

# INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

IJR  
CM



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

*Indexed & Listed at:*

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

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

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

Circulated all over the world & Google has verified that scholars of more than 2501 Cities in 159 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.	FORECASTING OF ELECTRICITY DEMAND USING SARIMA AND FEED FORWARD NEURAL NETWORK MODELS CHANDRABHUSHAN KESAVABHOTLA, DR. V. V. HARAGOPAL & DR. A. VINAY BABU	1
2.	FINANCIAL LITERACY FOR SUSTAINABILITY: A STUDY ON RURAL INDIANS WITH SPECIAL REFERENCE TO KARNATAKA ANAND.M.B & DR. SREENIVAS D L	7
3.	EMPLOYEES PERCEPTION TOWARDS COMPETENCY MAPPING PRACTICES IN INSURANCE SECTOR : AN EMPIRICAL STUDY DR. D. S. CHAUBEY, NIDHI MAITHEL & VISHAL GUPTA	12
4.	SIMULATION BASED PERFORMANCE ANALYSIS OF TCP VARIANTS HITESH N. PARVADIYA, KETAN B. SHETH & RAHUL D. MEHTA	19
5.	PERSONALIZED TERRITORIES ARE APPARENT COPING AGENT FOR STRESS AMONG CORPORATE EMPLOYEES: AN EMPIRICAL INVESTIGATION OF CORPORATE WORKSTATIONS WITH REGIONAL CONTEXT L.SAIKALA & A.SELVARANI	23
6.	WORLD TOURISM SCENARIO AND CONTRIBUTION OF TOP 15 COUNTRIES IN INDIA'S FTA DR. JASBIR SINGH	28
7.	COLOR IMAGE SEGMENTATION USING IMPROVED HISTOGRAM BASED CLUSTERING AND QUADTREE DECOMPOSITION TECHNIQUE SANGEETHA T.S, JAYALAKSHMI N & RAJKUMAR NALLAMUTHU	39
8.	EVALUATING SMALL AND MEDIUM SCALE INDUSTRIAL DEVELOPMENT THROUGH INDUSTRIAL ESTATES OF DIFFERENT DISTRICTS AND DIVISIONS OF BANGLADESH ABDUL LATIF & KHANDAKER DAHIRUL ISLAM	42
9.	A STUDY ON CONSEQUENCES OF CRM IN PRIVATE BANKS N.RAJASEKARAN & DR. T. VANNIARAJAN	47
10.	REDRESSAL AND SETTLEMENT OF EMPLOYEES GRIEVANCES - A STUDY OF SELECTED INDUSTRIAL UNITS DR. SUPRIYA CHOUDHARY	53
11.	STRESS AMONG FACULTY IN ENGINEERING AND ARTS COLLEGES IN NAMAKKAL DISTRICT -EMPIRICAL STUDY DR. S. RAJARAJESWARI	58
12.	AN EMBEDDED CORPORATE SOCIAL RESPONSIBILITY MATRIX: A WAY AHEAD FOR SUSTAINABLE AND EQUITABLE BENEFIT FOR THE FIRM AND THE SOCIETY M JOTHI & DR. S P MATHIRAJ	62
13.	AN APPROACH TOWARDS RELATIONAL WEB MINING WITH CORRESPONDENCE OF LINK BREAKDOWN STRUCTURE SM SARAVANAKUMAR & R SHANMUGAVADIVU	69
14.	A STUDY ON FACTORS AFFECTING THE RISK PERCEPTION OF MUTUAL FUND INVESTORS DR. NIDHI WALIA & RAVINDER KUMAR	75
15.	PERCEPTIONS OF EFFECTIVE TEACHING PRACTICES AND INSTRUCTORS' CHARACTERISTICS IN TEACHING AT UNIVERSITIES DR. BIRHANU MOGES ALEMU	79
16.	A STUDY ON EMPLOYEE ABSENTEEISM IN INFO SCIENCE LTD. AKKUPALLI ANJANAIAH	87
17.	CALENDAR ANOMALY IN CNX-AUTO, BANK AND FMCG INDEX FOR THE PERIOD OF JANUARY 2004 TO MARCH 2013 SHAILAJA P. YADAV	100
18.	EMPLOYEES' AWARENESS TOWARDS TNSTC LIMITED, VILLUPURAM REGION DR. M. RAJARAJAN & S.ANANDARAJAN	109
19.	THE CHANGING FACE OF RISK MANAGEMENT IN INDIAN COMMERCIAL BANKS ASHA SINGH & DR. POONAM GUPTA	113
20.	ESTIMATION OF ENERGY CONSUMPTION IN GRID BASED WIRELESS SENSOR NETWORKS REECHA SOOD	117
21.	EXPERIMENTAL INVESTIGATION ABOUT INFLUENCES OF PROCESSING PARAMETERS IN PLASTIC EXTRUSION PROCESS SISAY G. WOLDEAREGAY, ACHAMYELEH A. KASSIE, M. NARASIMHA & R. REJI KUMAR	121
22.	A STUDY ON CUSTOMERS PERCEPTION TOWARDS DTH SERVICES R. SRIKANTH & V. PANNAGA	129
23.	CUSTOMER SATISFACTION AND ELECTRONIC BANKING SERVICE ON SOME SELECTED BANKS OF ETHIOPIA PHILIPPOS LAMORE BAMBORE	133
24.	INTERNET SURFING AMONG THE STUDENTS OF ASSAM UNIVERSITY, SILCHAR DR. CHONGTHAM BEDA DEVI	139
25.	AN ASCERTAINMENT OF EMPIRICAL AND THEORETICAL SACREDNESS OF SOCIAL SAFETY AND SECURITY OF READYMADE GARMENT WORKERS IN BANGLADESH: A THRIVING COUNTRY NOUMENON ABU ZAFAR AHMED MUKUL, MOHAMMAD TANJIMUL ISLAM & ABDULLAH ISHAK KHAN	146
26.	BRAND SALIENCE AND BRAND ASSOCIATION, A TOOL TO GAIN TOURIST DESTINATION REVISITATION: DMO's PERSPECTIVE ASHAQ HUSSAIN NAJAR & PRIYA SINGH	154
27.	ROLE OF EFFECTIVE LEADERSHIP ON INTERNET BUSINESS MODELS OF RELIANCE LIFE INSURANCE IN INDIA SUBHRANSU SEKHAR JENA	157
28.	THE PRACTICE OF TEACHERS PEDAGOGICAL SKILLS IMPROVEMENT PROGRAM AT ADAMA SCIENCE AND TECHNOLOGY UNIVERSITY FEKADU CHERINET ABIE	163
29.	THE IMPACT OF FIVE FACTOR MODEL OF PERSONALITY ON ORGANIZATIONAL CITIZENSHIP BEHAVIOR OF NON-MANAGERIAL EMPLOYEES IN THE BANKING SECTOR IN SRI LANKA U.W.M.R. SAMPATH KAPPAGODA	168
30.	CORPORATE SOCIAL RESPONSIBILITY IN BANKING INSTITUTIONS IN RELATION TO CLIENT SATISFACTION AND COMPETITIVE ADVANTAGE: A CASE OF COMMERCIAL BANKS IN CHUKA LENITY KANANU M., RAEI MWIRIGI & JOHN NJOROGI	174
	<b>REQUEST FOR FEEDBACK</b>	182

**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. SAMBHAV GARG**

Faculty, Shree Ram Institute of Business &amp; Management, Urjani

**ADVISORS****DR. PRIYA RANJAN TRIVEDI**

Chancellor, The Global Open University, Nagaland

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

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

**PROF. 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

**EDITORIAL ADVISORY BOARD****DR. RAJESH MODI**

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

**PROF. PARVEEN KUMAR**

Director, M.C.A., Meerut Institute of Engineering &amp; Technology, Meerut, U. P.

**PROF. H. R. SHARMA**

Director, Chhatrapati Shivaji Institute of Technology, Durg, C.G.

**PROF. MANOHAR LAL**

Director &amp; Chairman, School of Information &amp; Computer Sciences, I.G.N.O.U., New Delhi

**PROF. ANIL K. SAINI**

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

**PROF. R. K. CHOUDHARY**

Director, Asia Pacific Institute of Information Technology, Panipat

**DR. ASHWANI KUSH**

Head, Computer Science, University College, Kurukshetra University, Kurukshetra

**DR. BHARAT BHUSHAN**

Head, Department of Computer Science & Applications, Guru Nanak Khalsa College, Yamunanagar

**DR. VIJAYPAL SINGH DHAKA**

Dean (Academics), Rajasthan Institute of Engineering & Technology, Jaipur

**DR. SAMBHAVNA**

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

**DR. MOHINDER CHAND**

Associate Professor, Kurukshetra University, Kurukshetra

**DR. MOHENDER KUMAR GUPTA**

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

**DR. SAMBHAV GARG**

Faculty, Shree Ram Institute of Business & Management, Urjani

**DR. SHIVAKUMAR DEENE**

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

**DR. BHAVET**

Faculty, Shree Ram Institute of Business & Management, Urjani

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

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

**PROF. NAWAB ALI KHAN**

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

**ASHISH CHOPRA**

Sr. Lecturer, Doon Valley Institute of Engineering & Technology, Karnal

**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; Econometrics; Applied Economics; Development Economics; Business Economics; Monetary Policy; Public Policy Economics; Real Estate; Regional Economics; Political Science; Continuing Education; Labour Welfare; Philosophy; Psychology; Sociology; Tax Accounting; Advertising & Promotion Management; Management Information Systems (MIS); Business Law; Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labour Relations & Human Resource Management; Marketing Research; Marketing Theory & Applications; Non-Profit Organizations; Office Administration/Management; Operations Research/Statistics; Organizational Behavior & Theory; Organizational Development; Production/Operations; International Relations; Human Rights & Duties; Public Administration; Population Studies; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism & Hospitality; Transportation Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic; Web Design and emerging paradigms in allied subjects.

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

## **GUIDELINES FOR SUBMISSION OF MANUSCRIPT**

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

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

**THE EDITOR**  
IJRCM

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

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

**DEAR SIR/MADAM**

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

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

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

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

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

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

#### **NOTES:**

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

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

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

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



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

**INTRODUCTION**

**REVIEW OF LITERATURE**

**NEED/IMPORTANCE OF THE STUDY**

**STATEMENT OF THE PROBLEM**

**OBJECTIVES**

**HYPOTHESES**

**RESEARCH METHODOLOGY**

**RESULTS & DISCUSSION**

**FINDINGS**

**RECOMMENDATIONS/SUGGESTIONS**

**CONCLUSIONS**

**SCOPE FOR FURTHER RESEARCH**

**ACKNOWLEDGMENTS**

**REFERENCES**

**APPENDIX/ANNEXURE**

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

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

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

**BOOKS**

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

**CONTRIBUTIONS TO BOOKS**

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

**JOURNAL AND OTHER ARTICLES**

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

**CONFERENCE PAPERS**

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

**UNPUBLISHED DISSERTATIONS AND THESES**

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

**ONLINE RESOURCES**

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

**WEBSITES**

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

## EVALUATING SMALL AND MEDIUM SCALE INDUSTRIAL DEVELOPMENT THROUGH INDUSTRIAL ESTATES OF DIFFERENT DISTRICTS AND DIVISIONS OF BANGLADESH

**ABDUL LATIF**  
**ASSOCIATE PROFESSOR**  
**DEPARTMENT OF BUSINESS ADMINISTRATION**  
**SYLHET INTERNATIONAL UNIVERSITY**  
**SYLHET**

**KHANDAKER DAHIRUL ISLAM**  
**ASST. PROFESSOR**  
**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**  
**SYLHET INTERNATIONAL UNIVERSITY**  
**SYLHET**

### ABSTRACT

*In this paper the researchers attempt to evaluate the performance of industrial estates developed by Bangladesh Small and Cottage Industries Corporation (BSCIC) in divisional and districts level, as the climate, environment, effort of every region are different. In this Primary and secondary data-based study, the authors have simple statistical techniques in order to analyze the facts and this analysis at last came to the conclusion giving some timely recommendations. The important findings of the research are density of population is proportional to industrial efforts and the distance from commercially important places is inversely proportional to that. The government initiatives should follow the viability of industry in respect of operational smoothness and marketing prospects. In the targeted area, government efforts should be directed mostly to build up entrepreneurial base through motivation and training.*

### KEYWORDS

Industrial Estates, BSCIC, Entrepreneurship, Density of Population.

### INTRODUCTION

Industrial estates are for industrialization in regional and local areas of a country. Every country tried to do faster industrialization through the concept of industrial estates. Success depends on the decision making at regional and local level regarding mainly the location and other factors of effective industrialization. There are detailed regulation regarding the permission of industrial estates, acquiring the land for estates and management and investment in industrial estates.

Many countries are succeeded in industrialization by industrial estates as a location guide in inducing the manufacturers in regional and local levels. The key to their success is growing local entrepreneurs' interests and decentralization of decision making in local or regional areas. It is evident in India, Japan, Italy, and Taiwan, UK and USA and other developed countries. But the concept of localization of industries for expediting industrial development creates an uneven regional distribution of industries. So the establishing industrial estates in every region of a country are an important tool for balanced industrial development all over the country. Through the process of decentralizing the authority to establish and manage industrial estates can enable the local authority to adopt proper strategy for labor intensive cottage industries.

The economic activities of Bangladesh concentrated to two of the main cities, namely Dhaka, the capital cities, Chittagong-the commercial capital city of Bangladesh. The other cities like Narayanganj as an industrial city is also notable. The economic activity of other areas of Bangladesh is not so enlighten. It is reflected in table below by the division wise distribution of industrial estate and number of units functioning.

The imbalance in industrial development of different divisions is due to the significant geographical and cultural differences of those divisions. The difference in development may be the consequences of differences among six divisions (namely, Dhaka, Chittagong, Rajshahi, Khulna, Barishal and Sylhet) regarding climate and soil, resource base, urbanization, importance in three economic sectors (agriculture, industry, service), relief and drainage etc. 'Food basket' Rajshahi is different from 'mangrove swamp' Khulna, Mineral rich Sylhet from mineral poor Khulna, Barishal and Sylhet from other divisions in urbanization, flood plain Dhaka from hilly Chittagong, and Dhaka and Chittagong from other divisions in emphasizing industry for development. To accomplish the objective of research, it is important to analyze the industrial development in the estates of different districts of different divisions.

### OBJECTIVES

The specific objectives of the study are:

- a. To discuss the industrial development by industrial estates in different divisions of Bangladesh.
- b. To discuss the industrial development by industrial estates in different districts under different divisions of Bangladesh
- c. To pinpoint the drawbacks of different divisions and districts in industrial development by industrial estates program
- d. To suggest the most effective steps to be taken to accelerate the industrial development regionally and nationally.

### METHODOLOGY

To carry out the research, the authors used systematic research methodology in data collection, analysis and drawing conclusions.

For collecting data, the researchers mainly used the secondary data specifically the product directory and the MIS published by the BSCIC. In addition to get the further information the researchers need primary data from estate officers and the entrepreneurs of the estates and the experts in the field. The researchers send questioner to all the estates officers and got 60% response from them.

For analysis the researchers used the simple statistical techniques in calculating the percentages and ratios.

By the thorough study of the facts found from using necessary techniques, the researchers tried to come on the conclusion rationally.

Findings and Analyses: The analysis of industrial development through industrial estates distributed by the divisions of Bangladesh is important to fulfill the objectives of the study. So, it is essential to study the industrial estates development in respect of proportion of area, population per estates. It is further important to study the number of units and the ratio of units per division. The following table depicts all elements:

TABLE 1: POPULATION, AREA, INDUSTRIAL ESTATES AND UNITS DISTRIBUTES BY DIVISIONS

Division	No. of estates	Proportion of estates	Total area (sq km)	Proportion of area	Population	Population	Number of unit in the estates	Percentage
Dhaka	24	0.32	30944	21.09	39044716	32.83	2678	49.46
Barishal	4	0.05	33771	9.01	24290384	5.72	944	17.43
Chittagong	17	0.23	34495	22.88	302001873	19.73	934	17.25
Khulna	7	0.09	22285	15.09	14705229	10.94	370	6.83
Rajshahi	17	0.23	13644	23.39	8173718	23.89	219	4.04
Sylhet	5	0.07	12596	8.54	7934343	6.89	270	4.99
Total	74		147735		124355263		5415	100.00

Source: MIS 2011, SYB 2010

From the above table we can be inferred that population is proportionate to the number of estates in the divisions. BSCIC established 24 industrial estates (32% of total estates) in Dhaka division where population is 33% of Bangladesh, 17 industrial estates (23% of total) in Rajshahi division of 24% of total population. 20% of population resided Chittagong, the port city, the region of industrial activities in Bangladesh, is home of 17 industrial estates (23% of all). For 11% of total population Khulna divisions have 7 industrial estates (9% of total) and for 5.72% of total population, Barishal division has 4 estates whereas for 6.80% of total population there are 5 industrial estates in Sylhet division.

Comparing the number of estates to the area of different divisions, it is found that the number of industrial estates is more than the proportional area in Dhaka division. Dhaka is situated at the center of Bangladesh and all economic activities are operated through the involvement of Dhaka, the capital city. The scenery is found opposite in Khulna division, where for 15.09% of total area of Bangladesh there are only 7 estates (9%). For 9.01 percent of total area 4 industrial estates are established in Barishal division and for 8.54% area 5 industrial estates are in Sylhet division. The scenery of Rajshahi and Chittagong division is comparatively better. For 23.39% of total area 17 industrial estates (23%) established in Rajshahi and for 22.88% area, there are 17 estates (23%) in Chittagong division.

Industrial Development of a specific area depends on the consumption of customers of that area. The density of population is one of the factors of consumption and also the factor of entrepreneurial development as the people has to think creatively for their livelihood and other requirements. It is now important to get the insights of comparative study of the activities of industrial estates in different division by considering the percentage of estates area, total industrial units, active and sick industrial units.

Activities of industrial estates among the divisions of Bangladesh in respect of estates area, active and sick units compared to the population and area of those divisions:

TABLE 2: PERCENTAGE OF AREA, POPULATION. ESTATE-AREA, INDUSTRIAL UNITS, ACTIVE UNITS AND SICK/CLOSED UNITS OF DHAKA DIVISION

Divisions	Percentage					
	Area	Population	Estate Area	Total industrial units	Active Units	Sick/Closed
Dhaka	21.09	32.83	36.48	48.44	48.00	30.42
Barishal	9.01	5.72	9.45	5.07	3.38	15.59
Chittagong	22.88	19.73	17.37	17.21	17.53	21.67
Khulna	15.09	10.94	8.69	6.94	7.01	10.27
Rajshahi	23.39	23.89	22.99	17.16	18.92	13.60
Sylhet	8.54	6.89	5.01	5.19	5.15	8.37

Source: Compilation from MIS 2007, 2008, 2009, 2010, 2011, 2012

Analyzing the table above it is apparent that industrial activities in industrial estates are comparatively higher in Dhaka division because of various advantageous factors in that area. Around 21.09 percent areas and with 32.83 percent populations Dhaka division is the most attractive region for industrialization. There is 36.48 percent estate area, 48.44 percent of total industrial units in the estates, 48.00 percent active units and higher industrial activities of that division gave birth to 30.42 percent of sick/closed units. Lowest activities are found in Khulna division, where 15.09 percent of total area provides 8.69 percent of total estate area and only 7.01 percent active units. It is not the lowest resourceful division regarding raw materials because there is the mangrove forest which provides more resources. But comparative lower population and distance from populated area is considered as the cause of lowest industrial activities in that division. Though Chittagong divisions avails more facilities for industrialization but industrial activities is not so satisfactory in industrial estates. 23.39 percent of total area and 23.89 percent of total population surrounded Rajshahi is a bit higher position than Chittagong where 18.92 percent active industrial activities in industrial estates with 13.60 percent sick/closed in industrial estates of 22.99 percent area. The remittance rich Sylhet region is falling behind in industrial activities in industrial estates. The area of Sylhet division is 8.54 percent and of population 6.89 percent but the active industrial units is of only 5.15% in industrial estates in 5.01% of estate area.

## DHAKA

As a capital city, Dhaka is the center of country's legal, educational and economical activities. These activities create many employment opportunities that attract many people to the city. The people and their families need many products for their livelihood that transferred to demand of products and services. Producing these products and services create more employment opportunities. Thus Dhaka and nearby districts became the center of industrial activities. The marketing of almost all products are directed from Dhaka. So entrepreneurs attracted to Dhaka and nearby areas as their best location of industrial units. Dhaka has the easy access from the north of the country by rail and road and from the south by the rivers. Dhaka is situated at the center of the country. Around 400,000 rickshaws are regularly carrying people from one place to another. Besides there are a huge number of auto rickshaws, CNG driven 3 wheeler taxis, buses (both luxury and normal) in the city. Dhaka is connected to the other cities of the country by buses, trucks and rail. Elevated expressway is going to be constructed to reduce the traffic jam. An international airport (15 km away from center of Dhaka) connected the outside world and also the other parts of the country by 11 airports in 11 cities of great importance.

Dhaka is the largest industrial regions of the country. Entrepreneurs are producing traditional products to modern electronic products in the various places of Dhaka division. Garments industry attracts most of the domestic and foreign entrepreneurs because of the cheap labor rate of the country. In 2009 the Gross Municipal Product of Dhaka was \$25 billion that projected to increase to \$215 billion in 2025 by the present growth rate of 6.2%. (Wikipedia)

The population of Dhaka rises from 500,000 from its inception as capital city to nearly 12 million. It is 24 times greater than its starting. According to the Far Eastern Economic Review the population would be reached to 25 million by 2025. (Wikipedia)



TABLE 3: POPULATION, AREA, INDUSTRIAL ESTATES, ESTATES AREA AND ACTIVE UNITS IN DISTRICTS OF DHAKA DIVISION

Districts	Area (km <sup>2</sup> )	Population 2011 Census (Preliminary /Final)	Distance from Dhaka	Industrial estates	Industrial Area in estates	Active Units
Dhaka	1459.56	12,043,977	0	5	333.94	537
Faridpur	2072.72	1,867,000	101	1	15.6	42
Gazipur	1741.53	3,333,000	37	1	10.5	58
Gopalganj	1489.92	1,149,000	127	1	26.3	81
Jamalpur	2031.98	2,265,000	179	1	44.94	153
Kishoreganj	2731.21	2,853,000	117	1	20.6	59-
Madaripur	1144.96	1,149,000	90	1	16.33	90
Manikganj	1383.06	1,379,000	63	1	10.4	28
Munshiganj	954.96	1,420,000	27	1	13.53	65
Mymensingh	4363.48	5,042,000	122	2	20.43	90
Narayanganj	687.76	2,897,000	17	3	103.52	1240
Narsingdi	1140.76	2,202,000	51	1	15.39	51
Netrokona	2810.40	2,207,000	158	1	15	37
Rajbari	1118.80	1,040,000	118	1	15.28	48
Shariatpur	1181.53	1,146,000	101	1	13.67	59
Sherpur	1363.75	1,407,468	188	1	15.00	41
	27676.38	43,400,445	1496	23	690.43	1749

Source: SYB 2010, MIS 2007, 2008, 2009, 2010, 2011, 2012

From the above table, it is found that the highest number of industrial estates (5) and active units (537) are located in the Dhaka districts that is equal to one third of the area of Mymensingh district (where industrial estates are two) and the total industrial estates area is the highest with 333 sq km because of the nearness to raw materials, market, facilities and workers hub. Dhaka is followed by Narayanganj with 103.52 sq km area and 3 industrial estates. This district with only 2% of total area of the division and 6% of population is the place of 3 industrial estates with 2 special industrial estates of Jamdhani and Hushieri. In both industry Narayanganj is pioneering in the whole country. For a vast area of Mymensingh the total industrial estate area is limited to only 20.43 sq km. The industrial estate of Dhaka districts are located in the highly growth industrial area with smallest distance from zero point. In far distant district (188 km from Dhaka) Sherpur of an area of 1363.75 sq km that is same as Dhaka district there are only 15 sq km of industrial area with 41 active industrial units. Far distant district, Jamalpur with 7% of area and 5% of population is the place of 6% of industrial estate area and 65 of active units. The least industrial estate activities is found in Manikganj that is only 63 km away from Dhaka with 4% of area, 1% of industrial estate and 1% of active industrial units.

## CHITTAGONG

The divisional city Chittagong is the second largest city of the country. It is situated on the river of Kornafully, 19 miles from the sea. 80% of the foreign trade is conducted by the main port of the country, Chittagong. So, Chittagong is the main industrial city of the country. The export processing zone, industrial estates and industrial area are the home of many large, medium and small industries. The population density is 15276 per km. 40% of heavy industries like drydock, dockyard, oil refinery, steel mills, cement factories, automobile, pharmaceuticals, textile, jute and fertilizer of the country is located in Chittagong. Two publicly and one privately owned EPZs are the home of export oriented industries of the country. In manufacturing Chittagong contributing 25% of GDP, in 2010 it was 25.5 million dollar and with a growth rate of 6.3% it is projected to be \$39 million in 2020 (Wikipedia). The mineral rich Sangu Field is contributing more to the economy. The divisional city is connected with other part of the world by water, road and air. Many long distance luxury and economy buses are connecting the other districts of the country. Trucks, rail, boats, ships are transporting goods to other part of the country and outside the country as export. The Shah Amanath International airport is connecting the people of outside and inside the country. The town buses, cars, taxis, auto rickshaws and manual rickshaws are carrying people and goods inside the town. The town is enriched by luxurious hotels, shopping malls, schools, colleges and universities. The following table shows the industrial activities in the industrial estates of the Division.

TABLE 4: POPULATION, AREA, INDUSTRIAL ESTATES, ESTATES AREA AND ACTIVE UNITS IN DISTRICTS OF CHITTAGONG DIVISION

District	Area	Population	Estates	EstatesArea	Unit	Area	On production	Construction	Closed
B. Baria	1,927.11	2,808,000	1	21.98	72	21.98	58	9	5
Bandarban	4,479.03	383,000	0	0		0	0	0	
Chandpur	1,704.06	2,393,000	1	10	35	10	25	7	2
<b>Chittagong</b>	<b>5,282.98</b>	<b>7,509,000</b>	<b>5</b>	<b>95.01</b>	<b>301</b>	<b>95.01</b>	<b>275</b>	<b>3</b>	<b>20</b>
<b>Comilla</b>	<b>3,085.17</b>	<b>5,304,000</b>	<b>2</b>	<b>65.38</b>	<b>211</b>	<b>65.38</b>	<b>179</b>	<b>21</b>	<b>8</b>
Cox's Bazar	2,491.86	2,275,000	1	21.69	39	21.69	15	8	12
Feni	928.34	1,420,000	2	42.79	94	42.79	67	22	5
Khagrachhari	2,699.55	608,000	1	10	14	10			
Lakshmipur	1,455.96	1,711,000	1	16.07	55	16.07	15	13	1
<b>Noakhali</b>	<b>600.99</b>	<b>3,072,000</b>	<b>2</b>	<b>40</b>	<b>142</b>	<b>40</b>	<b>76</b>	<b>27</b>	<b>4</b>
Rangamati	6,116.13	596,000	1	12.5	12	12.5			
Total	33,771.18	28,079,000	17	335.42	975	335.42	710	110	57

Source: SYB 2010, MIS 2007-2012 and Survey

The superlative degree of high is applicable to population, estate, estate area, industrial units, active units and closed units to Chittagong districts. With 27% of total divisional population, Chittagong district has 30% of total industrial units in 5 industrial estates. But the highest area is covered by hilly Rangamati with 2<sup>nd</sup> lowest population has only one industrial estate with no running production unit. The same situation is in Bandarban also with no industrial estates and in Khagrachhari, there is only one industrial estates with no allocation. The backwardness is due to lack of proper transport facilities and entrepreneurial initiative for industrial activities in those hilly areas populated by indigent tribal people of agriculture profession. Comilla district with the 2<sup>nd</sup> largest population of the division, has two industrial estates that have also second largest number of industrial units in running and eight sick or closed units. Noakhali the smallest district with highest density of population has two industrial estates with 76 running industrial units and 4 closed units. Cox's Bazar, the tourist district is industrially backward, indicated by only 15 running industrial units and 12 closed/sick units. The similar situation is prevailing in Lakshmipur district.

## RAJSHAHI

With an area of 23.39 percent of Bangladesh and the population of 23.89 percent, Rajshahi is the 'student city' of the country. The visional city is situated on the bank of Padma River. All silk of the country is produced in Rajshahi. The other cottage industries are weaving, metal working, wood working and pottery and the large and medium industry of oil processing plant, match factories and sawmills etc.. Along with major educational institutions, the Varendra museum and silk institution is located there. The following table illustrates the industrial activities in industrial estates of that division as follows:

TABLE 5: POPULATION, AREA, INDUSTRIAL ESTATES, ESTATES AREA AND ACTIVE UNITS IN DISTRICTS OF RAJSHAHI DIVISION

District	Population	Area	Density	Estates	Area	Units in Production	Sick/closed
Bogra	3371000	2920	1154	2	33.17	90	3
Dinajpur	2970000	3438	864	1	35.14	51	3
Gaibandha	2349000	2179	1078	1	15.00	20	8
Joypurhat	909000	965	942	1	15.00	18	0
Kurigram	2050000	2296	893	1	20.00	28	2
Lalmonirhat	1249000	1241	1006	1	15.60	16	
Natore	1696000	1896	894	1	15.58	42	
Nawabganj	1636000	1703	960	1	11.10	18	2
Noagaon	2576000	3436	750	1	15.14	46	
Pabna	2497000	2372	1053	1	103.30	161	6
Panchagarh	981000	1405	698	1	15.00	2	
Rajshahi	2573000	2407	1069	1	95.71	189	7
Rangpur	2866000	2368	1210	1	20.68	25	1
Nilphamari	1820000	1580	1152	1	10.93	45	2
Sirajganj	3072000	2498	1230	1	10.00	16	2
Thakurgaon	1380000	1810	762	1	15.00	38	0
Total	33995000	34514	984.9626	17	446.35	805	36

Source: SYB 2010, MIS 2007-2012 and survey

The highest number of industrial units (189) is found as active in Rajshahi industrial estates that has the second largest industrial area of 95.71 acres where population density is 1069. The district with highest population density (1230) has 16 industrial units running. The lowest activity was found in Panchagarh district that has the second smallest population size. The running unit's percentage is found 100% in Natore, Noagaon districts. The numbers of units are found as significant in both districts (47 and 62 respectively). More than 95% of units are found as active in Bogra, Pabna, Rajshahi, Rangpur, and Nilphamari districts. The portion of sick units to total units are found as zero in Joypurhat, Lalmonirhat, Natore, Noagaon, Panchagarh and Thakurgaon districts. The highest portions of sick units are found in Gaibanda (16%) and Sirajganj (11%). The number of units in industrial estates of Sirajganj districts is very small (only 18). The activities in industrial estates are very significant in Rajshahi, Pabna. And Bogra district and lowest in Panchagarh district.

## KHULNA

The total area of Khulna division is 22285.45 sq km and population 15.5 millions. Located on the Rupsha River it is the city with second sea port of the country. Mongla the gateway to sunder bans is 19 km away from the city. It is the second busiest seaport. The availability of raw materials' like jute, oilseed, cotton, and timber for making boards, matches and newsprints makes the division industrially attractive. The telephone cable, news print industry and the largest dock yard are located in Khulna. The activities of industrial estates of that division can be summarized as follows:

TABLE 6: POPULATION, AREA, INDUSTRIAL ESTATES, ESTATES AREA AND ACTIVE UNITS IN DISTRICTS OF KHULNA DIVISION

District	Established	Area	Population	Industrial estate	Area	Industrial units	Active units	Sick	Inactive units
Bagerhat	1995	3,959.11	1,461,000	1	19.3	44	44		00
Chuadanga		1,177.40	1,123,000						
Jessore	1962	2,570.42	2,742,000	1	50.06	124	122	2	00
Jhenaidah	1995	1,949.62	1,756,000	1	15.07	50	45		5
Khulna	1961	4,394.46	2,294,000	1	44.1	96	74	21	1
Kushtia	1963	1,621.15	1,933,000	1	18.49	12	12		00
Magura		1,048.61	913,000						
Meherpur	2003	716.08	652,000	1	10	37	09		28
Narail		990.23	715,000						
Satkhira	1993	3,858.33	1,973,000	1	15.75	30	22	4	

Source: SYB 2010, MIS 2007-2012

The number of industrial units is found proportionate to population in Jessore and Khulna districts. The highest number of active units (122 and 74 units) is found in both districts those are featured by highly populated and comparatively larger area. This division has single industrial estate in 7 districts and no estates in Chuadanga, Magura and Narail districts. Though the area and population of Chuadanga, Magura and Narail districts is in the list of smallest category but the smallest area and population centred Meherpur district has one industrial estates and naturally out of 37 units 28 is found inactive. The sick units is highest in Khulna district (21) and other districts are free from sick units except Satkhira (4) and Jessore (2) district.

The highest proportion of area in industrial estates to total area of the division is found 2% in Jessore. In other districts it is 1% or less than 1%. The industrial activities is found the highest in Bagerhat, Kushtia districts. Here 100% units are found as active though the numbers of units are small. The proportionate highest number of units to total units of the division is found in Jessore, Khulna and Jenaidaha districts. The zero percent un-attempted units are in all districts of industrial estates except Meherpur, Jhenaidaha and Khulna districts. The sick units are also highest in Meherpur district (76%). Overall activities of industrial estates of Meherpur district is not satisfactory at all though it has the smallest area and population (3% and 4%). But there are no industrial estates in Chadanga (5% of area and 7% of population), Magura (5% of area and 6% of population) and Narail (4% of area and 5% of population).

## SYLHET

Sylhet is located on the north-east corner of Bangladesh. It is basically a hill based area, surrounded by Khasia-Jaintia hill on the north. Sylhet possesses different minerals and natural resources like forestry, fisheries, horticulture etc. out of 70 industrial estates and 13 more implementation, five of them are in Sylhet. Sylhet is one of the 6 divisional city, having area of 3490 sq. km and a population of 2,547,320 (population census 2012). It has agricultural produce of taka 9477 million having a specialty in orange, pineapple, shatkora and jackfruits etc. Its mineral resources comprising gas, fuel, stone, sand etc. are contributing significantly in national economy. About 6000 M.T. fishes are available per year from different rivers, ponds, hoar etc. forest of 59,384.62 km in Sylhet provides sufficient forestry products like wood, grass and bamboo etc. all those in Sylhet provides sufficient raw materials for food, chemical, construction, petrochemical and other industries. The financial resources in Sylhet can play a significant role in building a industrial city. The people from here working in other countries provide 80% foreign remittance (Aziz, 1994)

The deposit in various bank of Sylhet in 2006-07 was BDT 117,732.7 million where the advance was only 23365 million. People living in home and abroad creates a great market of products produced in Sylhet. So there are every possibilities of building industrial base in Sylhet as also the Road, river and rail communication are conducive for that purpose. The industrial estates' activities in this division is summarized in the following table:

**TABLE 7: POPULATION, AREA, INDUSTRIAL ESTATES, ESTATES AREA AND ACTIVE UNITS IN DISTRICTS OF SYLHET DIVISION**

District	Area	Population	Density	Industrial Estates	Estate Area	On production	Sick or closed
Hobigonj	2,636.58	2,059,000	780.94	1	15.00	35	2
Maulvi Bazar	2,799.39	1,902,000	679.43	1	14.59	29	7
Sunamganj	3,669.58	2,443,000	665.74	1	25.52	7	0
Sylhet	3,490.40	3,404,000	975.25	2	25.76	130	13
Total	12,595.95	9,807,000	778.58	5	81	201	22

Source: SYB 2010, MIS 2007-2012

The densely populated district Sylhet with two estates of 25.76 sq km in size has the highest number of units in action and naturally the highest numbers of sick/closed units though in proportion it may be small. The largest district in size, Sunamganj with a good number of population has a minimum activities in industrial estate, though there is industrially developed area Chattak with many of Small and medium industries by the bank of river Surma. Hobigonj has moderate level of activities in estate area but in Moulabibazer it is not satisfactory.

The summary of the analysis is as under:

- i. Industrial activities is proportionate to the population density of any area.
- ii. The economic importance of area is important for industrial activity.
- iii. More industrial efforts bring more sick units and more active units also.
- iv. Distance from the most important commercial center is the important factor of industrialization.
- v. For networking, communication facilities and other benefits industrial efforts tend to be concentrated in specific area like Narayanganj.
- vi. In case of Manikgonj the trends of SMEs of Industrial estates is negligible but it is attracted by the heavy industry.
- vii. The Commercial Capital, Chittagong is the place of heavy industry. But development of small industry in industrial estates is not proportionate with the heavy industry.
- viii. Only incentive and facilities cannot attract the industrialist. It is proved in Meherpur, Khagrachari, Rangamati

### RECOMMENDATION AND CONCLUSION

- i. More industrial estates should be established near the commercial important places like Dhaka, Chittagong with all required facilities.
- ii. Industrialists can migrate to the area where industrial efforts are viable, so the authority should consider the density of population as an important factor in selecting the industrial estate location.
- iii. Industrial sickness is a common phenomenon, so industrial activities cannot be hampered in fear of sickness. More attention should be given by permitting and supporting authorities in industrial efforts where there are ambitious entrepreneurs.
- iv. As entrepreneurs prefer the industrial area more in their site selection, so more efforts are needed to establish more estates in those areas.
- v. Where there are heavy industries, small industrial can be equally established more in those areas. The authorities should encourage the entrepreneurs of small capital to give their attention in this respect. The authority should also give efforts in research activities in finding out new avenues of investment.
- vi. In industrial backward areas the industrial states authority should give more efforts in entrepreneurship training and development. The people of Banderbha, Rangamati and Khagarchari are more laborious in agriculture. If their efforts can be diverted to industrial concern, the return will be more attractive.

Only incentives cannot attract the industrialist to operate their venture in expected location. The viability of the industrial concern is the most important thing to consider. The operational smoothness and marketing prospects along with the governments' initiatives and supports are the most important consideration in industrial development. Entrepreneurial intention and efforts are to be considered with due respects in bringing the optimum results.

### REFERENCES

1. Aziz Mohammed Abdul (1994); Sylhet Janamanosh o Orthonoty; Prothisruthi, Sylhet.
2. Bangladesh small and cottage industries corp./home page [www.bscic.gov.bd/](http://www.bscic.gov.bd/)
3. MIS, (2007), Bangladesh small and cottage industrial corporation, Motijil, Dhaka
4. MIS, (2008), Bangladesh small and cottage industrial corporation, Motijil, Dhaka
5. MIS, (2009), Bangladesh small and cottage industrial corporation, Motijil, Dhaka
6. MIS, (2010), Bangladesh small and cottage industrial corporation, Motijil, Dhaka
7. MIS, (2011), Bangladesh small and cottage industrial corporation, Motijil, Dhaka
8. MIS, (2012), Bangladesh small and cottage industrial corporation, Motijil, Dhaka
9. Population and housing census 2011, <http://www.bbs.gov.bd/home.aspx>
10. Product directory, (May 2005), Marketing (research division), BSCIC, Dhaka.
11. Bangladesh economic survey-2012 (June 2012); finance advisor sub-department, finance department, finance ministry, peoples republic of Bangladesh (Bengali version)

### WEBSITES

12. [http://www.bangladesh.gov.bd/index.php?Itemid=272&id=225&option=com\\_content&task=view](http://www.bangladesh.gov.bd/index.php?Itemid=272&id=225&option=com_content&task=view)
13. <http://en.wikipedia.org/wiki/Dhaka>

## **REQUEST FOR FEEDBACK**

**Dear Readers**

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

I would like to request you to supply your critical comments and suggestions about the material published in this issue as well as on the journal as a whole, on our E-mail [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 an appropriate consideration.

With sincere regards

Thanking you profoundly

**Academically yours**

Sd/-

**Co-ordinator**



## ABOUT THE JOURNAL

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

### *Our Other Journals*

