12, Financial Policy Forum, Washington DC.
- Goodhart C. (1998), The Central Bank and the Financial System. Chapter 16. Macmillan, London.
- Goodhart, C.A.E. (1995) Some Regulatory Concerns", LSE Financial Markets Group Special Paper.
- Grosse, R. (2012). Bank regulation, governance and the crisis: a behavioral finance view. *Journal of Financial Regulation and Compliance*, 20 (1), 4 - 25.
- Llewellyn, D. (1999a). The Economic Rationale for Financial Regulation. *Occasional Paper Series. #1, Financial Services Authority, United Kingdom*.
- Llewellyn, D.T. (2006) Institutional Structure of Financial Regulation and Supervision: The Basic Issues. *Paper presented at a World Bank seminar*.
- Llewellyn, D.T., Institutional Structure of Financial Regulation and Supervision: The Basic Issues
- Nachane, D. M. (2008 9-August). Committee on Financial Sector Reforms: A Critique. *Economic and Political Weekly*, pp. 14-18.
- Nier, Erland, "Financial Stability Frameworks and the Role of Central Banks", *IMF Working Paper, WP/09/70*
- Pellerin, S. R., Walter, J. R., & Wescott, P. E. (2009). The Consolidation of financial market regulation: pros, cons and implications for the United States. *Working Paper 09-08, Federal Reserve Bank of Richmond*.
- Quinn B. (1996). The Financial Regulator, Vol. 1 No. 1, Central Banking Publications, London. p.30-33.
- Report of the High Powered Expert Committee, M. (2007). *Making Mumbai an International Financial Centre*. New Delhi: Sage India.
- Scheltema Commission (2010), Onderzoek DSB Bank, Den Haag.
- Sehgal, S., & Ahmad, W. (2013). A Re-Assessment of the Role of the Financial Sector in Driving Economic Growth: Recent Evidence from Cross Country Data. *International Journal of Economics and Finance*. 5(1).
- Sehgal, S., & Ahmad, W. (2013). A Re-Assessment of the Role of the Financial Sector in Driving Economic Growth: Recent Evidence from Cross Country Data. *International Journal of Economics and Finance*. 5(1).
- Taylor, M and Fleming, A, (1999), "Integrated Financial Supervision: Lessons from Northern European Experience", Policy Research Working Paper 2223, World Bank, Washington. <http://www.business-standard.com>
- Taylor, M. (1999). Integrated Financial Supervision: Lessons of Northern European Experience.
- Taylor, M. (2010). Welcome to Twin Peaks. *Central Banking Journal, Central Bank of Bahrain*.
- Vashishtha, A., & Sharma, A. (2012). Indian financial market regulation: A dialectic model. *Journal of Economics and Business*, 64, 77-89.
- Vermorken, M. A., & Vermorken, A. T. (2011). Cause v. consequence-based regulation: Basel III v. the Eurocodes. *Journal of Financial Regulation and Compliance*, 19 (2), 111 - 116.
- White L. (1997). Technological Change, Financial Innovation, and Financial Regulation: the Challenges for Public Policy, *Wharton Financial Institutions Center* w.p. 33.
- [www.fmc.gov.in/index.aspx](http://www.fmc.gov.in/index.aspx)
- [www.irda.gov.in/Defaulthome.aspx?page=H1](http://www.irda.gov.in/Defaulthome.aspx?page=H1)
- [www.mca.gov.in/](http://www.mca.gov.in/)
- [www.pfrda.org.in/](http://www.pfrda.org.in/)
- [www.rbi.org.in/](http://www.rbi.org.in/)

## CASUAL WORKERS AND THEIR WAGES

MAMTA LAMBA  
RESEARCH SCHOLAR  
CENTRE FOR ECONOMIC STUDIES & PLANNING  
JAWAHARLAL NEHRU UNIVERSITY  
DELHI

## ABSTRACT

From 2004-05 to 2009-10, the proportion of casual workers had increased. This fact provides a motivation for investigating the relationship between proportion of casual labours and their wage rates. Also, there is a need to examine the wage inequality between male and female casual labours during 61<sup>st</sup> and 66<sup>th</sup> rounds. Using regression models, this paper has found evidence that there exists a negative impact of increase in proportion of casual workers on their wages. It was also found that though overall wage inequalities between male and female casual labours had increased, there were some industries/operations where these had gone down between 61<sup>st</sup> and 66<sup>th</sup> rounds. Furthermore, it was observed that there exists a negative correlation between female to male casual labour wage ratio and sex ratio of states.

## KEYWORDS

casual worker, wage inequalities, wage rate.

## I. INTRODUCTION

The worker's earnings level is regarded as a pointer of their economic status in society. In terms of wages earned and tenure security, casual labourers do not enjoy the same status as regular wage/salaried employees. NSS 66<sup>th</sup> round report shows that casual labourers (15-59 years) engaged in non-public works earned about 40 % of wages earned by regular wage/salaried employees (of the same age) in rural areas and about 33.5 % in urban areas in 2009-10. Moreover, at all India level, female casual workers earned about 65 % of wages of male casual workers in 2009-10. According to the same report, the proportion of casual workers (ps+ss) (out of total persons employed) had increased from 15 % to 17.5 % in urban areas and from 32.8 % to 38.6 % in rural areas from 61<sup>st</sup> to 66<sup>th</sup> round (NSS). Consequently, the following questions arise: (1) whether this increase in proportion of casual workers had any impact on their wages? (2) Though wage inequalities exist between male and female casual workers across industries/operations, whether these have narrowed down between 61<sup>st</sup> and 66<sup>th</sup> round and (3) finally, whether there exists any correlation between sex ratio and female to male wage ratio of casual labours.

NSS 66<sup>th</sup> round report points out that in 2009-10, the lowest decile class on MPCE<sup>2</sup> was constituted by 59.2 % of casual workers among males and 58 % among females in rural areas, and 43.7 % among males and 44.1 % among females in urban areas. It shows that large number of casual workers occupied lowest rung of expenditure class. In light of this, it becomes important to examine the effect of rising proportion of casual workers on their average wages? Furthermore, the prevailing practice of gender-wise wage differential makes imperative to enquire whether these differentials are going down or not and whether states which otherwise provide more equal opportunities to women have least wage differential.

The regression results show that there exists a negative impact, though very small, of increase in proportion of casual labours on their average wages. The analysis further shows that wage inequalities between males and females casual labours have gone down in large number of industries/operations between 61<sup>st</sup> and 66<sup>th</sup> round and a paradox seems to exist where states otherwise favourable to women observe highest gender wage differential.

The next section consists of a brief literature review, followed by data source in section III. Section IV talks about modelling and results, and Section V concludes.

## II. REVIEW OF LITERATURE

Mukherjee (2007) has shown, using 50<sup>th</sup>, 55<sup>th</sup> and 61<sup>st</sup> round of NSSO data, through Theil Index that in the post-reform period, there has been a decline in wage inequalities between males and females. Using decomposition, he showed that the primary cause of rising wage inequalities in the same period was the rise in inequalities within males and females rather than between them. Furthermore, he demonstrated using Theil Index that at the aggregate level, disparities within occupations are rising for all occupations except Professionals and Sales workers. Moreover, Esteve-Volart (2004) has shown through study of sixteen Indian states over 1961-91 that gender discrimination has negative consequences for economic development. Harilal (1989) has shown while considering Kerala's construction industry that a gradual decline in the skill requirements in this industry has led to fall in the skilled-unskilled labour wage differential.

Mahajan & Ramaswami (2012) have shown that gender differentials in agricultural wages are maximum in states like Andhra Pradesh, Kerala, Tamil Nadu, Karnataka and Maharashtra (called Southern states by him), otherwise known for providing equal opportunities to women. Furthermore, this study shows that greater female labour supply in the southern states is partly responsible for the greater gender wage differential in southern states as compared to northern states.

## III. DATA SOURCE

This work has been carried out using data from multiple sources: 2 quinquennial survey rounds of NSSO: 61<sup>st</sup> round (2004-05) and 66<sup>th</sup> round (2009-10), Census, 2011 and RBI's Handbook of Statistics on Indian Economy. It encompasses casual workers belonging to the age group 15-59 years<sup>3</sup>. Data on casual worker's wages (based on *Current Daily Status*) have been taken from *NSS reports* and on percentage of casual labours out of total persons employed (based on *Principal Status + Subsidiary Status*) have been extracted from *unit level data*<sup>4</sup>.

NSS reports provide data on wages of casual labours engaged in public works other than Mahatma Gandhi NREG public works (code 41) and those engaged in other types of work (code 51) separately<sup>5</sup>, therefore, combined wages for casual labours engaged in both types of work had to be calculated<sup>6</sup>. Data on sex ratio and service sector's share in state's Net State Domestic Product (NSDP) (at constant prices with base 2004-05) have been taken from census, 2011 and RBI's Handbook of Statistics on Indian Economy, respectively. Unless mentioned otherwise, wages written anywhere in this paper represent casual worker's wages.

<sup>2</sup>MPCE is monthly per capita consumer expenditure.

<sup>3</sup>According to Planning Commission, this is the most active working age group.

<sup>4</sup>In NSS reports, data given on percentage of casual labours out of total persons employed cover all age groups, but for the purpose of this study, data on casual workers belonging only to age group 15-59 years was required, therefore, required data was extracted from unit level data.

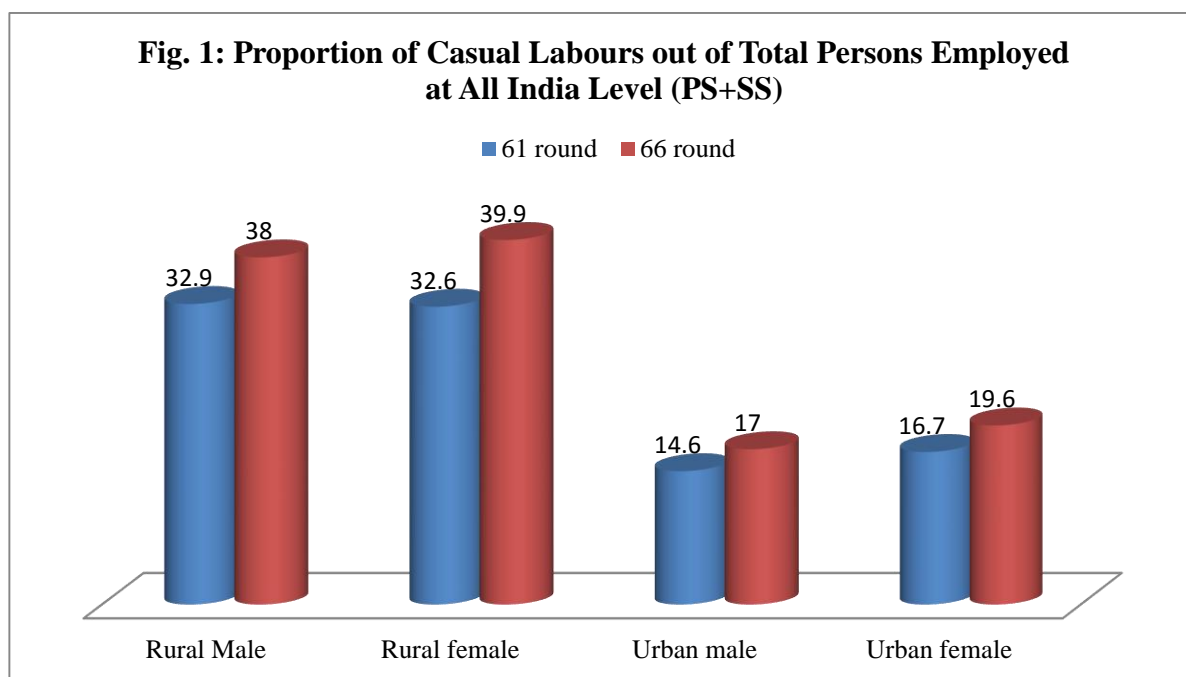
<sup>5</sup>In 66<sup>th</sup> round of NSS, in addition to 2 above mentioned codes, code 42 was also used which represented casual wage labours engaged in Mahatma Gandhi NREG public works. But in the usual activity status (which has been used in this study), code 41 which measures casual wage labours engaged in public works, include all types of public works and code 42 is not relevant in the usual activity status.

<sup>6</sup>Combined casual worker's wage for rural males = (Average wage/salary earnings of rural males<sub>41</sub>\* rural male sample person days<sub>41</sub> + Average wage/salary earnings of rural males<sub>51</sub>\* rural male sample person days<sub>51</sub>) / (rural male sample person days<sub>41</sub> + rural male sample person days<sub>51</sub>). Similarly, casual worker's wage for rural females can be calculated. Since only code 51 is applicable for casual labours engaged in urban areas, there is no need to calculate combined wages for them.



#### IV. OBJECTIVES OF STUDY AND RESULTS

From 2004-05 to 2009-10, the proportion of casual workers had increased in each of the 4 category of workers mentioned in fig.1 and clearly this rise was highest (around 7 percentage points) for rural females. The casual workers in rural areas had increased by higher percentage than urban areas perhaps because of the impact of MGNREG programme (Chowdhury, 2011).



#### OBJECTIVE 1: INVESTIGATING THE RELATIONSHIP BETWEEN PROPORTION OF CASUAL LABOURS AND THEIR WAGE RATES

To investigate this relationship, two OLS regressions have been run: one for 61<sup>st</sup> round and another for 66<sup>th</sup> round (NSS). In 61<sup>st</sup> round, data is available on 9 states (in total, there are 36 observations as for each category of workers: rural male, rural female, urban male, urban female, there are 9 observations) and in 66<sup>th</sup> round, data is available on 14 states (there are 56 observations as for each category of 4 above mentioned workers, there are 23 observations). The rural and urban casual worker's wages have been converted to real wages using CPI-AL (base 1986-87) and CPI-IW (base 2001)<sup>7</sup>, respectively.

#### MODEL

In this model, casual worker's real wages have been regressed upon four independent variables: proportion of casual workers out of total persons employed, percentage share of service sector in state's NSDP<sup>8</sup>, gender dummy and area dummy.

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \alpha_1 D_{1i} + \alpha_2 D_{2i} + \epsilon_i$$

where,  $Y_i$  = casual worker's real wages;

$X_{1i}$  = percentage of casual workers out of total persons employed;

$X_{2i}$  = percentage share of service sector in state's NSDP;

$D_{1i} = 1$ , if casual worker is female,

= 0, otherwise;

$D_{2i} = 1$ , if casual worker belongs to rural area

= 0, otherwise;

$\epsilon_i$  = random error term

#### RESULTS

TABLE 1 (61<sup>st</sup> round)

Dependent Variable: Casual worker's real wages			
Independent Variables	Coefficient	Standard Error	t-statistic
Casual Workers ( % )	- 0.2059137	0.0380498	- 5.41***
Share of Services in NSDP ( % )	0.130257	0.0918427	1.42#
Gender	- 5.282253	0.7748721	- 6.82***
Area	6.118918	0.9980252	6.13***
Constant	8.758022	5.431972	1.61#

Adj. R-square = 0.6956, Number of observations = 36, F-statistic = 21.00\*\*\*, Correlation between casual workers and share of services in NSDP = 0.179.

Notes: \*statistically significant at 10% level, \*\*statistically significant at 5% level, \*\*\*statistically significant at 1% level, #statistically insignificant.

Table 1 demonstrates that in 61<sup>st</sup> round, after controlling for gender, area and share of services in state's NSDP, there exists a significant negative impact of increase in proportion of casual workers on their wages, i.e., with a 1 % increase in proportion of casual workers, there is a fall of Rs. 0.20 in their wages. It means that greater proportion of casual labours in workforce exerts downward pressure on their wages.

<sup>7</sup> Data on CPI-IW (Consumer Price Index for Industrial Workers) and CPI-AL (Consumer Price Index for Agricultural Labourers) have been taken from Labour Bureau, Ministry of Labour and Employment, Government of India.

<sup>8</sup> This variable has been considered because the share of services sector in most of the state's NSDP at factor cost (at constant prices with base 2004-05) was greater than 50 % in 2009-10. Moreover, in urban areas, more than 60 % of casual labourers estimated person days are spent in services sector in both 61<sup>st</sup> and 66<sup>th</sup> rounds.

TABLE 2 (66<sup>th</sup> round)

Independent Variables	Dependent Variable: Casual worker's wages		
	Coefficient	Standard Error	t-statistic
Casual Workers ( % )	- 0.1361153	0.0624851	- 2.18**
Share of Services in NSDP ( % )	0.3558505	0.0993929	3.58***
Gender	- 6.702787	1.367283	- 4.90***
Area	7.076989	1.806233	3.92***
Constant	- 3.412837	6.321191	- 0.54#

Adj. R-square = 0.4385, Number of observations = 56, F-statistic = 11.74\*\*\*, Correlation between casual workers and share of services in NSDP = 0.289.

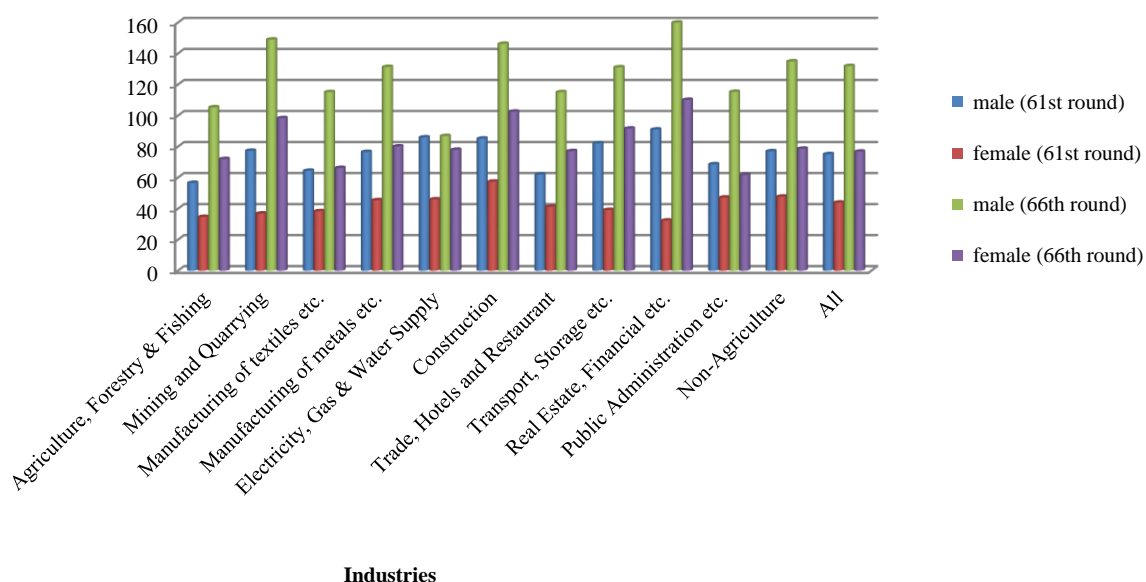
Notes: \*statistically significant at 10% level, \*\*statistically significant at 5% level, \*\*\*statistically significant at 1% level, #statistically insignificant.

In 66<sup>th</sup> round also, we get similar results where after controlling for gender, area and share of services in state's NSDP, with a 1 % increase in proportion of casual workers, there is a fall of Rs. 0.13 in their wages. It means that supply side of casual labour market plays a dominant role in determining their wages.

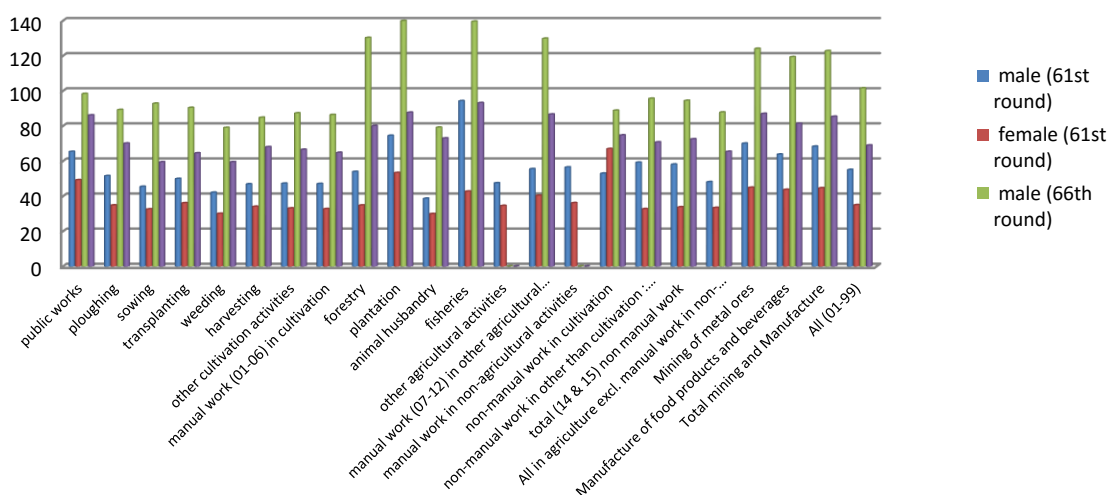
## OBJECTIVE 2: EXAMINING THE WAGE INEQUALITY BETWEEN MALE AND FEMALE CASUAL LABOURS DURING 61<sup>ST</sup> AND 66<sup>TH</sup> ROUNDS

For this part, nominal wages have been considered. It can be clearly seen from fig. 2 and 3 that on average, female casual labours earn lower wage than male casual labours across all industries/operations in urban as well as rural areas<sup>9</sup> (except one operation in rural areas<sup>10</sup>) in both 61<sup>st</sup> and 66<sup>th</sup> round which indicates that wage inequality exists between male and female casual workers across industries/operations.

**Fig. 2: Average wage earnings per day received by casual wage labourers engaged in different industries in urban areas**



**Fig. 3: Average wage earnings per day received by casual wage labourers engaged in different types of operations in rural areas**



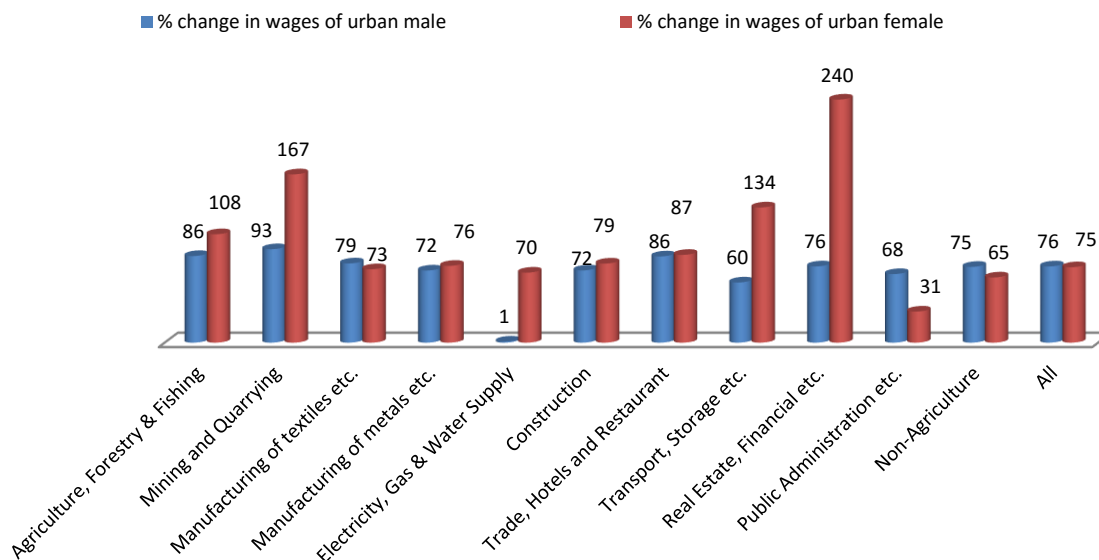
<sup>9</sup> For rural areas, data on operations: other agricultural activities (code 12) and manual work in non-agricultural activities (code 13) was missing in 66<sup>th</sup> round.

<sup>10</sup> This operation is non-manual work in cultivation where female casual labours average wage was higher than male casual labours average wage in 61<sup>st</sup> round.

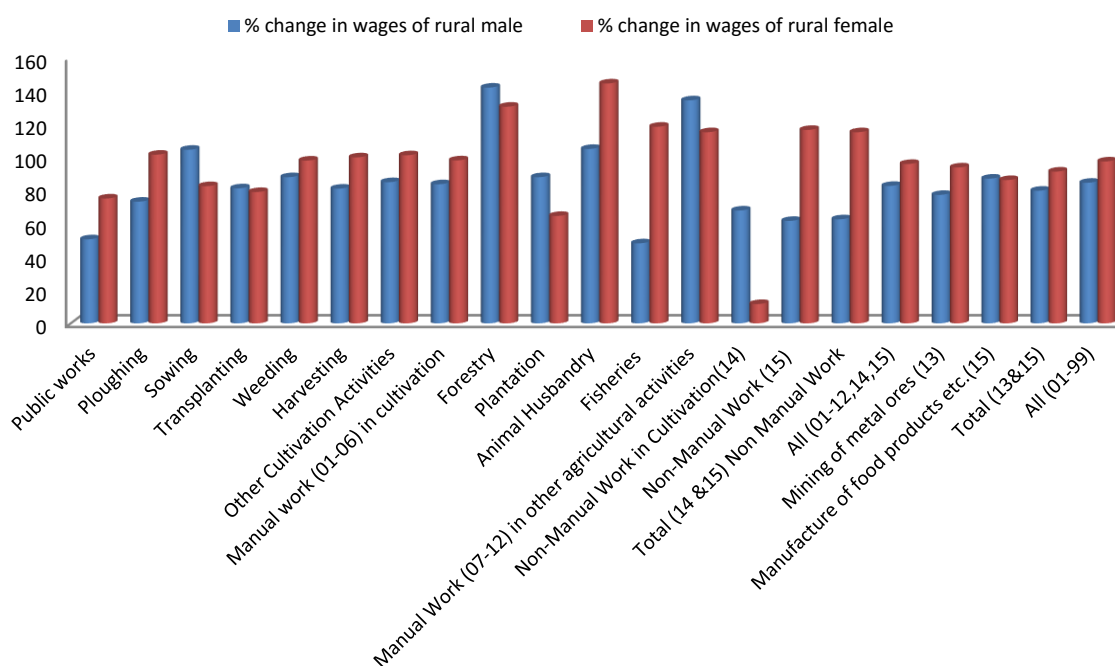


However, the increase in female casual labour wages had been higher than that of male casual labour wages in most of the industries/ operations between 61<sup>st</sup> and 66<sup>th</sup> round. As we can see in fig. 2, in urban areas, female casual labour wage had increased by greater percentage than male casual labour wage in almost all industries except 2 industries 'Manufacturing of Textiles, Food Products, Paper, Tobacco etc.' and 'Public Administration, Health and Social Work, Education' between the same period. This increase was highest (240 %) in industry 'Financial Intermediation, Real Estate, Renting and Business Activities' which could be due to the launching of MGNREG programme by government in 2006 that must have exerted upward pressure on wages in real estate sector (fig.4). In rural areas, except 6 operations, in all other operations, female casual labour wage had increased by greater percentage than male casual labour wage between 61<sup>st</sup> and 66<sup>th</sup> round (fig. 5).

**Fig.4: Growth rate of male and female wages in urban areas (industry-wise) between 61st and 66th round**



**Fig.5: Growth rate of male and female wages in rural areas (operations-wise) between 61st and 66th round**



As table 3 shows, this greater increase in female casual labour wage as compared to male wage has led to improvement in female to male wage ratio from 61<sup>st</sup> to 66<sup>th</sup> round in large number of industries/operations in rural as well as urban areas<sup>11</sup> and this improvement had been highest for the industry 'Financial Intermediation, Real Estate, Renting And Business Activities' in urban areas (in which female casual labours average wage had increased from around 35 % to about 70 % of male casual labour average wage from 61<sup>st</sup> to 66<sup>th</sup> round) and for the operation 'Fisheries' in the rural areas.

TABLE 3

Operations (Rural Areas)	Wage Ratio* (61st round)	Wage Ratio* (66th round)	Industries (Urban Areas)	Wage Ratio* (61st round)	Wage Ratio* (66th round)
Public Works	0.753	0.876	Agriculture, Forestry & Fishing	0.612	0.683
Ploughing	0.675	0.785	Mining and Quarrying	0.477	0.660
Weeding	0.715	0.752	Manufacturing of metals etc.	0.594	0.610
Harvesting	0.727	0.802	Electricity, Gas & Water Supply	0.535	0.898
Other Cultivation Activities	0.701	0.762	Construction	0.674	0.701
Animal Husbandry	0.774	0.922	Trade, Hotels and Restaurant	0.664	0.670
Fisheries	0.453	0.667	Transport, Storage etc.	0.477	0.699
Non-Manual Work in other than Cultivation: agri. & non-agri. Activities	0.553	0.740	Real Estate, Financial Intermediation etc.	0.355	0.689
Mining of Metal Ores	0.641	0.701			

Note: \* It shows female to male casual labour wage ratio.

The above analysis raises an interesting question, though wage inequalities exist between male and female casual workers across industries/operations, whether these have narrowed between 61<sup>st</sup> and 66<sup>th</sup> round and to answer this question, Modified Sopher's Index<sup>12</sup> has been calculated.

TABLE 4

Industries	Modified Sopher's Index (Urban Areas)	
	61st round	66round
Agriculture, Forestry and Fishing	0.633	0.682
Mining and Quarrying	1.026	1.106
Manufacturing of Textiles etc.	0.696	1.007
Manufacturing of Metals, Vehicles etc.	0.745	1.052
<b>Electricity, Gas and Water Supply</b>	<b>0.925</b>	<b>0.183</b>
Construction	0.611	0.951
Trade, Hotels and Restaurant	0.549	0.770
<b>Transport, Storage and Communications</b>	<b>1.051</b>	<b>0.811</b>
<b>Financial Intermediation, Real Estate, Renting and Business Activities</b>	<b>1.465</b>	<b>1.180</b>
Public Administration, Health and Social Work, Education etc.	0.525	1.114
Non-Agriculture	0.691	1.162
All	0.760	1.136

In the above mentioned table, we can clearly see that in urban areas, wage inequalities between males and females have gone down in 3 industries between 61<sup>st</sup> and 66<sup>th</sup> round and this decrease had been highest in the industry 'Electricity, Gas and Water Supply'. Moreover, in rural areas also, wage inequalities have gone down in many operations between these 2 rounds (Table 5) and least wage inequality exist in operation 'Animal Husbandry' in 66<sup>th</sup> round.

TABLE 5

Operations	Modified Sopher's Index	
	61st round	66round
<b>Public works</b>	<b>0.397</b>	<b>0.246</b>
<b>Ploughing</b>	<b>0.499</b>	<b>0.401</b>
Sowing	0.412	0.716
Transplanting	0.413	0.549
Weeding	0.410	0.434
<b>Harvesting</b>	<b>0.400</b>	<b>0.357</b>
<b>Other Cultivation Activities</b>	<b>0.444</b>	<b>0.441</b>
Manual Work (01-06) in Cultivation	0.452	0.461
Forestry	0.562	1.030
Plantation	0.492	1.093
<b>Animal Husbandry</b>	<b>0.310</b>	<b>0.131</b>
<b>Fisheries</b>	<b>1.189</b>	<b>0.974</b>
Manual Work (07-12) in other Agricultural Activities	0.419	0.885
<b>Non-Manual Work in Cultivation</b>	<b>0.336</b>	<b>0.292</b>
<b>Non-Manual Work in Other than Cultivation : Agri. &amp; Non-Agri. Activities</b>	<b>0.766</b>	<b>0.516</b>
<b>Total (14 &amp; 15) Non Manual Work</b>	<b>0.701</b>	<b>0.452</b>
All (01-12, 14,15)	0.457	0.477
Mining of Metal Ores	0.621	0.753
Manufacture of Food Products and Beverages	0.516	0.769
Total Mining and Manufacture	0.591	0.759
All (01-99)	0.584	0.673

<sup>11</sup> Here only those industries/operations have been shown in which female to male casual labour wage ratio has improved from 61<sup>st</sup> to 66<sup>th</sup> round. Changes in female to male wage ratio in all industries/operations have been shown in appendix.

<sup>12</sup> Modified Sopher's Index =  $\ln (X_2 / X_1) + \ln ((200 - X_1) / (200 - X_2))$ , where  $X_2 > X_1$ .

**OBJECTIVE 3: TO ASSESS WHETHER STATES HAVING HIGHER SEX RATIO ALSO HAVE HIGHER FEMALE TO MALE WAGE RATIO**

Here nominal wages have been considered. It is generally expected that states which are doing better on sex ratio parameter will have lower wage inequalities between males and females, and correlation between sex ratio and female to male wage ratio should be positive, if such correlation exists at all.

TABLE 6

States	Female to Male casual labour wage ratio*	Sex ratio (2011)**	States	Female to Male casual labour wage ratio*	Sex ratio (2011)**
Jammu and Kashmir	0.949	883	Mizoram	0.725	975
Himachal Pradesh	0.924	974	Gujarat	0.705	918
Arunachal Pradesh	0.881	920	Rajasthan	0.702	926
Manipur	0.870	987	Uttar Pradesh	0.700	908
Tripura	0.795	961	Punjab	0.659	893
Chhattisgarh	0.786	991	Meghalaya	0.639	986
Assam	0.783	954	Andhra Pradesh	0.636	992
Madhya Pradesh	0.782	930	Haryana	0.607	877
Bihar	0.775	916	Maharashtra	0.598	925
Uttarakhand	0.770	963	Tamil Nadu	0.526	995
West Bengal	0.769	947	Kerala	0.521	1084
Jharkhand	0.763	947	all-India	0.651	940
Correlation					- 0.291 <sup>13</sup>

Notes: \*Female to Male casual labour wage ratio has been calculated for 66<sup>th</sup> round (2009-10) of NSSO; \*\*Sex ratio (defined as number of females per 1000 males) for the year 2011 has been taken from census, 2011.

However, it can be seen from the table that correlation between female to male casual labour wage ratio and sex ratio is negative. States like Kerala, Tamil Nadu and Andhra Pradesh which were counted as topmost 3 states (out of 28 Indian states) in terms of sex ratio in Census, 2011 figure among the bottom 5 states in terms of female to male wage ratio of casual labours, along with Haryana which had the lowest sex ratio among all 28 Indian states. In fact, in Kerala and Tamil Nadu, female casual labours earn almost half of the male casual labours. On the other hand, the state of Jammu and Kashmir which had 2<sup>nd</sup> lowest sex ratio in 2011 among all 28 Indian states has highest female to male wage ratio. It shows that greater equality between males and females in terms of sex ratio cannot ensure wage equality between them.

**V. CONCLUSION**

The above findings suggest that gender wage differentials have narrowed down between 2004-05 and 2009-10 in some industries/operations. In 2009-10, the least gender wage differential existed in industry 'Electricity, Gas and Water Supply' in urban areas and in operation 'Animal Husbandry' in rural areas. The negative correlation between casual worker's wages and sex ratio of states shows that gender wage gap is not a right indicator of female's economic freedom in a state. Southern states which are well ahead of others in providing equal opportunities to women lag behind in wage gap. Since casual workers are worse off in terms of working conditions than regular wage/salaried employees and there exists a negative impact of their increasing proportion in total persons employed on their wage rate, it provides a reason to control 'casualization of workforce'. So the issues raised at the outset have more or less been addressed. However, there exists a further scope for improvement in the results obtained with utilization of unit level data<sup>14</sup>.

**REFERENCES**

1. Census (2011) - <http://censusindia.gov.in/>
2. Chowdhury, S. (2011) "Employment in India: What Does the Latest Data Show?", Economic and Political Weekly, Vol. XLVI, No.32
3. Esteve-Volart, Berta (2004) "Gender Discrimination and Growth: Theory and Evidence from India", LSE STICERD Research Paper No. DEDPS 42
4. Harilal, K. N. (1989) "Deskilling and Wage Differentials in Construction Industry", Economic and Political Weekly, Vol. 24, No. 24, pp.1347-1352
5. Labour Bureau, Ministry of Labour and Employment, Government of India
6. Mahajan, K. And Ramaswami, B. (2012) "Caste, Female Labor Supply and the Gender Wage Gap in India: Boserup Revisited", paper taken from [www.iza.org/conference\\_files/worldb2012/mahajan\\_k8185.pdf](http://www.iza.org/conference_files/worldb2012/mahajan_k8185.pdf)
7. Mukherjee, Dipa (2007) "Post-reform Trends in Wage-Differentials: A Decomposition Analysis for India", Indian Journal of Labour Economics, Vol.50, No. 4
8. NSSO (2006) - Employment and Unemployment Situation in India: Report No. 515 and Unit Level Records, NSS 61<sup>st</sup> round: July 2004 – June 2005, National Sample Survey Office, Government of India.
9. NSSO (2011) - Employment and Unemployment Situation in India: Report No. 537 and Unit Level Records, NSS 66<sup>th</sup> round: July 2009 – June 2010, National Sample Survey Office, Government of India.
10. RBI - Handbook of Statistics on Indian Economy, <http://www.rbi.org.in/>

<sup>13</sup> Correlation comes out to be - 0.283 if data on sex ratio is taken from NSS 66<sup>th</sup> round report.

<sup>14</sup> Number of words used excluding Tables, Graphs are 2,482.

## APPENDIX

TABLE 7

Operations (Rural Areas)	Wage Ratio* (61st round)	Wage Ratio* (66th round)	Industries (Urban Areas)	Wage Ratio* (61st round)	Wage Ratio* (66th round)
Public Works	0.753	0.876	Agriculture, Forestry & Fishing	0.612	0.683
Ploughing	0.675	0.785	Mining and Quarrying	0.477	0.660
Sowing	0.717	0.640	Manufacturing of textiles etc.	0.595	0.575
Transplanting	0.723	0.714	Manufacturing of metals etc.	0.594	0.610
Weeding	0.714	0.752	Electricity, Gas & Water Supply	0.535	0.898
Harvesting	0.727	0.802	Construction	0.674	0.701
Other Cultivation Activities	0.701	0.762	Trade, Hotels and Restaurant	0.664	0.670
Manual Work (01-06) in Cultivation	0.696	0.750	Transport, Storage etc.	0.477	0.699
Forestry	0.645	0.614	Real Estate, Financial Intermediation etc.	0.355	0.689
Plantation	0.715	0.626	Public Administration etc.	0.688	0.535
Animal Husbandry	0.774	0.922	Non-Agriculture	0.620	0.583
Fisheries	0.453	0.667	All	0.584	0.582
Other Agricultural Activities	0.728				
Manual Work (07-12) in Other Agricultural Activities	0.727	0.667			
Manual Work in Non-Agricultural Activities	0.639				
Non-Manual Work in Cultivation	1.265	0.841			
Non-Manual Work in Other than Cultivation : Agri. & Non-Agri. Activities	0.553	0.740			
Total (14 & 15) Non Manual Work	0.581	0.768			
All in Agriculture excl. Manual Work in Non-Agricultural Activities	0.694	0.745			
Mining of Metal Ores	0.641	0.701			
Manufacture of Food Products and Beverages	0.685	0.682			
Total Mining and Manufacture	0.653	0.695			
All (01-99)	0.635	0.679			

Note: \* It shows female to male casual labour wage ratio

## ISSUES AND PROSPECTS OF FDI IN RETAIL SECTOR IN INDIA

**SADHANA SINGH**  
**RESEARCH SCHOLAR**  
**DEPARTMENT OF COMMERCE**  
**ALIGARH MUSLIM UNIVERSITY**  
**ALIGARH**

**ABSTRACT**

*The Indian retail industry is the fifth largest in the world. Comprising of organized and unorganized sectors Indian retail industry is one of the fastest growing industries in Indian, Indian Retail Industry is one of the sunrise sectors with huge growth potential. According to the Investment Commission of India, the Retail sector is expected to grow almost three times its current levels to \$660 billion by 2015. In this context, the present paper attempts to analyze the issues concerning the influx of foreign direct investment in the Indian retail industry. Moreover, with the latest move of the government to allow FDI in the multi-brand retailing sector, the paper analyzes the reason why foreign retailers are interested in India, the strategies they are adopting to enter India and their prospects in India. The finding of this study point out that FDI in retail would undoubtedly enable India Inc to integrate its economy with that of the global economy. Thus, as a matter of fact FDI in the buzzing Indian retail sector should not just be freely allowed but should be significantly encouraged. It analyses the reasons why foreign retailers are interested in India and their prospects in India and also find out the suggestions for the future growth of the retail industry.*

**KEYWORDS**

organized retail, retail, economic growth, sunrise sector, foreign direct investment, issues and prospects.

**INTRODUCTION**

The Indian retail industry is the fifth largest in the world. Retailing in India is one of the pillars of its economy and accounts for 14 to 15 percent of its GDP. The Indian retail market is estimated to be US\$ 450 billion and one of the top five retail markets in the world by economic value. India is one of the fastest growing retail markets in the world, with 1.2 billion people. Until 2011, Indian central government denied foreign direct investment (FDI) in single and multi brand retail, forbidding foreign groups from any ownership in supermarkets, convenience stores or any retail outlets. Even single brand retail was limited to 51 percent ownership and a bureaucratic process. Companies are likely to combine expansion with innovative measures as they look to ensure profitability in difficult times. One such initiative includes assessing the prospects of foreign players in this sector through foreign direct investment.

In November 2011, India's central government announced retail reforms for both multi brand stores and single brand stores. These market reforms paved the way for retail innovation and competition with multi brand retailers such as Wal-Mart, as well single brand majors such as IKEA.

In December 2011, under pressure from the opposition, Indian government placed the retail reforms on hold till it reaches a consensus.

In January 2012, India approved reforms for single brand stores welcoming anyone in the world to innovate in Indian retail market with 100% ownership, but imposed the requirement that the single brand retailer source 30 percent of its good from India. Indian government continues the hold on retail reforms for multi brand stores. In June 2012, IKEA announced it has applied for permission to invest \$1.9 billion in India and set out 25 retail stores.

On September 2012, the government of India announced the opening of FDI in multi-brand retail, subject to approvals by individual states. This decision has been welcomed by economists and the markets, however has caused protests and an upheaval in India's central government's political coalition structure. On 20 September 2012, the Government of India formally notified the FDI reforms for single and multi brand retail, thereby making it effective under Indian law. FDI inflow to the retail sector in the 20 largest developing countries. In this context, the present paper attempts to analyze the strategic issues concerning the influx of foreign direct investment in the Indian retail industry.

On 7 December 2012, the federal government of India allowed 51% FDI in multi-brand retail in India. The government managed to get the approval of multi-brand retail in the parliament despite heavy uproar from the opposition. Some states will allow foreign supermarkets like Wal-Mart, Tesco and Carrefour to open while other states will not.

**REVIEW OF LITERATURE**

**Dornbusch and Park (1995)** observe that foreign investors pursue a positive feedback strategy, which markets stocks to overreact to change in fundamentals.

**Borensztein et al (1998)** examine absorptive capacity of recipient country, which is measured by stock of human capital required for technological progress, it take place through 'capital is Deeping' associated with new capital goods brought into an economy by FDI.

**Kumar and Ritankar (2007)** in their work made an attempt to study the foreign direct investment in India with a special focus on the retail trade. This paper uses the augment that FDI is allowed in multiple sector and the effects have been quite good without harming the domestic economy.

**Rupali gupta (2012)** conclude that there will be initial and desirable displacement of middleman involved in the supply chain of farm produce.

**OBJECTIVES**

1. To analyze the impact of FDI on retail sector.
2. To understand the evolution of retail sector in India
3. To study the growth of Indian retail sector
4. To study the issues and prospects of FDI in retail sector in India.

**RESEARCH METHODOLOGY**

The study is based on secondary sources of data. The main source of data is various journals websites newspapers books government publications etc.

**MEANING OF RETAILING**

The word 'retail' is derived from the French word *retailier*, meaning 'to cut a piece of' or 'to break bulk'. The distribution of finished products begins with the producer and ends at the ultimate consumer. Between the two of them there is a middle person-the retailer.

Retailing is defined as a set of activities or steps used to sell a product or a service to consumers for their personal or family use. This is divided in two parts:

1. Organized retailing
2. Unorganized retailing

**ORGANIZED RETAILING:** organized retailing, in India, refers to trading activities undertaken by licensed retailers, that is, those who are registered for sales tax, income tax, etc. These include the publicly traded supermarkets, corporate-backed hypermarkets and retail chains, and also the privately owned large retail businesses.

**UNORGANIZED RETAILING:** unorganized retailing, on the other hand, refer to the traditional formats of low-cost retailing, for example, the local corner shops, owner manned general stores, paan/beedi shops, convenience stores, hand cart and pavement vendors, etc.

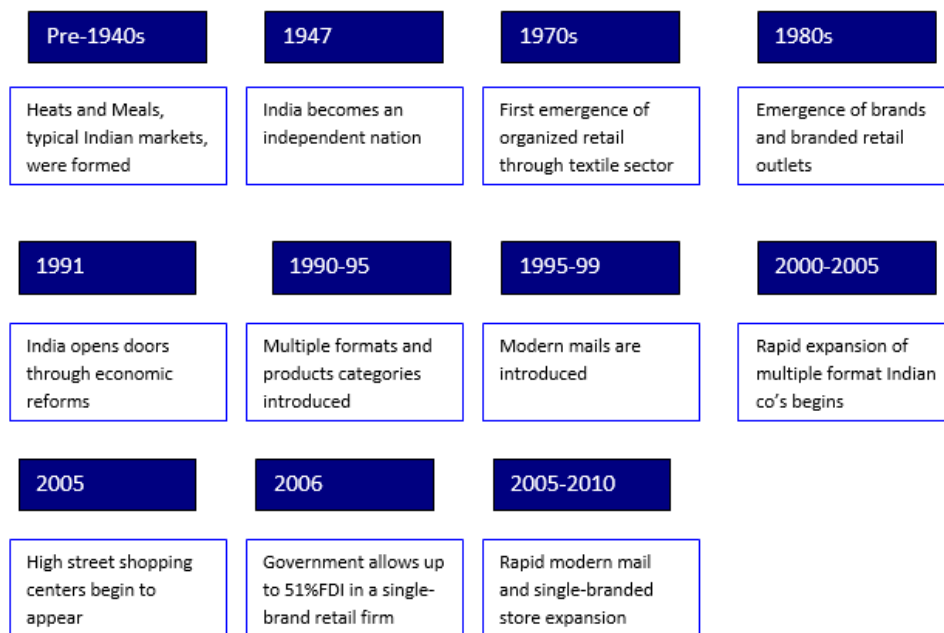
Organized retailing was absent in most rural and small town of India in 2010. Supermarkets and similar organized retail accounted for just 4% of the market.

## RETAIL SECTOR IN INDIA: AN OVERVIEW

The world 'Retailing refers to any activity that involves the indirect sale to an individual customer or end user. Retailing has been the most active and attractive sector of the last decade. Indian Retail industry is ranked among the largest retail market in the world. Retail is India's largest industry for over 10 percent of the country's GDP and around eight percent of the employment. It is one of the most dynamic and fast pacing industries with several players entering the market not only in India but all over the world. Retail is clearly the sector that is poised to show the highest growth in next five years "Most predictions say that the sector might reach to US\$ 400- 600 billion by the year 2010."

### TIMELINE OF RETAILING IN INDIA

FIG. 1

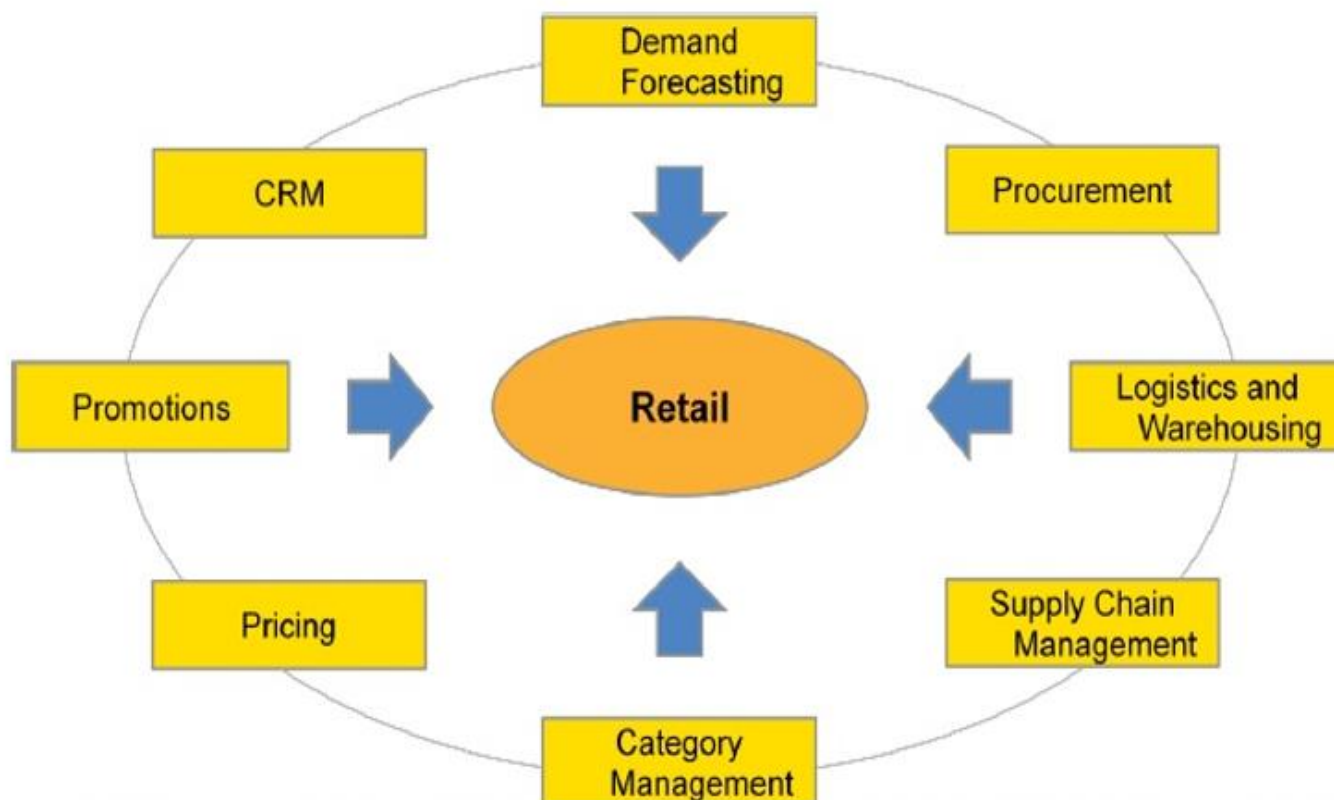


The retail industry is divided into organized and unorganized sectors. Organized retailing refers to trading activities undertaken by licensed retailer, that is, those who are registered for sales TAX, Income Tax, Income Tax etc. These include the corporate- backed hypermarkets and retail chains, and also the privately come, owned large retail businesses unorganized retailing, on the other hand, refers to the traditional formats of low-cost retailing, for examples the local kirana shope, Owner CRM website) [3] Due to limitation we can measure only the organized retail sector.

### RETAIL FUNCTION

The following illustration gives an overview of the retail function.

FIG. 2

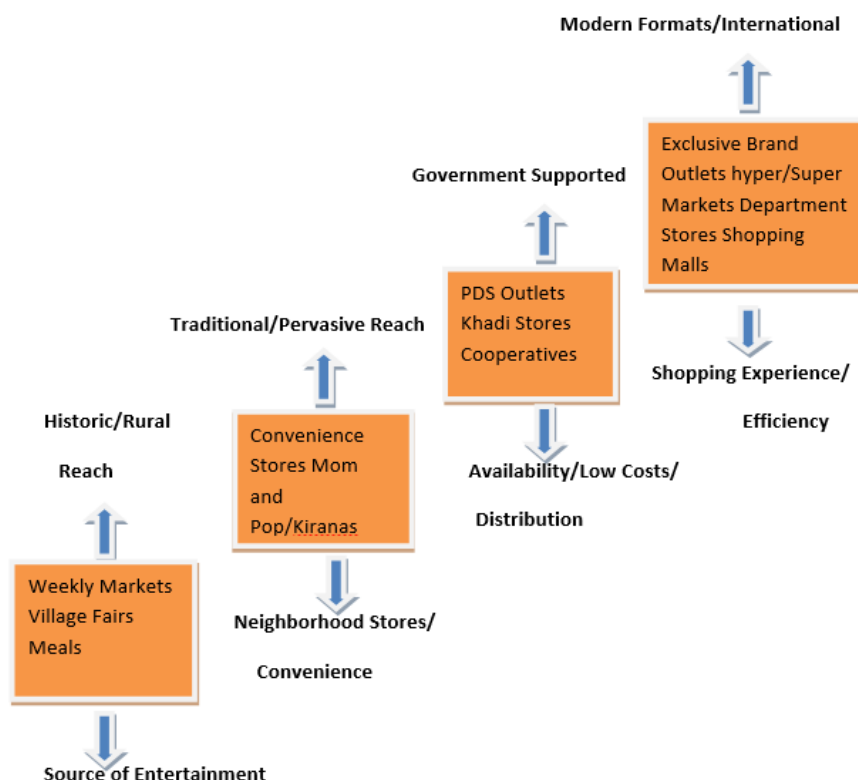




## EVOLUTION OF RETAILING

History of retailing is very old. Small retailing plays a key role in the nation's economy. Generally, most of the retailers are small-one man or proprietary stores. Retailing is a dynamic form of marketing. In some developed countries one-man or small stores are disappearing and have been replaced by other forms such as department and discount stores and they are found in abundance in urban markets. But in India such stores are sometimes found in urban areas only. In rural areas, only general stores are existing in India. Most of the retailers in Indian suburban and rural markets are of the form of general stores. For explaining the continuous evolution in retailing, several theories have been proposed, including the wheel of retailing and life cycle.

FIG. 3



Source: Technopak Research

## FDI IN RETAIL SECTOR

FDI can be a powerful catalyst to spur competition in the retail industry, due to the current scenario of low competition. Permitting foreign investment in food-based retailing is likely to ensure adequate flow of capital into the country, & its productive use in a manner likely to promote the welfare of all sections of society, particularly farmers and consumer. It would also help bring about improvements in farmer's income & agriculture growth and assist in lowering consumer prices inflation 10 apart from this, by allowing FDI in retail trade, India will significantly flourish in terms of quality standards and consumer expectations, since the inflow of FDI in retail sector is bound to pull up the quality standards and cost-competitiveness of Indian producers in all the segments. It is obvious that we should not only permit but encourage FDI in retail trade.

Indian council of research in International Economic Relations (ICRIER) has projected the worth of Indian retail sector to reach \$496 billion by 2011-12 and ICRIER has also come to the conclusion that investment of 'big' money (large corporate and FDI) in the retail sector would in the long run not harm interests of small traditional retailers.

The Economic survey of 2010-11 mentioned that phased opening of FDI in multi-brand retail is likely to benefit the consumer, but did not state the exact benefits. In July 2011, a committee of secretaries (CoS) had cleared the proposal to allow up to 51% FDI in multi-brand retail, which has been approved by the Union Cabinet in November 2011, albeit with a few riders to set up the supply chain and reduce inflation. The union cabinet has also approved increasing the FDI limit in single brand retail to 100% with government approval.

As a part of Economic Liberalization process set in place by the industrial policy of 1991, the government of Indian opened up the Retail sectors to FDI through a series of effect:

TABLE 1

1995	World Trade Organization's General Agreement on Trade in Services, which includes both wholesale and retailing services, came into effect.
1997	FDI in cash and carry (wholesale) with 100% right allowed under government approval route.
2006	FDI in cash and carry (wholesale) brought under the automatic route. Up to 51% investment in a single brand retail permitted, subject to press Note 3 (2006 Series)
2011	100% FDI in single brand retail permitted.
2012	51% FDI in multi- brand retail permitted.

## GROWTH OF INDIAN RETAIL INDUSTRY IN INDIA

1. According to the tenth report of GRDI of AT Kearney, India is having a very favorable retail environment and it is placed at 4<sup>th</sup> spot in the GRDI. The main reason behind that is the 9% real GDP growth in 2010, forecasted yearly growth of 8.7% through 2016, high saving and investment rate and increased consumer spending.
2. According to department of industry Policy and Promotion Cumulative, FDI inflows in single brand retail trading stood at US\$ 44.45 million during April 2000 to September 2011.
3. According to the 8<sup>th</sup> Annual Global Retail Development Index of A T Kearney, India retail industry is the most promising emerging market for investment. In 2007, the retail trade in India had a share of 8-10% in the GDP of the country. In 2009, it rose to 12%, 22% in 2010 and is expected to reach 35% by 2011-12.

4. According to the ICRIER report, the retail business in India is estimated to grow at 13% from \$322 billion in 2006-07 to \$590 billion in 2011-12. The unorganized retail sector expected to grow at about 10% per annum with sales expected to rise from \$309 billion in 2006-07 to \$496 billion in 2011-12.

### MAJOR ISSUES ON FDI IN RETAIL SECTOR

1. FDI up to 51% only through government approval mode.
2. Retail sales outlets may be set up only in cities with a population of more than 10 lakh as per 2011 census and may also cover an area of 10 kms around the urban agglomeration limits of such cities.
3. Mandatory sourcing of a minimum of 30% from Indian small industries with a total investment in plant and machinery not exceeding US \$ 1 million
4. Expected gains from FDI in retail from stakeholders:

#### \*FARMERS

- a) FDI in retail will encourage direct procurement from farmer to enable them secure higher price.
- b) At least 50% of total FDI brought in shall be invested in 'backend infrastructure' which will largely be in villages.

#### \*RURAL YOUTH

- a) Imparting necessary skill sets in a whole new range of activities.
- b) Employment opportunities in front end stores for manning the counters.

#### \*CONSUMER

- a) Lower prices and more choice for consumers.
- b) Strengthening of supply chain infrastructure for all products ranging from storage to processing and manufacturing infrastructure.

#### \*SMALL INDUSTRY

- a) Fillip to local value addition and domestic manufacturing by SMEs.
- b) Technology up gradation of SMEs.

#### \*SMALL RETAILER

- a) The entry of FDI into the sector will also incentivize existing traders and retail outlets to upgrade and become more efficient, thereby providing better services to the consumers as also better remuneration to the producers from whom they source their products.
- b) Opportunity of sourcing high quality produce at low price from wholesale cash and carry point.

### FUTURE PROSPECTS OF FDI IN RETAIL SECTOR IN INDIA

India has been ranked as the third most attractive nation for retail among 30 emerging markets by the US-based global management consulting firm. AT Kearney's study on Global Retailing Trends Found that India is the least competitive as well as least saturated of major Global markets. The report further stated that Global Retailer such as Wal-Mart, Carrefour, Tesco and Casino would take advantage of more favorable FDI rules that are likely to be introduced in India.

- the world's second largest retailer, has opened its first cash and carry store in India in New Delhi.
- Jewellery retail store chain Tanishq plan to open 15 new retail stores in various parts of the country in the 2011-12 fiscal.
- future value retail, a future group venture, will take its hypermarket chain Big Bazaar to smaller cities of Andhra Pradesh, with an investment of around US\$ 1.54 million to US\$ 4.41 million depending on the size and format.

### CONCLUSION

The performance of foreign direct investment till date round about the satisfactory level barring the certain issues and prospects. Today we have more than \$303.48 billion as a foreign exchange reserves and above foreign debts are around about \$297.5 billion which we can further improves though export promotions for foreign investors. It has been observed from the above analysis that FDI approval given by the government will benefit almost all the sectors of the economy. There are some people who are trying to mislead people for their own benefit and are opposing the entry of foreign retailers into India. FDI in retail sector not benefit the society but also helps in the economic growth of the country. The India retail industry is gradually incing its way towards becoming the next boom industry. Allowing FDI may not be as bad as some of us feel. But the policy must be well drafted for which a country wide perceptual study of the stakeholders of retailing is solicited.

### REFERENCES

1. Bisaria Gaurav, "Foreign Direct Investment in Retail in India", International journal of Engineering and Management RESEARCH, Vol. 2, Issue-1, Jan 2012 ISSN No.:2250-0758 Pages:31-36.
2. Chetan bajaj, Rajnish tuli and Nidhi varma, "Retail Management" second edition New Delhi. Page no. 2-3
3. David Gilbert, Retail Marketing Management, Prentice, second Edition, 2003.
4. Hariharan.G. (2008), "Profile and perception of retail consumers" Indian journal of Marketing, Vol.XXXVIII, No.2.
5. "ICRIER Begins Survey of Indian retail sector" the Economist 29 may 2008.
6. IJMMR Volume 1, Issue 1 (December,2010) ISSN-2229-6883
7. "Indian again tops global retail index."22/07/2007
8. "Indian Retail Forum 2008"
9. Kearney, A.T,8<sup>th</sup> Annual Global Retail Development index(GRDI).
10. Kothari.C. R, Research Methodology, New Age Limited, Second Edition, 2004.
11. Kumar and Ritankar (2007) "India puts retails reforms on hold" in indian journal.
12. Laxmi Prabha.G.(2007), "The Prospects and problems of Indian retailing", Indian journal of Marketing, Vol.XXXVII, No.10.
13. Mukherjee, A. and Nitisha patel (2005), "FDI in retail Sector India", Academic Foundation, New Delhi,
14. Pillai & Bagavathi, Marketing management, New Delhi, sultan chand & sons, 1999.
15. Rupali gupta (2011) the Indian journal of management
16. S.L. Gupta, "Retail Management: An Indian Perspective text & Cases" in Wisdom Publication, New Delhi second edition 2011, page no.3
17. SANNAM S4 market entry simplified Foreign Direct Investment in India's Single and multi brand retail in October 2012.

#### WEBSITES

18. <http://toostep.com/debate/fdi-in-fashion-industry>, FDI in Fashion Industry, last visited 20<sup>th</sup> Sept. 2010
19. <http://business.mapsofindia.com/fipb/forms-foreign-capital-flowing.html>, last visited 14<sup>th</sup> Oct.2010.
20. <http://business.rediff.com>
21. [www.businessstandard.com](http://www.businessstandard.com)
22. [www.indiaretailnews.com](http://www.indiaretailnews.com).
23. [www.retailing.com](http://www.retailing.com) "definition of retail
24. [www.scribd.com/doc/36152252/roshan-synopsis-crm](http://www.scribd.com/doc/36152252/roshan-synopsis-crm)
25. [www.wikipedia.com](http://www.wikipedia.com)

**IMPACT OF FOREIGN DIRECT INVESTMENT (FDI) ON ECONOMIC GROWTH**

**CHIRANJEEV RANGA**  
**STUDENT**  
**MAHARISHI DAYANAND UNIVERSITY**  
**ROHTAK**

**ABSTRACT**

*India is the fastest growing economy in the world. India is ranked 3<sup>rd</sup> in the destination for the inbound investment. FDI is the monetary source for economy development and foreign company invest in India to take the benefits of cheaper wages and change the business environment of India economic liberalisation. In Indian economy reform program, policy and procedure and transfer of technology is allowed freely in all the sectors including only service sector except where sectorial ceiling's. FDI is the safest way for the international capital flow out of the available resource of the external finance is available to them. This FDI policy is utilise in enhancing the domestic production, saving and exports through the equitable distribution of the investment. This research paper examines the impact or the role of FDI in Indian economy.*

**KEYWORDS**

FDI, economic growth.

**INTRODUCTION**

Foreign Direct Investment is the flow of the capital at international level and the allocation of capital across the countries. FDI flow their capital developed countries to developing countries and the investors will bring the scarce capital and superior technology and new industries and also in the production, assets or employment of the industries. This also assists human capital formulation and contributes to international integration by promoting exports. It also increases the productivity and competitiveness and improves the efficiency of resources. FDI also did the financial collaboration through the joint venture and technical collaboration. In India FDI open the economy and allowed the MNCs in core sector like Power and fuels, Electric equipment's, transportation, chemicals, food processing, metallurgical, drugs and pharmaceuticals, textile and industries. In current period FDI allows in different sectors like telecommunication, banking and insurance sector, hotel and tourism. There are 15 sectors of India in which FDI can invest by taking the government approval and without approval of the government. FDI help India in the growth of the economy with help of industries and private enterprise. In India there is a possibility of acquiring the 100% ownership in telecommunication and there is FDI in E-commerce is as soon as. FDI will give the relaxation to some sectors like retail, multi brand retail, power, assets reconstruction and credit information while investing in these sectors they will take the permission from the FIPB (Foreign Investment Promotion Board).

**OBJECTIVE OF FDI**

Objective of FDI is promoting the foreign investment in order to supplement domestic capital, technology and skills, for accelerated economic growth. FDI also bring the latest and modern technology in India and also improve the infrastructure and creating competitive market. Indian Government will get the transparency in good and supply chain management system. FDI also open in retail sector which can be the solution for food inflation which has been confounding policy makers. FDI also improve the supply chain, customer satisfaction, technology and logistics, provide better employment opportunities.

**FOREIGN DIRECT INVESTMENT IN INDIAN ECONOMY**

India allowed the foreign direct investment in 1997 in cash and carry wholesale with the approval of government and after this the government will give the approval for the automatic approval in 2006. After this approval India signs the 94 proposals in year 2006 to 2010 out of which 57 proposals are accepted and implemented. In the year 2007 growth of Indian economy is measured 8% but it is predicted 7.9% for 2008. After this session of 2006 to 2010 Indian economy will take u turn and having innovation and organize the competition in retail industries from a report estimates the 2011 retail market of India generate sales of about \$470 billion a year, of which a minuscule \$27 billion comes from organized retail such as supermarkets, chain stores with centralized operations and shops in malls. The opening of retail industry to free market competition, some claim will enable rapid growth in retail sector of Indian economy. The growth of Indian retail industry will take time, with organized retail possibly needing a decade to grow to a 25% share. A 25% market share, given the expected growth of Indian retail industry through 2021, is estimated to be over \$250 billion a year.

**CHANGES ACCORDING TO YEAR IN INDIAN ECONOMY WITH HELP OF FDI**

In 2010, intermediaries and middlemen of India have dominated the value chain. Number of intermediaries involved in the traditional Indian retail chain, norms are flouted and pricing lacks transparency. Small Indian farmers realize only 1/3rd of the total price paid by the final Indian consumer, as against 2/3rd by farmers in nations with a higher share of organized retail. The 60% plus margins for middlemen and traditional retail shops have limited growth and prevented innovation in Indian retail industry. India has had years of debate and discussions on the risks and prudence of allowing innovation and competition within its retail industry. Numerous economists repeatedly recommended to the Government of India that legal restrictions on organized retail must be removed, and the retail industry in India must be opened to competition. In 2011, India had prevented innovation and organized competition in its consumer retail industry. Several studies claim that the lack of infrastructure and competitive retail industry is a key cause of India's persistently high inflation. Furthermore, because of unorganized retail, in a nation where malnutrition remains a serious problem, food waste is rife. Well over 30% of food staples and perishable goods produced in India spoil because poor infrastructure and small retail outlets prevent hygienic storage and movement of the goods from the farmer to the consumer.

One report estimates the 2011 Indian retail market as generating sales of about \$470 billion a year, of which a minuscule \$27 billion comes from organized retail such as supermarkets, chain stores with centralized operations and shops in malls. The opening of retail industry to free market competition, some claim will enable rapid growth in retail sector of Indian economy. Others believe the growth of Indian retail industry will take time, with organized retail possibly needing a decade to grow to a 25% share. A 25% market share, given the expected growth of Indian retail industry through 2021, is estimated to be over \$250 billion a year. The Economist forecasts that Indian retail will nearly double in economic value, expanding by about \$400 billion by 2020. The projected increase alone is equivalent to the current retail market size of France.

In 2011, food accounted for 70% of Indian retail, but was under-represented by organized retail. It was estimated that India organized retail had a 31% share in clothing, while the home supplies retail was growing between 20% to 30% per year.

The inflow of FDI in India is decline in 2012 from 31.5 billion to 27 billion because there will be a weakening in the macroeconomic environment slow growth rate and fall in GDP of India. After this India allowed the inflow FDI in retail sector up to 51% and raised the FDI in aviation and power trading exchange. After this 2012 the FDI is increasing in 2013 and 2014 that FDI recovery is on bumpy road while FDI in developing countries remained silent, more investment in sector that contributes to creation and enhances local productivity capacity is still badly needed. In 2013 the flow of FDI is increased by 17% to 28% which is unexpected. India is ranked 16 from among the 20 global countries in economics.

In 2013 flow of FDI is increase 17% which is unexpected flow in the middle of the year and India will rank 16<sup>th</sup> out of the 20 global economics country which receives the FDI. FDI flows to developing economies reached a new high of 759 billion dollars, accounting for 52 per cent, during the year.

Developed countries, however, remained at an historical low (39 per cent) for the second consecutive year. FDI inflows to developed countries increased by 12 per cent to USD 576 billion, the BRICS - Brazil, Russian Federation, India, China and South Africa - continued to be strong performers in attracting FDI. Their current share of global FDI flows at 22 per cent is twice that of their pre-crisis level. Total inflows to the five leading emerging economies reached 322 billion dollars in 2013, 21 per cent higher than in 2012.

In 2014 government increase the flow of FDI from 26% to 49% in insurance sector and also launch the Make in India project by this project 25 sectors will open for the flow of FDI. India was rank 15<sup>th</sup> in the world in 2013 in the term of FDI Flow and after this it will be rose up to 9<sup>th</sup> position in the 2014 and in 2015 it become top destination for the foreign Direct Investment.

In previous year 2015 there will be given a good impact on the Indian economy by using some policies for the purpose of investment in India and it will invest by taking the permission from FIPB (Foreign Investment Promotion Board) and it will be helpful in the growth of the Indian economy. In these Sectors FDI will done their investment:

## INVESTMENT IN DIFFERENT SECTORS IN INDIA

TABLE 1

SR. No	Sector / Activity	% Foreign Direct Investment (FDI), Foreign Institution Investor(FII), Foreign Portfolio Investment(FIP)	Route
1	Agriculture and animal husbandry	100%	Automatic
2	Tea Plantation	100%	Government
3	Mining & Natural Gas A. (Mining and Exploration of metal and non-metal ores, Coal & Lignite) B. Mining and mineral separation of titanium bearing mineral ore	100% 100%	Automatic Government
4	Petroleum and Natural Gas A. Petroleum refining by the public sector undertaking	100% 49%	Automatic Automatic
5	Defence Industry (license under the industries development & regulation Act 1951)	49%	Government route up to 49%.
6	Broadcasting: A) Broadcasting Carriage Services 1. Broadcasting carriage service (Teleports, Direct to Home s, Cable Network, Mobile TV, Handed in the Sky Broadcasting services) 2. Cable Networks B) Broadcasting content services 1. Terrestrial Broadcasting FM (FM Radio) 2. Up-Linking of News & Current Affairs TV Channel 3. Up-Linking of Non-News & Current Affairs TV Channel /Down Linking Of TV Channels	74% 49% 26% 26% 100%	Automatic up to 49% Government beyond 49% up to 74% Automatic Government Government Government
7	Print Media	26%	Government
8	Airports Air Transport Services	100% 49%	Automatic Automatic
9	Civil Aviation Sector	74%	Automatic up to 49% Government Beyond 49% up to 74%
10	Courier Service	100%	Automatic
11	Construction Development (Township, Housing, Built-up Infrastructure)	100%	Automatic
12	Industrial Park-new and existing	100%	Automatic
13	Satellite- establishment and operation	74%	Government
14	Private Security agency	49%	Government
15	Telecom Services	100%	Automatic up to 49% Government beyond 49%
16	Trading	100%	Automatic
17	E-Commerce	100%	Automatic
18	Single Brand product retail trading	100%	Automatic up to 49 % Government route beyond 49%
19	Multi Brand Retail Trading	51%	Government
20	Railway Infrastructure	100%	Automatic
21	Assets Reconstruction Company	100% Of paid up capital of ARC	Automatic Route up to 49% and beyond 49 % government
22	Banking and private sector  Banking and public sector	74% including investment by FIIs/FIPs 20% (FDI and Portfolio Investment)	Automatic up to 49% and beyond 49% up to 74% government Government
23	Commodity Exchange	49% FII/FPI	Automatic
24	Credit Information company	74% (FDI+FII/FPI)	Automatic
25	Infrastructure Company in Security market	49% (FDI+FII/FPI)	Automatic
26	Insurance	49% (FDI+FPI(FII+QFI+NRI+DRI+FVCI))	Automatic up to 26% Government beyond 26% up to 49%
27	NBFC (Non-Banking Finance Companies) (Merchant Banking, stock broking, venture capital, Asset Management, factoring, custodian Services)	100%	Automatic
28	Pharmaceuticals A. Green Field B. Brown Field	100% 100%	Automatic Government
29	Power Exchanges	49% (FDI+FII/FPI)	Automatic

This table data is taken from Foreign Direct Investment (FDI) Circular 2015. In this I have mentioned the route by which Foreign Direct Investment (FDI) will enter in these sectors of India. By automatic route in this automatic route foreign direct investment can invest in India directly by taking the permission from Foreign Investment Promotion Board (FIPB). Investment through government route is done with permission of government.

## CONCLUSION

In India FDI Also face some of the challenges in India regarding the resources, political, federal and equity challenges. India focus on the poverty reduction, trade liberalization, banking and insurance liberalization. In this 21st century we can't ignore the universal trends. Co-operation is the main for the success. FDI would lead to a more comprehensive integration of India into the world market where India can also make a strong position in global market by exporting their quality products and services. While FDI in India has been opposed by several in the past citing fears of loss of employment, adverse impact on traditional retail and rise in imports from cheaper sources like China, adherents of the same indicate increased transfer of technology, enhanced supply chain efficiencies and increased employment opportunities as the perceived benefits. Considering the inflation rise and economic recession in India, FDI looks like something that it provides relief to the Indian economy.

## REFERENCES

1. [www.economicstimes.com](http://www.economicstimes.com)
2. [www.makeinindia.com](http://www.makeinindia.com)

## **REQUEST FOR FEEDBACK**

**Dear Readers**

At the very outset, International Journal of Research in Commerce, Economics & 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](mailto: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](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 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*

