INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT

IJRCM

CONTENTS

CALL FOR MANUSCRIPTS

We invite unpublished novel, original, empirical and high quality research work pertaining to the recent developments & practices in the areas of Computer Science & Applications;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

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

GUIDELINES FOR SUBMISSION OF MANUSCRIPT

1.   **COVERING LETTER FOR SUBMISSION:**

                                                               DATED: _____

THE EDITOR

IJRCM

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

(e.g. Finance/Mkt./HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)

DEAR SIR/MADAM

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

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

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

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

NAME OF CORRESPONDING AUTHOR	:
Designation/Post*	:
Institution/College/University with full address & Pin Code	:
Residential address with Pin Code	:
Mobile Number (s) with country ISD code	:
Is WhatsApp or Viber active on your above noted Mobile Number (Yes/No)	:
Landline Number (s) with country ISD code	:
E-mail Address	:
Alternate E-mail Address	:
Nationality	:

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

NOTES:

a) The whole manuscript has to be in **ONE MS WORD FILE** only, which will start from the covering letter, inside the manuscript. _**pdf. version is liable to be rejected without any consideration**_.

b) The sender is required to mention the following in the **SUBJECT COLUMN of the mail**:

New Manuscript for Review in the area of (e.g. Finance/Marketing/HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)

c) There is no need to give any text in the body of the mail, except the cases where the author wishes to give any **specific message** w.r.t. to the manuscript.

d) The total size of the file containing the manuscript is expected to be below **1000 KB**.

e) Only the **Abstract will not be considered for review** and the author is required to submit the **complete manuscript** in the first instance.

f) _**The journal gives acknowledgement w.r.t. the receipt of every email within twenty-four hours**_ and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of the manuscript, within two days of its submission, the corresponding author is required to demand for the same by sending a separate mail to the journal.

g) The author (s) name or details should not appear anywhere on the body of the manuscript, except on the covering letter and the cover page of the manuscript, in the manner as mentioned in the guidelines.

2. **MANUSCRIPT TITLE**: The title of the paper should be typed in **bold letters**, **centered** and **fully capitalised**.

3. **AUTHOR NAME (S) & AFFILIATIONS**: Author (s) **name**, **designation**, **affiliation** (s), **address**, **mobile/landline number** (s), and **email/alternate email address** should be given underneath the title.

4. **ACKNOWLEDGMENTS**: Acknowledgements can be given to reviewers, guides, funding institutions, etc., if any.

5. **ABSTRACT**: Abstract should be in **fully Italic printing**, ranging between **150** to **300 words**. The abstract must be informative and elucidating the background, aims, methods, results & conclusion in a **SINGLE PARA**. _**Abbreviations must be mentioned in full**_.

6. **KEYWORDS**: Abstract must be followed by a list of keywords, subject to the maximum of **five**. These should be arranged in alphabetic order separated by commas and full stop at the end. All words of the keywords, including the first one should be in small letters, except special words e.g. name of the Countries, abbreviations etc.

7. **JEL CODE**: Provide the appropriate Journal of Economic Literature Classification System code (s). JEL codes are available at www.aeaweb.org/econlit/jelCodes.php. However, mentioning of JEL Code is not mandatory.

8. **MANUSCRIPT**: Manuscript must be in _**BRITISH ENGLISH**_ prepared on a standard A4 size _**PORTRAIT SETTING PAPER**_. _It should be free from any errors i.e. **grammatical, spelling** or **punctuation.** It must be thoroughly edited at your end_.

9. **HEADINGS**: All the headings must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.

10. **SUB-HEADINGS**: All the sub-headings must be bold-faced, aligned left and fully capitalised.

11. **MAIN TEXT**:

**THE MAIN TEXT SHOULD FOLLOW THE FOLLOWING SEQUENCE**:

INTRODUCTION

REVIEW OF LITERATURE

NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESIS (ES)

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

RECOMMENDATIONS/SUGGESTIONS

CONCLUSIONS

LIMITATIONS

SCOPE FOR FURTHER RESEARCH

REFERENCES

APPENDIX/ANNEXURE

The manuscript should preferably be in _**2000 to 5000 WORDS**_, But the limits can vary depending on the nature of the manuscript.

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT vii

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

http://ijrcm.org.in/

12. **FIGURES & TABLES:** These should be simple, crystal **CLEAR**, **centered**, **separately numbered** & self-explained, and the **titles must be above the table/figure**. **Sources of data should be mentioned below the table/figure**. *It should be ensured that the tables/figures are referred to from the main text*.

13. **EQUATIONS/FORMULAE:** These should be consecutively numbered in parenthesis, left aligned with equation/formulae number placed at the right. The equation editor provided with standard versions of Microsoft Word may be utilised. If any other equation editor is utilised, author must confirm that these equations may be viewed and edited in versions of Microsoft Office that does not have the editor.

14. **ACRONYMS:** These should not be used in the abstract. The use of acronyms is elsewhere is acceptable. Acronyms should be defined on its first use in each section e.g. Reserve Bank of India (RBI). Acronyms should be redefined on first use in subsequent sections.

15. **REFERENCES:** The list of all references should be alphabetically arranged. ***The author (s) should mention only the actually utilised references in the preparation of manuscript*** and they may follow Harvard Style of Referencing. **Also check to ensure that everything that you are including in the reference section is duly cited in the paper**. The author (s) are supposed to follow the references as per the following:

- All works cited in the text (including sources for tables and figures) should be listed alphabetically.

- Use (**ed.**) for one editor, and (**ed.s**) for multiple editors.

- When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc., in chronologically ascending order.

- Indicate (opening and closing) page numbers for articles in journals and for chapters in books.

- The title of books and journals should be in italic printing. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.

- For titles in a language other than English, provide an English translation in parenthesis.

- *Headers, footers, endnotes and **footnotes** should **not be used** in the document.* However, **you can mention short notes to elucidate some specific point**, which may be placed in number orders before the references.

PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:

BOOKS

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.

- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

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

JOURNAL AND OTHER ARTICLES

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

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

UNPUBLISHED DISSERTATIONS

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

ONLINE RESOURCES

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

WEBSITES

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

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT viii

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

http://ijrcm.org.in/

A STUDY ON THE IMPACT OF THE CHILI MARKET ON THE PEOPLE OF BYADGI REGION, KARNATAKA, INDIA

Dr. GURUBASAVARYA HIREMATH
ASSOCIATE PROFESSOR
SCHOOL OF MANAGEMENT STUDIES & RESEARCH
KLE TECHNOLOGICAL UNIVERSITY
HUBBALLI

SUNITA
RESEARCH SCHOLAR
SCHOOL OF MANAGEMENT STUDIES & RESEARCH
KLE TECHNOLOGICAL UNIVERSITY
HUBBALLI

ABSTRACT

Byadgi is known for its dry chili market. According to folk 200 years ago chili cultivation has started in Byadgi. Presently this is the second largest chili trading market in the country. It has awarded with local Geographical Indication (GI) tag in the year 2010 for varieties of chili. There is a scope to study the impact of the chili market. This study throws the light on the impact of chili market on the local traders, farmers, and the public through exploratory design using semi-structured questioner and interview methods. This paper discussed the overall chili industry influences on people lifestyle, employment, and health. Information collected directly from farmers, traders and workers through discussion.

KEYWORDS
Byadgi, effects of chili market.

JEL CODES
Q10, Q11, Q13, Q15, Q19.

1. INTRODUCTION

Chilli is originated from America in 7500 BC. Capsicum word is derived from the Greek word 'Kampsimo' meaning is "to bite". Chilli is a fruit of plant 'Capsicum annuum and capsicum friends'. It has some common varieties like bell peppers, hot pepper, cayenne pepper, and sweet pepper, etc. in the world more than 200 countries produce this product because of its color and pungency. The world area for production chili during 2009-10 was 767200 hectors and 1202900 tons. Chill is a source of vitamin A,C, and E so it scientifically recognized application in the treatment of asthma, arthritis blood clots, cluster, headaches and it also used in cosmetics preparation.

GRAPH 1: COUNTRY WISE SHARE IN CHILI PRODUCTION
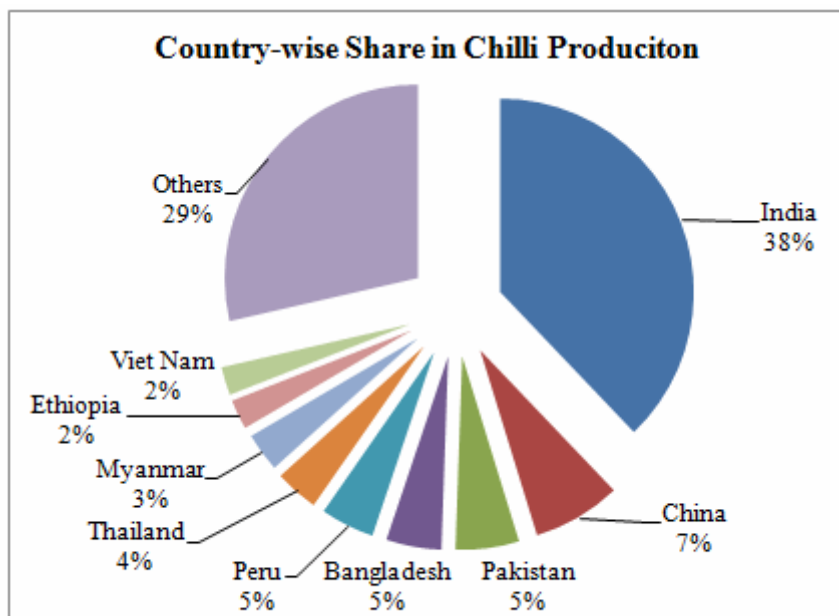
Source: FAOSTAT

Chilli enters India in the year 1585 by Portuguese and it spread rapidly in the whole country because of a suitable climate for cultivation. India is the world leader in chili production followed by China and Pakistan. Chilli is a universal spice. India is cultivating it in all the state and union territories of the company. Andhra Pradesh is the largest producer in India contributing 57 percent of total production followed by Karnataka, Maharashtra, and Tamilnadu. The export of chili from India stood at 204000 tons valued at Rs.129172.8 lakhs during 2009-10 and Malaysia (26%) is the largest importer of chili from India (Stephan 2012) Assam state producing World hottest chili "Naga Jolokia".

GRAPH 2: STATE WISE SHARE IN CHILI PRODUCTION
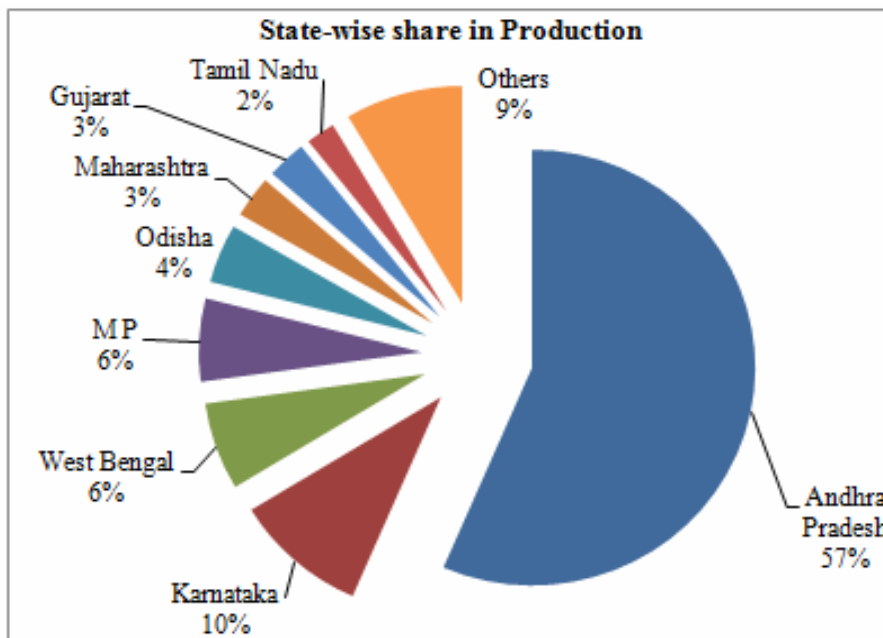
Source: Ministry of Agriculture, GoI

In Karnataka Dharwad, Haveri, Gulbarga, Belgaum, Hasan and Chitradurga districts produce chilli but Byadgi is known for chilli in the world market this chili is special for its deep red color and has the highest color value. Chilli crops play the main role in the agricultural economy of Byadgi and its given geographical indication (GI) certificate from September 2010 as per section of a geographical indication of goods (registration, protection) Act 1999. They are several types of Byadgi chili mainly classified into 2 types Byadgi kaddi and Byadgi Dabbi. Chillis were being cultivated in the Byadgi area about 200 years ago according to folk by British rule. Byadgi taluk is the second largest chili trading market in the country (Swamida 2012).

GRAPH 3: CHILLI TRENDS IN THE AREA, PRODUCTION, AND YIELD IN INDIA
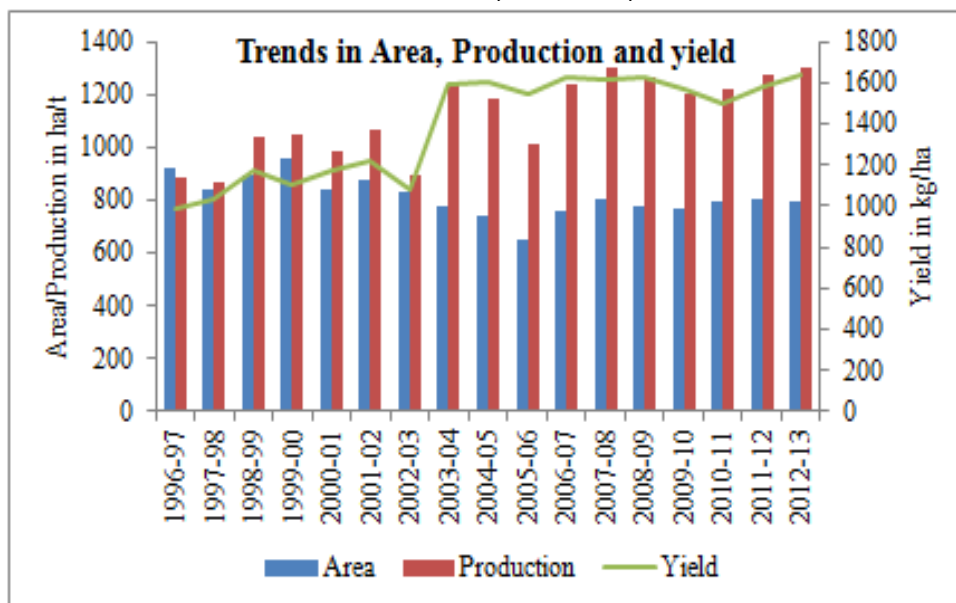
Source: Ministry of Agriculture, GoI and Spices Board of India

WHY CHILI MARKET IN BYADGI?
Byadgi chili is primarily sold in Byadgi chili market annual sales are about Rs 3 billion ($75 million). APMC of the Byadgi was started in the year 1948 (Feb 15). This market attracts the traders from all over Karnataka and neighboring Andrapradesh because of favorable condition for the business such as

- Transportation (Railway, Road)
- Best market place (75 acres)
- E-tender adopted in the year 2008
- Cold storage facility
- Money transfer through check or RTGS (Real Time Gross Settlement) to formers
- There are 6000 Framers, 600 Traders and 500 Commission agents are present the market
- More than 500 varieties of chili arrive at market
- On an average every year 60,000 of the bag there

TABLE 1: CENSUS OF BYADGI AS PER 2011

Terminology	Total	Male	Female
Population	1,41,024	72143	68881
Working population	65178	42965	22213
Cultivation	18613	15159	3454
Main working population	28431	13849	14582
House hold workers	1187	843	344
Other workers	16947	13114	3833

TABLE 2: ARRIVAL OF THE CHILI TO BYADGI MARKET

Product	Year	Arrival to market (Quintal)	Price (in Rs)		
			Low	High	
Red dry chili	2012-13	675058	2000	21666	7149
	2013-14	664210	2099	15509	7099
	2014-15	861916	2169	16839	8819
	2015-16	980960	3809	20000	9898
	2016-17	1193053	2320	21900	5450
	2017-18	1041073	1175	17109	11009

2. LITERATURE REVIEW

This chapter reviews the research work done in the field related to the objective of the study. These are few comprehensive studies made available on Byadgi Chilli may methods of analysis are presented following. To consistent with the objectives of the study the literature review is presented in two heads

a.   Chili market
b.   Byadgi chili market

2.1 CHILLI MARKET

Dr. Indira Mehta (2017) reported Indian Spice sector is zooming at a great place. India produces than 4 million tones of spice expert 180 spice products in over 150 nations. Technical guidance for organic chili cultivation is required and chili price is relevant to the market arrivals. If highest during the period of May September and lowest during November October. Chilli is rich in vitamins A&C and good sources of folic acid, potassium and vitamin E.

S. S. Pawar at al. (2011) stated that chili is contained belonging to Capsicum annulment and contain more than 12% of a volatile other soluble extractive capsaicin gives pungent to test. Chilli using more like chili Beverages, a counter-irritant in rheumatism, stomachic, heart arrhythmias as a food flavoring, etc. benefits effects of chili were positive and some were negative.

Shivaraja M B (2012) identified that chili is an important commercial crop of India and its exports also. Asian countries have a bulk share in the production of chili Indian is contributing 25 percent to the total world chili production. Karnataka has 20 percent of the total area produce chili in India but the output is only 9 percent of the total production chili. There is a need for the crop insurance scheme for chili protect production

Veerana et al (2011) reported that chili area, production, productivity was decreasing year after year despite being a highly profitable commercial spice crop.

Ajithkumar and Indira Devi (1994) in the study on cardamom production in Kerala used secondary and data on area, production productivity from the various publications of Bureau of Economics and Statistics as well Kerala spice board for the period (1965-66 to1989-90). He employed a linear growth rate model to analyze the data and concluded that the growth rates for the area (1.923 percent), production (5.535 percent) and productivity (3.612 percent) were positive and significant.

Hiremath (1994) studied growth rates for chilies in Dharwad district and found that the growth rate with respect to the area was higher (5.9%) which was closely followed by production (5.18%) and productivity (0.011%). All these parameters showed a positive growth rate with respect to chilies' in Dharwad district.

Bhullar (2005) studied the trends in the production of dry chilies in India and found that Andhra Pradesh, Karnataka, Maharashtra, and Orissa put together account for 75.00 percent of the total Indian production. Punjab state occupied 3.10 percent of the area and was ranked eighth during 1974-77, which decreased substantially to only 0.46 percent in 1998-2001. Production-wise, Punjab accounted for 4.61 percent of production during 1974-77, which fell to 0.74 percent during 1998-2001. There has been a significant improvement in the productivity of chilies' at 1945 kg per ha, followed by Punjab at 1688 kg per ha, Rajasthan at 1064 kg per ha, Arunachal Pradesh at 1272.7 kg per ha and Gujarat 786 kg per ha.

Vandana (2008) reported that chili cultivation depended on farmers saved seeds. The farmers largely depend upon two major regions for the supply of seeds – one in Karnataka itself called Byadgi and the other was Guntur (Andhra Pradesh).

Ramachandra (2008) estimated Rs. 6.58 corer loss of chili crop in Bellary district due to disease attack. Chilli area was 1,736 hectares, out of the total crop area of 13,287 hectares in Bellary.

Navadkar et al. (2003) revealed that the area, production, and productivity of cotton in India during 2001-2002 were increased by 48.81, 22.71 and 15.00 percent change over 1950-51 respectively. It means that the production increased rapidly on account of area and productivity growth.

Balappa Shivaraya et al. (1999) attempted to analyze the growth performance of red gram in Gulbarga district and Karnataka state as a whole over the period 1980 to 1994. The quadratic growth function was fitted for the estimation of growth rate in the area and cubic function for production and productivity. The study showed that area under red gram declined significantly by 10 percent and 9 percent per annum respectively during 1980-81 to 1994-95 in the Gulbarga district and Karnataka state as a whole. Productivity has increased significantly by 11 percent in Karnataka state. The analysis concluded that even though the area had declined significantly, the production did not decline due to the significant increase in its products for the state as a whole.

2.2 BYADGI CHILI MARKET

Ishwara (2010) reported analysis that in the Byadgi region were cold storages to storing red, chili seeds and chili, etc. however 80 percent of each cold storage was filled with red chili due to the existence of vast and extensive red chili market yard in Byadgi.

Stephan Raj Swaminba (2012) reputed that Haveri (Byadagi) is shifting from red chili to cotton production. Despite the reduction Byadgi chili area the market arrivals as Byadgi chili substantially chili farmers facing "Madura Roga" means leaf curling disease for their chili cultivation. Byadgi chili is grown in Dharwad Gadag & Haveri district in rain field conditions

Jajetiravi (2012) reported that farmers switched to cotton from chili because of cotton prices were more stable than chili prices. Farmers were likely to shift to cotton or cereals due to lower returns from the chili.

3. RESEARCH GAP

There are many research studies on the chili market and Byadgi chili. Specifically studies on History of Byadgi chili, dynamics of chili market, grades and standards on chili, characteristics of Byadgi chili, production and value addition to chill, etc. But there is a lack of study chili market impact on the Byadgi region.

4. PROBLEM STATEMENT

Byadgi is known for chili and its given Geographical Indication (GI) certificate from September 2010 as per section of the GI goods Act 1999. According to folk 200 years ago chili crop started to grow here. Byadgi chili is special for its deep red color and less spicy and 25 industries are in and around the Byadgi involved in converting this chili into powder. Annually on an average Byadgi chili market has 300 core turnovers. This market attracts traders from throughout Karnataka and near state Andra Pradesh because of its fair price, immediate payment and accurate measurement of chili.

Presently this is the second largest chili trading market in the country. There is a scope to study the impact of chili market.

5. OBJECTIVE

➢ To analyze the impact of Byadgi chili market on the following people of Byadgi:
• Towards the Framers
• Towards the Traders
• Towards the Workers

6. SIGNIFICANCE OF THE STUDY

This study should be significant in the sense that it will:

This research enlightens policymakers on information about whether the chili market is impacting stakeholders of Byadgi or not in terms of infrastructure development, health, people lifestyle and economic growth, etc.

7. SCOPE OF THE STUDY

● This study will be restricted to Byadgi region because of external aspects like industries related to chili and chili market.
● This study is intense on only chili aspect.

8. LIMITATIONS OF THE STUDY

1. This study is limited to Byadgi region
2. This study is cover only those who are related to Byadgi chili market

9. RESEARCH METHODOLOGY

9.1 TYPE OF RESEARCH

The proposed research carried out will be descriptive research and analytical research in nature.

9.2 DESCRIPTION OF THE STUDY AREA

The study will carry in Haveri and Dharwad districts of Karnataka which contribute substantial chili area and production of the state.

Haveri, popularly known for Byadgi chili variety and its market in South East Asia, is almost in the center of Karnataka. It is a newly formed district on 15th August 1997comprising 7 taluks namely Haveri, Byadgi, Hirekerur, Ranebennur, Savanur, and Shiggaon The district has a total geographical area of 4, 85,058 ha with a cultivable area of 3, 47,540 ha

Dharwad district has a total geographical area of 4.27 lakh ha with 3.60 lakh ha cultivated area comprising of three Agro-climatic zones, i.e. Dry zone (zone-3), Northern transitional zone (zone-8) and part of Hilly zone (zone-9)

9.3 POPULATION FOR THE STUDY

For the proposed study population is defined as chili formers and chili related companies in Byadgi include employees who employed on chili related activities

9.4 DATA TYPE

For the research purpose, data will be collected on a quantitative and qualitative way

9.5 SAMPLING TYPE

Probability sampling (Stratified random sampling)

9.6 COLLECTION OF DATA

Data was collected through primary and secondary mode. Primary through interview of prospective respondents by questioner and secondary through Journals, Magazines, Newspapers, reports published by various institutes and Government bodies

10. DATA ANALYSIS

Hypothesis test used as data analyzes tool. It refers to an assumption that is made to find a solution to the research problem. The hypothesis is the theory, methods for the practice of testing a hypothesis by comparing it with the null hypothesis. The null hypothesis is only rejected if its probability falls below a predetermined significance level, in which case the hypothesis being tested is said to have that level of significance.

Parametric test: Hypothesis is based on two types Parametric and Non-parametric. The parametric statistical test is one that makes assumptions about the parameters (defining properties) of the population distribution from which one's data are drawn, while a non-parametric test is one that makes no such assumptions. Here parametric" as referring to tests, such as t-tests and the analysis of variance, those assume the underlying source population(s) to be normally distributed.

t-test: t- test (Sample size, Population variance unknown)

1. Chilli cultivation

H0: There is no decrease of chilli cultivation in Byadgi over years ($\mu p = \mu s$)

H1: There is decrease of chilli cultivation in Byadgi over years ($\mu p < \mu s$)

Reject H0 If t < -1.725

Test statistic t = -12.69

Decision: t = -12.69 < -1.725 Reject the H0

T-Distributions Plot lest-tail test, Alpha = 0.05, Degree of freedom (df) = 20

CHART 1
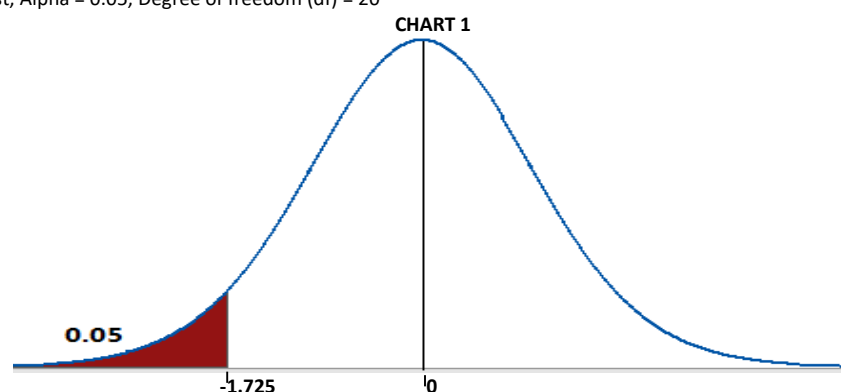
Interpretation: From the above graph, it can be inferred that the t value is -12.69 it falls in the rejection area that evidences that there is a decrease of chili cultivation in Byadgi over years. The study (Stephan Raj Swaminba et.al 2012) is also witness the formers of Haveri district people are shifting from red chili to cotton production.

2. Impact on lifestyle

H0: Chilli market has not effected on life style of the people

H1: Chilli market has effect on life style of the people

Reject H0 If t ≥ 1.725

Test statistic: t = 5.2

Decision: t = 5.2 > 1.725 Reject the H0
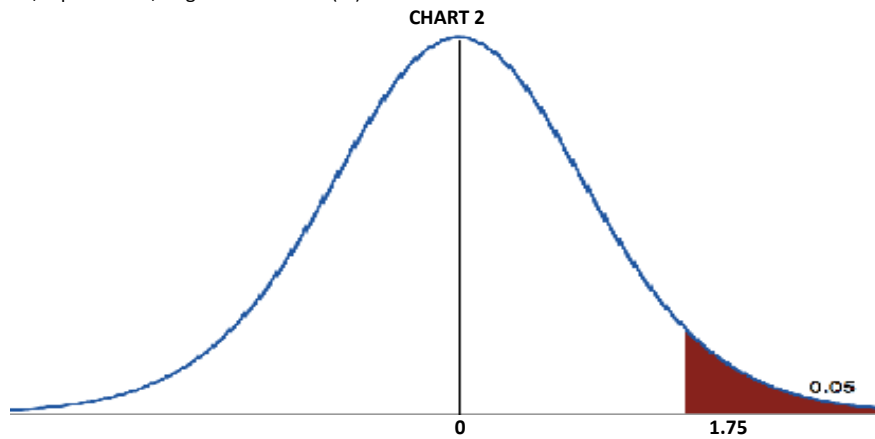
T-Distributions Plot right-tail test, Alpha = 0.05, Degree of freedom (df) = 20

CHART 2

Interpretation: The graph shows that there is an acceptance area of the null hypothesis less than 1.75 but the t value is 5.2, it would result in rejection of the null hypothesis. From the result, it can infer that the chili market into the lifestyle of the people. Because of chilli market income of people had increased and this affected the lifestyle of people also.

3. Impact on Byadgi

H0: Chilli market has not positively impacted on Byadgi

H1: Chilli market has positively impacted on Byadgi

Hypotheses Region:

Reject H0 If t < 1.725

Test statistic: t = -4.21

Decision: t = -4.21 < 1.725 Reject the H0

T-Distributions Plot right-tail test, Alpha = 0.05, Degree of freedom (df) = 20

CHART 3
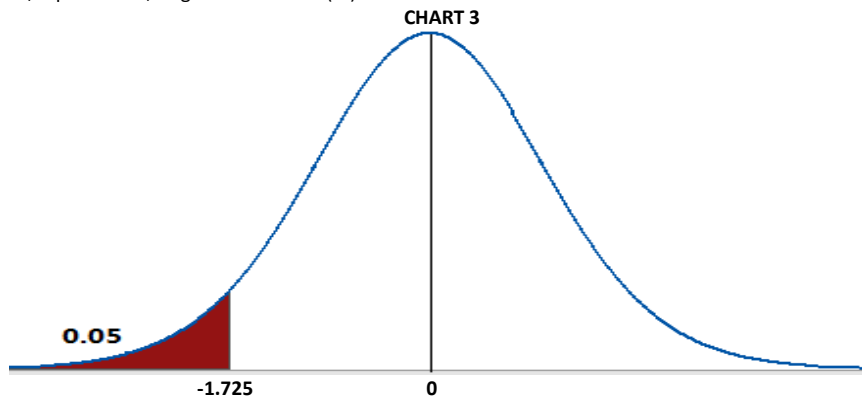
Interpretation: From the above graph, it can be inferred that the t value -4.21 falls in the rejection area. It would result in accept the alternative hypothesis that is Chilli market has positively impacted on Byadgi in terms of their infrastructure and development of the region.

4. Impact on Employment

H0: Employment has not increased in Byadgi because of chilli market

H1: Employment has increased in Byadgi because of chilli market

Hypotheses Region:

Reject H0 If t < 1.725

Test statistic: t = -20.07

Decision: t = -20.7 < - 1.725 Reject the H0
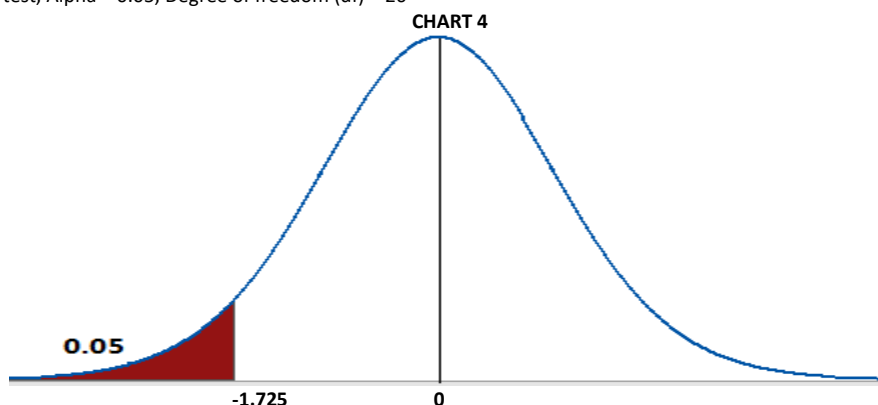
T-Distributions Plot right-tail test, Alpha = 0.05, Degree of freedom (df) = 20

CHART 4

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT 5

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

http://ijrcm.org.in/

Interpretation: The graph shows that there is an acceptance area of the null hypothesis less than 1.75 but the t value is 20.07, it would result in rejection of the null hypothesis. From the result, it can infer that employment has increased in Byadgi because of the chili market. Presently on an average daily 10.000 people are working in the market.

5. Impact on Health

H0: Chilli market has no effect on the health of people

H1: Chilli market has an effect on the health of people

Hypotheses Region:

Reject H0 If t ≠ 2.086

Test statistic: t = 8.1609

Decision: t ≠ Reject the H0

T-Distributions Plot of two tail test, Alpha = 0.05, Degree of freedom (df) = 20

CHART 5

0.025   0.025

-2.086   0   2.086
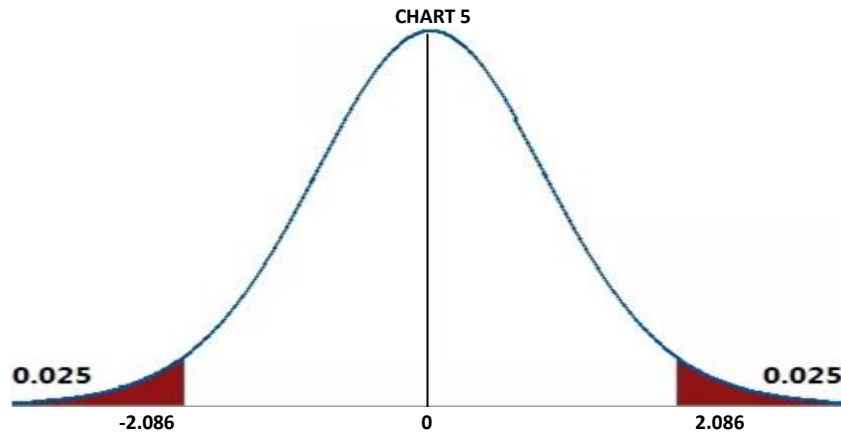
Interpretation: Interpretation: From the above graph, it can be inferred that the t value 8.1609 falls in the rejection area. It would result in accept the alternative hypothesis that is chili market has an effect on the health of people.

11. FINDINGS

On the basis of the study following findings have been drawn:

- Byadgi chili is known for its deep red color and fragrance. That provides scope for chili related industry
- There is a lack of awareness about the Geographical Index (GI) tag in the market
- There are 600 registered chili traders in the market that producing employment opportunities for people
- On average 10,000 people are working in the market daily based especially involved in removing the cap of chili, which negatively impacts on the health of people.
- Growth of the market influencing the lifestyle of the people.
- Prices of chili are not stable compared to other crops. Formers are shifting from chili cultivation so resulting in a reduction of chili cultivation in Byadgi
- On an average daily 10,000 people are working in the market, especially involved in removing the cap of chili, which negatively impacts on the health of people.

12. CONCLUSION

Byadgi is forced to grow chili at the time of British role. Presently this is second largest chili trading market in India. This growth results in many changes in Byadgi. The study is contributing to know that the market has impacted Byadgi directly and indirectly in terms of their employment, infrastructure, health, and lifestyle. It has upgraded the peoples' lifestyles with a negative effect on health.

REFERENCES

1. Ajith Kumar P.K and Indira Devi P. 'Variability and trends in area, production, and productivity of tea in Kerala', Agricultural Situation in India, Volume XLX(11), 1995, pp 807-809.
2. Balappa Shivaraya, L.B Hugar, and J.N Olekar, 'Growth performance of red gram in Karnataka state', Journal of Applied and Natural Science, Volume 8(4), (2016), Issue No 10 (December), ISSN 1756-1761.
3. Bhullar, A. S., 'Estimating, export competitiveness of chillies from Punjab state'. Agricultural Marketing, April-June, 2005, pp 36-43.
4. Hiremath, A.P, 1994, 'Production and marketing of dry chillies in Karnataka' – An economic analysis. M.Sc. (Agri) thesis (Unpub.), University of Agricultural Sciences, Dharwad. Journal of Pharmacognosy and Phytochemistry, Volume No 6(2017), Issue No :1291-1293 E-ISSN 2278-4136.
5. Ishwara P., 'Entrepreneurial opportunities in food processing units (with special references to Byadgi red chilli cold storage units in the Karnataka state)', Annals of the University of Petrosani, Economics, Volume 10(1) 2010, pp 119-128.
6. Jajetiravi, 2012, Turmeric, chilli suffer production overkill, The Financial express, report by The Hindu newspaper.
7. Navadkar, D.S., K.S. Birari and D.V. Kasar, 2003, 'Government support for increasing production and marketing of cotton', Agricultural Situation in India, Volume No 59(12), Issue No April 2002, pp 777-781.
8. Ramachandra C., 2008, Chilli grown in 1,736 hectares damaged the loss has been highest in Bellary taluk, report by The Hindu newspaper.
9. S.S.Pawar, N.V Bharude et al. 'Chillies a food, spice and medicine: A perspective', International Journal of Pharmacy and Biological science, Volume 1, Issue No 3(July)2011, ISSN: 2230-7605, pp 311-318.
10. Stephan Raj Swamidas 2012, 'A study on Dynamics of Byadgi chili in Karnataka', Department of agriculture marketing cooperation and business management, University of Agricultural Science, GKVK, Benglure-560 065.
11. Vandana Shiva, 2008, 'Seeds of Suicide, the Ecological and Human Costs of Globalisation of Agriculture', Research Foundation for Science, Technology and Ecology, 2008.
12. Veerana G. Goudra, Y. N. Havaldar, S. N. Megeri, S. B. Hosamani, Basvaraj Banakar, 2011, 'Growth rate scenario of chilli (Capsicum annum L) in north Karnataka', Journal of Farm Science, Volume 24(2011), Issue No 3 (November), pp 412.

WEBSITES
13. http://iosrjournals.org/iosr-jhss/papers/Vol.%2022%20Issue7
14. http://krishikosh.egranth.ac.in/handle/1/69362

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT 6

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

http://ijrcm.org.in/

15. http://www.dupont.co.in/products-and-services/crop-protection/crop-protection-chilli-cultivation.html
16. https://ideas.repec.org/p/pra/mprapa/64832.html
17. https://www.academia.edu/36819500/Indian_Commodity_Trading
18. https://www.agrocrops.com/red-dry-chillies.php
19. https://www.ijpbs.com/ijpbsadmin/upload/ijpbs
20. https://www.researchgate.net/profile/Indira
21. https://www.researchgate.net/publication/327980543_Farmer's

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT 7

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

http://ijrcm.org.in/

PERCEPTION OF INSTITUTIONAL CUSTOMERS' TOWARDS COURIER SERVICES IN TAMILNADU

Dr. S. SELVAKUMAR
HEAD
PG & RESEARCH DEPARTMENT OF COMMERCE
THEIVANAI AMMAL COLLEGE FOR WOMEN (AUTONOMOUS)
VILLUPURAM

ABSTRACT
All the institutions are using courier services for onwards transmission of time-sensitive documents and non-documents from one place to another irrespective of their type of organisation and business. Hence, in this study an attempt has been made to analyse the institutional customers' attitude towards courier services in Tamilnadu. Both primary and secondary data were collected for the study. In order to analyse the opinion of the institutional customers belonging to different types of organisations and different types of business on service variables such as speed of delivery, safety, reasonable charges, reliability, proximity, technology, value added services, credit facility, service at all places and allied business, ANOVA test was used. The major finding of the study is that even though the institutional customers are belonging to different types of organization and business, they have similar positive opinion on courier services and associate the name courier service with speed, safety and reliability.

KEYWORDS
courier service, customers, perception, speed, safety.

JEL CODE
L87, L91, L97, M30.

INTRODUCTION
The courier industry plays an important role in transmitting documents and non-documents from one place to another for business community and general public. Apart from this, it also provides employment opportunities to many young educated youth. In a way within a short-span of time it has proved its value in the economy.

Oil and Natural Gas Corporation is the first Indian entity to use single express services in India. The legend of the runner who ran all the way from Sparta to Athens, to deliver the message of the Greek victory, is also the first famous courier in history"[1]

"The global express service industry made a direct contribution to world GDP of US$64 billion in 2003. It carried over 1 billion shipments annually. It contributed more than Rs.6 billion in federal taxes yearly."[2]

STATEMENT OF THE PROBLEM
Customer perception plays a vital role in a company's ability to attract new customers and to retain existing customers. The good news is that courier services have the ability to control many of the factors that build an individual's perception of the company/brand. Hence, an attempt has been made to analyse the perception of the institutional customers belonging to different types of organisations and different types of business on service variables such as speed of delivery, safety, reasonable charges, reliability, proximity, technology, value added services, credit facility, service at all places and allied business.

REVIEW OF RELATED LITERATURE
While scanning through customer satisfaction on courier service, very few studies have been conducted.

Aleksandra Gule in her article titled "Courier Service Quality from the Clients' Perspective"[3] published in 'Engineering Management in Production and Services' assessed the significance of thirteen criteria which determine the choice of service at present and in the future using Wilcoxon signed ran test.

Dr. R. Somasundaram et al in their article titled "Customer Behaviour of Courier Services in Erode District"[4] published in Indian Journal of Research have found that there is relationship between the level of education of customers and the purpose of using courier service.

OBJECTIVES OF THE STUDY
The following are the main objectives of the study:
1.   To examine the perception of institutional customers' towards courier services in Tamil Nadu.
2.   To offer suitable suggestions on the basis of the findings of the study.

HYPOTHESES
Ho: The opinions on variables influencing courier services such as speed of delivery, safety, reasonable charges, reliability, proximity, technology, value added services, credit facility, service at all places and allied business among institutional customers belonging to different types of organisations do not differ.

H1: The opinions on variables influencing courier services such as speed of delivery, safety, reasonable charges, reliability, proximity, technology, value added services, credit facility, service at all places and allied business among institutional customers belonging to different types of business differ.

RESEARCH METHODOLOGY
COLLECTION OF DATA
The study is based on both primary and secondary data. Primary data have been collected by conducting survey. The survey covered 100 institutional customers of courier services i.e., 25 each from four major districts of Tamilnadu such as Chennai, Coimbatore, Madurai and Trichy. Secondary data have been collected from books, journals, newspapers, periodicals, reports, internet and unpublished Ph.D. theses.

[1] Pankaj Joshi and Vijay Trivedi, "Courier Industry", Indian Express Investment Week, September 14 - 20, 1998, p.16.
[2] Oxford Economic Forecasting, "The Impact of the Express Delivery Industry on the Global Economy", March, 2005, p.7.
[3] Aleksandra Galc, "Courier Service Quality from the Clients' Perspective", Engineering Management in Production and Services, Vol.9, No.1, 2017, p.36.
[4] Dr. R. Somasundaram et al., "Customer Behaviour of Courier Service in Erode District", Indian Journal of Research, Vol.2, No.1, 2013, p.7.

PROFILE OF INSTITUTIONAL CUSTOMERS
TYPE OF ORGANISATION

The institutional customers surveyed belong to different types of organisation. Table 1 shows the classification of institutional customers on the basis of type of organisation.

TABLE 1: CLASSIFICATION OF INSTITUTIONAL CUSTOMERS ON THE BASIS OF TYPE OF ORGANISATION

Sl. No.	Type of Organisation	Number of Respondents	Percentage
1.	Sole trader	7	7.0
2.	Partnership	10	10.0
3.	Joint Stock Company	83	83.0
	Total	100	100.0

Source: Primary Data

From Table 1, it is clear that among the 100 institutional customers functioning in the State of Tamilnadu surveyed, 7 per cent belonged to sole trader concerns. Those who operated as partnership firms and joint stock companies amounted to ten per cent and 83 per cent respectively. It is concluded that more than four-fifths of the institutional customers (83%) belong to Joint Stock Companies.

Table 2 shows the details of opinion of the institutional customers belonging to different types of organisations on service variables such as speed of delivery, safety, reasonable charges, reliability, proximity, technology, value added services, credit facility, service at all places and allied business.

TABLE 2: DESCRIPTION OF THE OPINION ON VARIABLES INFLUENCING COURIER SERVICES AMONG INSTITUTIONAL CUSTOMERS BELONGING TO DIFFERENT TYPES OF ORGANISATIONS

Variable influencing Courier Services	Type of Organisation	Number of Institutional Customers	Mean value of opinion	Standard. Deviation of Opinion	Standard Error
Speed of Delivery	Sole Trader	7	4.57	.535	.202
	Partnership Firm	10	5.00	.000	.000
	Joint Stock Co.	83	4.72	.454	.050
	Total	100	4.73	.446	.045
Safety	Sole Trader	7	4.43	.535	.202
	Partnership Firm	10	4.40	.966	.306
	Joint Stock Co.	83	4.20	.781	.087
	Total	100	4.24	.780	.078
Reasonable Charges	Sole Trader	7	4.57	.535	.202
	Partnership Firm	10	4.80	.422	.133
	Joint Stock Co.	83	4.41	.648	.072
	Total	100	4.45	.626	.063
Reliability	Sole Trader	7	4.14	.378	.143
	Partnership Firm	10	4.30	.483	.153
	Joint Stock Co.	83	4.17	.469	.052
	Total	100	4.19	.465	.046
Proximity	Sole Trader	7	4.29	.488	.184
	Partnership Firm	10	4.50	.527	.167
	Joint Stock Co.	83	4.30	.535	.059
	Total	100	4.31	.526	.053
Technology	Sole Trader	7	4.14	.378	.143
	Partnership Firm	10	4.10	.876	.277
	Joint Stock Co.	83	3.88	.967	.107
	Total	100	3.90	.969	.097
Value Added Services	Sole Trader	7	3.86	.900	.340
	Partnership Firm	10	4.50	.527	.167
	Joint Stock Co.	83	4.32	.609	.068
	Total	100	4.31	.631	.063
Credit facility	Sole Trader	7	4.14	.378	.143
	Partnership Firm	10	4.30	.483	.153
	Joint Stock Co.	83	4.16	.460	.051
	Total	100	4.18	.458	.046
Service at all places	Sole Trader	7	4.29	.488	.184
	Partnership Firm	10	4.50	.527	.167
	Joint Stock Co.	83	4.28	.553	.061
	Total	100	4.30	.541	.054
Allied Business	Sole Trader	7	2.71	.488	.184
	Partnership Firm	10	3.10	.316	.100
	Joint Stock Co.	83	2.88	.781	.087
	Total	100	2.91	.753	.075

Source: Primary Data

Table 2 shows the details of opinion of the institutional customers belonging to different types of organisations on service variables such as speed of delivery, safety, reasonable charges, reliability, proximity, technology, value added services, credit facility, service at all places and allied business.

The above analysis shows that the mean value (5.00) for speed of delivery is the highest for partnership firms with standard deviation of (0.0). When this value is compared with value of other respondents such as sole trader and company, the mean value slightly varies.

The mean value (4.43) for safety is the highest for sole trader with standard deviation of.535. When this value is compared with value of other respondents such as partnership firm and company, the mean value slightly varies.

The mean value (4.80) for reasonable charges is the highest for partnership firm with standard deviation of.422. When this value is compared with value of other respondents such as sole trader and company, the mean value slightly varies.

The mean value (4.30) for reliability is the highest for partnership firm with standard deviation of.483. When this value is compared with value of other respondents such as sole trader and company, the mean value slightly varies.

The mean value (4.50) for proximity is the highest for partnership firm with standard deviation of.527. When this value is compared with value of other respondents such as sole trader and company, the mean value slightly varies.

The mean value (4.14) for technology is the highest for sole trader with standard deviation of.378. When this value is compared with value of other respondents such as partnership firm and company, the mean value slightly varies.

The mean value (4.50) for value-added services is the highest for partnership with standard deviation of.527. When this value is compared with value of other respondents such as sole trader and company, the mean value slightly varies.

The mean value (4.30) for credit facility is the highest for partnership with standard deviation of.483. When this value is compared with value of other respondents such as sole trader and company, the mean value slightly varies.

The mean value (4.50) for service at all places is the highest for partnership firm with standard deviation of.527. When this value is compared with value of other respondents such as sole trader and company, the mean value slightly varies.

The mean value (3.10) for allied business is the highest for partnership firm with standard deviation of.316. When this value is compared with value of other respondents such as sole trader and company, the mean value slightly varies.

In order to find the evidence for the statistical significance of these variations, the researcher applied ANOVA test and the result is given in Table 3.

TABLE 3: ANALYSIS OF VARIANCE

Variables influencing Courier Services	Source	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance
Speed of Delivery	Between Groups Within Groups Total	1.027 18.683 19.710	3 96 99	.342 .195	1.758	.160
Safety	Between Groups Within Groups Total	.786 59.454 60.240	3 96 99	.262 .619	.423	.737
Reasonable Charges	Between Groups Within Groups Total	1.880 36.870 38.750	3 96 99	.627 .384	1.632	.187
Reliability	Between Groups Within Groups Total	.353 21.037 21.390	3 96 99	.118 .219	.536	.658
Proximity	Between Groups Within Groups Total	.573 26.817 27.390	3 96 99	.191 .279	.683	.564
Technology	Between Groups Within Groups Total	2.477 90.523 93.000	3 96 99	.826 .943	.876	.457
Value Added Services	Between Groups Within Groups Total	1.879 37.511 39.390	3 96 99	.626 .391	1.603	.194
Credit Facility	Between Groups Within Groups Total	.389 20.371 20.760	3 96 99	.130 .212	.612	.609
Service at all places	Between Groups Within Groups Total	.602 28.398 29.000	3 96 99	.201 .296	.679	.567
Allied Business	Between Groups Within Groups Total	3.096 53.094 56.190	3 96 99	1.032 .553	1.866	.141

From table 3, it is inferred that all the variables show only insignificant difference. It means that even though the institutional customers belong to different types of organisations such as sole trader, partnership and company, there is no significant difference in their opinion on the variables important for courier services such as speed of delivery, safety, reasonable charges, reliability, proximity, technology, value added services, credit facility, service at all places and allied business. It is concluded that all the institutional customers have similar positive opinion on courier services and associate the name courier service with speed, safety and reliability.

TYPE OF BUSINESS

Institutional customers surveyed belong to different type of business. Table 4 shows the classification of institutional customers on the basis of type of business.

TABLE 4: CLASSIFICATION OF INSTITUTIONAL CUSTOMERS ON THE BASIS OF TYPE OF BUSINESS

Sl. No.	Type of Business	Number of Respondents	Percentage
1.	Manufacturing	13	13.0
2.	Trading	18	18.0
3.	Service	69	69.0
	Total	100	100.0

Source: Primary Data

From Table 4, it is found that out of 100 institutional customers surveyed 13 per cent belong to manufacturing concerns. Those who belong to trading concern amount to 18 per cent. Service type of business amounted to 69 per cent. More than two-thirds of the institutional customers (69%) belong to service sector.

TABLE 5: DESCRIPTION OF THE OPINION ON VARIABLES INFLUENCING COURIER SERVICES AMONG INSTITUTIONAL CUSTOMERS BELONGING TO DIFFERENT TYPES OF BUSINESS

Variable influencing Courier Services	Type of Business	Number of Institutional Customers	Mean value of opinion	Standard. Deviation	Standard Error
Speed of Delivery	Manufacturing	13	4.54	.519	.144
	Trading	18	4.83	.383	.090
	Services	69	4.74	.442	.053
	Total	100	4.73	.446	.045
Safety	Manufacturing	13	4.15	.376	.104
	Trading	18	3.89	1.132	.267
	Services	69	4.35	.703	.085
	Total	100	4.24	.780	.078
Reasonable charges	Manufacturing	13	4.38	.506	.140
	Trading	18	4.61	.502	.118
	Services	69	4.42	.673	.081
	Total	100	4.45	.626	.063
Reliability	Manufacturing	13	4.08	.277	.077
	Trading	18	4.11	.323	.076
	Services	69	4.23	.519	.062
	Total	100	4.19	.465	.046
Proximity	Manufacturing	13	4.31	.480	.133
	Trading	18	4.33	.767	.181
	Services	69	4.30	.464	.056
	Total	100	4.31	.526	.053
Technology	Manufacturing	13	3.46	1.266	.351
	Trading	18	3.56	1.199	.283
	Services	69	4.07	.792	.095
	Total	100	3.90	.969	.097
Value Added Services	Manufacturing	13	4.46	.519	.144
	Trading	18	4.61	.502	.118
	Services	69	4.20	.655	.079
	Total	100	4.31	.631	.063
Credit Facility	Manufacturing	13	4.08	.277	.077
	Trading	18	4.11	.323	.076
	Services	69	4.22	.511	.061
	Total	100	4.18	.458	.046
Service at all places	Manufacturing	13	4.31	.480	.133
	Trading	18	4.50	.514	.121
	Services	69	4.25	.553	.067
	Total	100	4.30	.541	.054
Allied Business	Manufacturing	13	3.38	1.044	.290
	Trading	18	3.00	.767	.181
	Services	69	2.80	.655	.079
	Total	100	2.91	.753	.075

Source: Primary Data

Table 5 shows the details of opinion of the institutional customers belonging to different types of business on service variables such as speed of delivery, safety, reasonable charges, reliability, proximity, technology, value added services, credit facility, service at all places and allied business.

The above analysis shows that the mean value (4.83) for speed of delivery is the highest for respondents doing trading business with standard deviation of.383. When this value is compared with value of other respondents doing manufacturing business and service business, the mean value slightly varies.

The mean value (4.35) for safety is the highest for institutional customers doing service type of business with standard deviation of.703. When this value is compared with value of other respondents doing manufacturing and trading businesses, the mean value slightly varies.

The mean value (4.61) for reasonable charges is the highest for institutional customers doing trading business with standard deviation of.502. When this value is compared with value of other respondents doing manufacturing and service type of businesses, the mean value slightly varies.

The mean value (4.23) for reliability is the highest for institutional customers doing service type of business with standard deviation of.519. When this value is compared with value of other respondents doing manufacturing and trading businesses, the mean value slightly varies.

The mean value (4.33) for proximity is the highest for institutional customers doing trading business with standard deviation of.767. When this value is compared with value of other respondents doing manufacturing and service type of businesses, the mean value slightly varies. The mean value (4.07) for technology is the highest for institutional customers doing service type of business with standard deviation of.792. When this value is compared with value of other respondents doing manufacturing and trading businesses, the mean value slightly varies. The mean value (4.61) for value-added services is the highest for institutional customers doing trading business with standard deviation of.502. When this value is compared with value of other respondents doing manufacturing and service type of businesses, the mean value slightly varies. The mean value (4.22) for credit facility is the highest for institutional customers doing service type of business with standard deviation of.511. When this value is compared with value of other respondents doing manufacturing and trading businesses, the mean value slightly varies. The mean value (4.50) for service at all places is the highest for institutional customers doing trading business with standard deviation of.514. When this value is compared with value of other respondents doing manufacturing and service type of businesses, the mean value slightly varies. The mean value (3.38) for allied business is the highest for institutional customers doing manufacturing business with standard deviation of 1.044. When this value is compared with value of other respondents doing manufacturing and service type of businesses, the mean value slightly varies. In order to find the evidence for the statistical significance of these variations, the researcher applied ANOVA test and the result is given in Table 6.

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT   11

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

http://ijrcm.org.in/

TABLE 6: ANALYSIS OF VARIANCE

Variables influencing Courier Services	Source	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance
Speed of Delivery	Between Groups	.675	2	.337	1.720	.185
	Within Groups	19.035	97	.196		
	Total	19.710	99			
Safety	Between Groups	3.118	2	1.559	2.647	.076
	Within Groups	57.122	97	.589		
	Total	60.240	99			
Reasonable Charges	Between Groups	.584	2	.292	.742	.479
	Within Groups	38.166	97	.393		
	Total	38.750	99			
Reliability	Between Groups	.399	2	.200	.923	.401
	Within Groups	20.991	97	.216		
	Total	21.390	99			
Proximity	Between Groups	.012	2	.006	.021	.979
	Within Groups	27.378	97	.282		
	Total	27.390	99			
Technology	Between Groups	6.687	2	3.344	3.758	.027
	Within Groups	86.313	97	.890		
	Total	93.000	99			
Value Added Services	Between Groups	2.722	2	1.361	3.600	.031
	Within Groups	36.668	97	.378		
	Total	39.390	99			
Credit Facility	Between Groups	.320	2	.160	.759	.471
	Within Groups	20.440	97	.211		
	Total	20.760	99			
Service at all places	Between Groups	.919	2	.460	1.588	.210
	Within Groups	28.081	97	.289		
	Total	29.000	99			
Allied Business	Between Groups	3.954	2	1.977	3.671	.029
	Within Groups	52.236	97	.539		
	Total	56.190	99			

From table 6, it is inferred that the variables such as safety, technology, value added services and allied business show significant difference and the other variables such as speed of delivery, reasonable charges, reliability, proximity, credit facility and service at all places show insignificant difference. It means that all the institutional customers belonging to different type of business such as manufacturing, trading and service have different opinion on courier industry in respect of certain variables such as safety, technology, value added services and allied business and at the same time they have similar positive opinion on courier industry in respect of certain variables such as speed of delivery, reasonable charges, reliability, proximity, credit facility and service at all places.

OPINION ON THE REASONS FOR USING COURIER SERVICES

In order to ascertain the main reasons for using courier services by the institutional customers, they were asked to rank the various reasons for using courier services. Table 7 shows the rank given by the respondents to various reasons for using courier services.

TABLE 7: OPINION ON THE REASONS FOR USING COURIER SERVICES

Sl. No.	Reasons	Rank						Total
		I	II	III	IV	V	VI	
1.	Speed	87	6	3	2	1	1	100
2.	Safety	4	76	13	3	2	2	100
3.	Low Charges	1	5	21	6	35	32	100
4.	Reliability	4	8	12	52	22	2	100
5.	Prompt Service	1	4	46	29	13	7	100
6.	Service at all places	3	1	6	8	27	56	100
		100	100	100	100	100	100	600

Source: Primary Data

The six main reasons for using courier service were ranked in the order of preference by the institutional customers.

TABLE 8: GARRET'S RANK

Sl. No.	Reasons	Garret's Score	Average	Rank
1.	Speed	7391	73.91	1
2.	Safety	6056	60.56	2
3.	Prompt Service	4789	47.89	3
4.	Reliability	4712	47.12	4
5.	Low Charges Service at all places	3833	38.33	5
6.	Service at all places	3219	32.19	6

Source: Primary Data

From Table 8, it is seen that the main reason for using courier service by the institutional customers is speed, followed by safety, prompt service, reliability, low charges and service at all places.

TYPE OF ARTICLES SENT THROUGH COURIERS

Different types of articles were sent by the respondents. Table 4.15 shows the classification of respondents according to the type of articles sent by them through couriers.

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT 12

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

http://ijrcm.org.in/

TABLE 9: TYPE OF ARTICLES SENT THROUGH COURIER SERVICE

Sl. No.	Article Sent	Number of Respondents	Percentage
1.	Document	30	30.0
2.	Non-document	6	6.0
3.	Both	64	64.0
	Total	100	100.0

Source: Primary Data

It is clear from Table 9 that 30 per cent of the institutional customers send documents only and six per cent send non-documents. Those who send both the documents and non-documents amount to 64 per cent. It is concluded that two-thirds of the institutional customers (64%) send documents as well as non-documents through courier companies.

NUMBER OF COURIER SERVICES USED FOR SENDING ARTICLES

Institutional customers surveyed do not depend on a single courier company. They usually patronize a number of courier companies to ensure timely distribution of letters to the customers, who reside in the different parts of the locality. The courier company does not provide services to various places. So the institutional customers depend on the local couriers to send the letters within a City and they depend on those couriers who are rendering services, both domestic as well as international, to send letters and parcels to the places. Table 10 shows the classification of institutional customers on the basis of number of courier services used for sending articles.

TABLE 10: CLASSIFICATION ON THE BASIS OF NUMBER OF COURIER SERVICES USED

Sl. No.	Number of Courier Services Used	Number of Respondents	Percentage
1.	One	8	8.0
2.	Two	65	65.0
3.	Three	21	21.0
4.	Four	4	4.0
5.	More than Four	2	2.0
	Total	100	100.0

Source: Primary Data

From Table 10, it is obvious that among the 100 institutional customers 8 per cent of them use only one courier service for sending letters and parcels. Those who use two courier services amount to 65 per cent. Those who use three couriers amount to 21 per cent. Four per cent of the institutional customers use four courier services. Two per cent of the respondents use more than four courier services. Two-thirds of the institutional customers (65%) use two courier services for sending letters and parcels.

CLASSIFICATION ON THE BASIS OF PLACES WHERE ARTICLES ARE SENT

Different types of articles are sent by the respondents to different types of places. Table 11 shows the classification of respondents according to the places where articles are sent by them.

TABLE 11: CLASSIFICATION ON THE BASIS OF PLACES WHERE ARTICLES ARE SENT

Sl. No.	Places Where Articles are Sent	Number of Respondents	Percentage
1.	For Local Delivery	5	5.0
2.	For Outstation	28	28.0
3.	Both	67	67.0
	Total	100	100.0

Source: Primary Data

It is inferred from Table 11 that five per cent of the respondents send articles to local places only where as those who send articles to outstations alone amount to 28 per cent. Those who send articles to both local as well as outstations amount to 67 per cent. More than two-thirds of the respondents (67%) send articles to local as well as outstations.

OCCASIONS FOR USING COURIER SERVICES

The institutional customers surveyed send articles for different occasions. Table 12 shows the classification of respondents on the basis of occasions for using courier services.

TABLE 12: OCCASIONS FOR USING COURIER SERVICES

Sl. No.	Occasions for Using Courier Services	Number of Respondents	Percentage
1.	Daily	51	51.0
2.	Alternative Days	34	34.0
3.	In Emergencies	8	8.0
4.	Once a Week	7	7.0
	Total	100	100.0

Source: Primary Data

It is inferred from Table 12 that 51 per cent of the institutional customers used courier services daily whereas 34 per cent used courier services on alternative days. Those who used courier services in emergencies and once a week amount to eight per cent and seven per cent respectively. It is concluded that majority of the institutional customers (51%) used courier services daily.

OPINION ON COURIER CHARGES

Institutional customers have different opinions on the courier charges. Table 13 shows the opinion of the respondents on the rates of charges levied by the courier services.

TABLE 13: OPINION ON COURIER CHARGES

Sl. No.	Rate of Charges	Number of Respondents	Percentage
1.	High	58	58.0
2.	Moderate	30	30.0
3.	Low	12	12.0
	Total	100	100.0

Source: Primary Data

It is inferred from Table 13 that the charges levied are high for 58 per cent of the respondents. Those who considered the courier charges moderate and low amount to 30 per cent and 12 per cent respectively. According to a majority of the institutional customers (58%), the courier charges were high.

AMOUNT SPENT ON COURIER SERVICES PER MONTH

All the 100 institutional customers surveyed spend huge amount of money on courier services. Table 14 shows the amount spent on courier services per month by the respondents.

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT 13

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

http://ijrcm.org.in/

TABLE 14: AMOUNT SPENT ON COURIER SERVICES PER MONTH

Sl. No.	Amount Spent Per Month	Number of Respondents	Percentage
1.	Upto Rs. 3,000	86	86.0
2.	Rs. 3,000 to Rs. 6,000	8	8.0
3.	Rs. 6,000 to Rs. 9,000	1	1.0
4.	Above Rs. 9,000	5	5.0
	Total	100	100.0

Source: Primary Data

It is seen from Table 14 that 86 per cent of the respondents spent upto Rs. 3,000 per month on courier services. Those who spent more than Rs. 3,000 per month but less than Rs. 6,000 per month on courier services and more than Rs. 6,000 per month but less than Rs. 9,000 per month on courier services amount to eight per cent and one per cent respectively. Those who spent more than Rs. 9,000 per month on courier services amount to five per cent. More than four-fifths of the institutional customers (86%) spent upto Rs. 3,000 per month on courier services.

COMPLAINTS ABOUT THE COURIER SERVICES

Among the 100 institutional customers in Tamilnadu, 23 per cent of them complained about the courier services such as delay in delivery, non-delivery, loss of contents, delivery of letter to wrong person, unfair handling of contents of parcels and insured articles, tampering and non-receipt of proof of delivery and the like. Those who did not have any complaint about the courier services amount to 77 per cent. More than three-fourths of the institutional customers (77%) do not have any complaint about the courier services.

COMPENSATION FOR DAMAGE OF AN ARTICLE

Among the 100 institutional customers, 7 per cent of them have received compensation from courier units for the damages for the articles sent. Those who have not faced the problem of compensation for damage amount to 93 per cent. More than four-fifths of the institutional customers (93%) have not faced the problem of compensation for damage.

CONCLUSION

It is concluded that the institutional customers belonging to different types of organisation and different types of business have similar positive opinion on factors influencing courier services such as speed of delivery, safety, reasonable charges, reliability, proximity, value added services and service at all places.

REFERENCES

1. Aleksandra Galc, "Courier Service Quality from the Clients' Perspective", Engineering Management in Production and Services, Vol.9, No.1, 2017, p.36.
2. Dr. R. Somasundaram et al., "Customer Behaviour of Courier Service in Erode District", Indian Journal of Research, Vol.2, No.1, 2013, p.7.
3. Oxford Economic Forecasting, "The Impact of the Express Delivery Industry on the Global Economy", March, 2005, p.7.
4. Pankaj Joshi and Vijay Trivedi, "Courier Industry", Indian Express Investment Week, September 14 - 20, 1998, p.16.

A STUDY ON ASSESSING THE EFFECTIVENESS OF INTERNAL AUDIT PRACTICE IN PUBLIC DEVELOPMENTAL AGENCIES IN ETHIOPIA WITH REFERENCE TO DEVELOPMENT BANK OF ETHIOPIA

SEFIWSEW ZELEKE BELAY
LECTURER
DEPARTMENT OF ACCOUNTING & FINANCE
DEBRE TABOR UNIVERSITY
AMHARA REGION

ABSTRACT

Despite audit is required for all organizations to survive grow and remain prosperous. It has not received the degree of concern it deserves in public developmental agencies (PDAs) in Ethiopia. This study is conducted under a title of Assessing the effectiveness of internal audit practice of Public developmental agencies in Ethiopia in case of Development bank of Ethiopia. "The major objective of the research was to evaluate the effectiveness of internal audit practice in Development bank of Ethiopia by studying audit as a process, assessing the perceptions of employees towards the effectiveness of internal audit. To achieve this objective, both primary and secondary information were obtained via questionnaires and from its documentation using both descriptive and explanatory research design with quantitative and qualitative methods, the type of sampling techniques applied is census and the information gathered was analyzed according using SPSS. Data from 30 internal auditors and 85 Accountants. The study revealed that the internal auditors receive management support and majority of the internal auditors did have requisite skills and experience. The Development bank of Ethiopia also experienced inadequate resources allocation and trainings on the required professions. This suggests that the internal audit in the bank is effective as existed limitations. To enhance more the effect of the bank internal audit practice the study recommended that the bank should have to strive hard in order to improve their internal audit effectiveness by developing and implementing internal audit trainings periodically and adequate resources which will best suit their specific needs. The findings of the study have important implication for the bank, other public organizations and future research by academics, consultants and researches.

KEYWORDS
public developmental agencies, internal audit effectiveness, development bank of Ethiopia.

JEL CODES
H83, M42.

INTRODUCTION
INTRODUCTION ABOUT TOPIC
The issues of globalization transparency, integrity and improvement of service delivery increase the need for governance and accountability. Consequently, this phenomenon leads the increasing interest of internal audit function in organization Dittenhofer (2001) and Goodwin in (2004) have both shown that internal auditing is promising as an important component of management and a control mechanism both private and public sectors. Still, Montondon and Fischer (2005.) have both asserted that the credibility of the internal audit function is significantly important especially in public entities as they are held responsible to diverse stakeholders compared to private entities.

Therefore, the nature of the service sought from the internal auditor has been transforming over the years from an emphasis on compliance audit where independence has been the core paradigm, to both compliance and consulting role where partnering with management is accorded greater significance (Trulea and Stefanescu, 2009; Nagy and Cenker 2002,). The government of Ethiopian as part of its development strategy to stop various corrupted officials and other criminal activities, it is becoming, obvious that addressing the problem of economic crime is vital. Due to this, issuing proclamation no 68/1997 and the issuance of internal audit procedure manual for public sectors back the relevance of Internal audit functions (IAF). Moreover the issuance of proclamation no- 235/2001 to establish the federal ethics and anticorruption commission and the implementation of the civil service reform plan are clean indicators of governments concern to embed good governance system in the public sectors of Ethiopia.

STATEMENT OF THE PROBLEM
Internal audit is a cornerstone of good public sector governance and it is essential for ensuring the operation and appropriateness of controls. According to Zeleke (2007) the internal audit activities help to prevent corruption, misappropriation of funds and other financial irregularities and ensure effective and efficient utilization of resources to achieve the objectives of the organization. Misappropriation of funds and corruption are now the order of the day in the public developmental agencies in all countries due to weak internal control systems (Van Gansberghe, 2005) and internal audit implemented in Developmental Bank of Ethiopia were also challenged by problems like lack of obtaining proper attention from managers, resistance from staffs and increasing number of customer complaints. Internal auditing also is handicapped by a critical shortage of appropriately trained and skilled manpower, inadequate organizational status, and a lack of professional independence.

OBJECTIVES
This paper focuses on to assessing the effectiveness of internal audit practice in public developmental agencies in Ethiopia with reference to Development bank of Ethiopia.

RESEARCH QUESTIONS
This research has tried to give answers to the following research questions.
1. What does implementation and effectiveness of internal audit look like in Development Bank of Ethiopia?
2. How do employees perceive the effectiveness of internal audit practice in Development Bank of Ethiopia?
3. What factors make the internal audit units effective?
4. What is the strength and direction of the relationship between effectiveness of internal audit practice with process of internal audit?

SPECIFIC OBJECTIVES
1. To investigate implementation of internal audit in Development bank and to see whether these Banks adhere to theoretical guidelines for managing internal audit or not.
2. To analyze and determine the level of internal audit practice effectiveness based on factors common for successful internal audit.
3. To determine whether Development Bank have any formal policy on internal audit or not.
4. To examine the relationship between effectiveness of internal audit practice and factors of effective internal audit practice.

SCOPE

The scope of the study covers the conceptual, geographical and the time scope.

Conceptual Scope - the study was focus on examining issues related to identify on impact of the effectiveness of internal audit practice in public developmental agencies in Ethiopia with reference to Development bank of Ethiopia.

Geographical Scope - the research was carried out geographically Ethiopia.

Time Scope - The study used the most recent year data from the fiscal year of 2009 up to 2010 e.c

METHODOLOGY

This paper focuses on to assess the effectiveness of internal audit practice in public developmental agencies in Ethiopia with reference to Development bank of Ethiopia.

RESEARCH DESIGN

The study was employed by using both descriptive and explanatory research design with quantitative and qualitative methods. The quantitative aspect of the data focused on description of the state of affairs related with implementation and effectiveness of internal audit practice as it exists currently in Development bank of Ethiopia and analysis of a relationship among the dependent and explanatory variables of the Bank.

POPULATION AND SAMPLING TECHNIQUE

Currently the total numbers of the study comprised all Development bank of Ethiopia internal auditors and Accountants. The type of sampling techniques applied is census method, the structure of this population enabled the researcher to collect objective and detailed information from internal auditors and Accountants who are responsible for ensuring the effectiveness of the internal audit. The Accountants were chosen because they deal with the financial affairs of the banks and implementation of internal audits which help them to have enough exposure to the internal audit practice of their bank. The total number of the targeted population was at 115 (which constituted 30 internal auditors, 85 Accountants).

METHODS OF DATA COLLECTION

Data were collected using primary data gathering tools of questionnaire and the researcher's onsite observation. Questionnaires that contain both open and closed ended questions are prepared and distributed to all staff members of the bank. The researcher ratings summarized by likert with a five-point scale from strongly agree to neutral to obtain information on attitudes and to examine the effectiveness of internal audit practice.

Primary data

This is system of data collection tool that was got directly from the field. It was collected using questionnaires.

Secondary data

The researcher was read related literature relevant to the subject before and during the study (internal audit) in public developmental agencies, obtained from previous studies, text books, internet, journals and reports from the bank itself.

METHODS OF DATA COLLECTION AND INSTRUMENTS

Administered questionnaires were given to a selected internal auditors and accountants who are currently working in the bank, the questionnaire investigates opinions on the effectiveness of internal audit based on factors and how the audits were carried out as experienced and perceived by respondents.

DATA ANALYSIS METHOD

It is the most important component of this study. The responses of the respondents that have been collected using the above methods were organized, analyzed, and interpreted in a sensible way. To meet the objectives of the research correlation analysis and regression analysis as well as descriptive statistics have been used to analyze findings.

Regression analysis is a statistical tool for the investigation of relationships between dependent and independent variables. Usually, the investigator seeks to ascertain the causal effect of one variable upon another to examine the relationship between effectiveness of internal audit practice and factors of effective internal audit practice. The investigator also typically assesses the "statistical significance" of the estimated relationships, that is, the degree of confidence that the true relationship is close to the estimated relationship.

In multiple linear regression there are P explanatory variables and the relationship between the dependent variable and the explanatory variables is represented by the following equation:

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \cdots \ldots \ldots \ldots + \beta_p X_{pi} + \varepsilon_i$$

Where:

Y_i is the dependent variable and X_1, X_2, ..., X_p are the independent variables

β_0 is the constant term and β_1 to β_p are the coefficients relating the p explanatory variables to the variables of interest. The term 'linear' is used because in multiple linear regressions we assume that y is directly related to a linear combination of the explanatory variables.

MODEL ASSUMPTIONS

Dependent variables Y

Independent (explanatory) variables: X_1, X_2, ...X_n

Assumptions

- The true model is $Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \cdots \ldots \ldots \ldots + \beta_p X_{pi} + \varepsilon_i, i = 1, 2, \ldots \ldots \ldots . n$
- Homoscedasticity: $Var(\varepsilon_i) = E(\varepsilon_i^2) = \sigma^2$ for all i
- No error autocorrelation: $cov(\varepsilon_i, \varepsilon_j) = E(\varepsilon_i \, \varepsilon_j) = 0$ for all $i \neq j$
- Each of the explanatory variables X_1, X_2, ...X_n is non-stochastic.
- No multicollinearity: No exact linear relationship exists between any of the explanatory variables.
- Normality: ε_i are normally distributed with mean zero and variance σ^2 for all i ($\varepsilon_i \sim N(0, \sigma^2)$)

Correlation Analysis

It deals with the measurement of the closeness of the relationship which is described in the regression equation. We say there is correlation when the two series of items vary together directly or inversely.

TYPES OF DATA COLLECTED

This study was mainly based on primary data and supported by secondary data when available. The sources of primary data are the employees; Secondary data are collected from the banks, personal files, websites and reports.

ANALYSIS & FINDINGS

This research sought to assess the effectiveness of internal Audit practice in the development bank of Ethiopia, according to the total respondents 0% of them lies between an age of 21-25,48.6% of them are between 26-30 years,42.2%of them are between 31-40 years and the rest 8.3% of the respondents are aged above 40.

The occupation of respondents can contribute a lot towards the effectiveness of internal audit practice. As it is depicted in the table 26% of the respondents are engaged in internal auditors and 74% Accountants within the bank, also reveal that 75% of the respondents are males and 25% of the respondents are females, Regarding the educational level of the respondents 45% of them are BA(BSC) holders,55% of the respondents are MA(MSC) holders.

From the respondents evident that the majority of respondents 30% have been employed in their current position for 1-3 years, 60% of them have an experience of 4-6 years, 7% of them have an experience of 7-10 years and the rest 3% of them has an experience of above 10 years. Statistical evidence showed the internal audit department is given low status in the bank management structure,10% strongly agree,12.% agree,23.9% disagree and 54.1%) strongly disagree and the audit

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT 16

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

http://ijrcm.org.in/

have policies and procedures are not clearly defined for the internal audit department,0%)of the respondents agreed,11.7% disagree 0% of them strongly agree and 88.6%) respond strongly disagree this showed us the bank have clear policies and procedures for internal audit departments, management also perceived internal auditors as fault-finders rather than adding value to promote good corporate governance from the total of the respondents 8% agreed,0% strongly agree,14.7% disagree and 77.3% strongly disagree

The respondents also agreed that there is no regular in-service training for them. the respondents representing 89% agree 11.0%)strongly disagree. The internal auditors are not allowed pre-transaction audit, the respondents representing 70.6% agreed,15.6% disagree,11.0% strongly agree and 2.8% representing strongly disagree and didn't free to choose any transaction of their choice 4% agreed,25.5% disagree,5% strongly agree and 65.5% strongly disagree. The respondents also agreed that no opportunity to seek the assistance of experts during audit process especially when assessing value of a contract, property 9.3%) strongly agree, 62.4% agree,10% disagree and 19.3% strongly disagree.

As to whether the units have adequate resources including utilization and availability of appropriate technology the respondents representing 21.1% strongly agreed that they have no adequate resources including appropriate technology and 78.9% also agreed that the resources available are not adequate. Evidence from the study showed that 59.6% of the respondents expressed that the number is inadequate while 21.1% of them stated the number is somehow adequate, 10.1% adequate,6.4% very adequate and 2.8% very inadequate.

The respondents also respond and a review of audit reports reveal that the internal auditors concentrated and Accountants agreed on compliance of law 76.4%), checking budget implementation 85.3%,assessing reliability and soundness of financial information 77% of accounting errors and fraud detection 82(75.2),evaluating management's efforts to the recovery of receivable, taxes and other collectables 79(72.5%),examine use of organization resources and safeguard of assets 86(78.9%),assessing unethical behavior of management and recommend best practice 71(65.1%). The internal auditors also agreed to risk management 85.1%, evaluation of project and productivity 94%, examine and assess the polices, procurers, and manuals 86.2%), test the organizations conformity with objective requirement 79.7%. The documents that the internal auditors draw their powers, functions, mandate and administrative lines include Financial Administration Act, 2003(Act 654), Public Procurement Act, 2003 (Act 663), Internal Audit Charter and Internal Audit Manual. 82.6% of the Development bank of Ethiopia do have Internal Audit Charter and the internal auditors relied on Internal Audit Agency Act. This Act defined the responsibilities and duties of the internal auditors and to define the scope of internal work and powers of internal auditors. The internal audit charter binds management to allow internal auditors to execute their work without any restrictions and implement internal audit recommendations. From the responses 84.4% of the respondents expressed agreed about the implementation of internal audit recommendations by management and the respondents agreed that the relationship with management that is 80.7%. On commitment of management in supporting budgetary status of the internal audit units representing 76.1% of the respondents stated agreed. Management sometimes interferes with the work of the internal auditors as 76.1% indicated agreed about management interference.

The evidence suggests that the internal audit units receive management support in the Development bank of Ethiopia.

The researcher wanted to know the extent to which the external auditors rely on internal auditors in the bank. The external Auditors indicated that they occasionally rely on the internal auditors 65.9%. They explained that the internal auditors do have necessary expertise and experience. It can be deduced that, there is collaboration between internal auditors and external auditors in the bank. In this regard, there would be effective auditing.

From the statistical evidence showed that the internal auditors play advisory roles in the bank. The internal auditors agree to advise management on good corporate governance systems 74.3%, Ethical practice and anticorruption 72.5%. They also agree management on effective risk management 75.2% and management on designing and implementing internal control systems 78% and sound business practice 75.2%. From the above analysis, one can say that the internal audit units in the bank are meeting the modern definition of internal audit by IIA, 2009 as consulting activity and adding value to an organization. These advisory services are necessary to ensure good corporate governance in the bank. It is important to add that the internal audit units may have good advisory services to offer, but the benefits of it may depend on the quality of the service and how relevant is it to the bank. The expertise and the experience of the internal auditors would determine the quality of advisory services they can offer.

As it has been shown the mean score for the effectiveness of internal audit practice in Development bank of Ethiopia was 4.04 and the standard deviation was 0.44 with maximum and minimum values of 4.92 and 2 respectively.

The respondents agreed that, approved internal audit standards, Act or charter 69.7%, Organizational independence 62.4%, Management support 57.8% Implementation of audit recommendations 64.2, No adequate resources 67.9%, Unrestricted access to records 60.6%, Quality leadership of chief internal auditors 65.1% and No regular training of internal audit staffs 64.2% make the internal audit units effective. The respondent also agreed that Rotations of internal audit staffs 60.6%, Job satisfaction 64.2%and Opportunity to take part in the decision making 65.1% could make internal auditors effective.

REGRESSION ANALYSIS

A regression analysis was conducted and Pearson product-moment correlation (*r*) were calculated in order to establish whether or not there was any statistically significant relationship between effectiveness of internal audit practice and important factors of effective internal audit practices, which provides a correlation coefficient that indicates the strength and direction of the linear relationship.

Here we have the dependent variable (effectiveness of internal auditing (EIA)) and independent variables (Organizational setting (OS), internal audit quality (IAQ), Existence of Formal Mandate (EFM), Management Support (MS), Adding Value and Advisory Role of Internal Audit (AVARIA)). Therefore, we have to do a correlation and regression analysis between the EIA and OS, IAQ, MS, and AVARIA. Let us star with correlation analysis or to test the correlation/ association between the dependent and independent variable.

TABLE 1: PEARSON CORRELATION BETWEEN IMPORTANT FACTORS OF EFFECTIVE INTERNAL AUDIT PRACTICE AND INTERNAL AUDIT EFFECTIVENESS (CORRELATION OUTPUT FOR EIA WITH OS, IAQ, MS, AND AVARIA)

		OS	IAQ	EFM	MS	AVARIA
EIA	Pearson Correlation	.726**	.699**	.596**	.704**	.808**
	Sig. (2-tailed)	.000	.000	.000	.000	.000

Source: SPSS

As we have seen in the above table, all P value 0.00 which is less than the 5% level of significance. Therefore, it is highly significant meaning that is strong and positive correlation between EIA and OS, IAQ, MS, and AVARIA.

REGRESSION ANALYSIS

In this part we are going to describe the relationship between EIA and OS, IAQ, MS, and AVARIA in mathematical equation. To do this, let us start with the overall significance of the regression model test.

TABLE 2: ANOVA TABLE

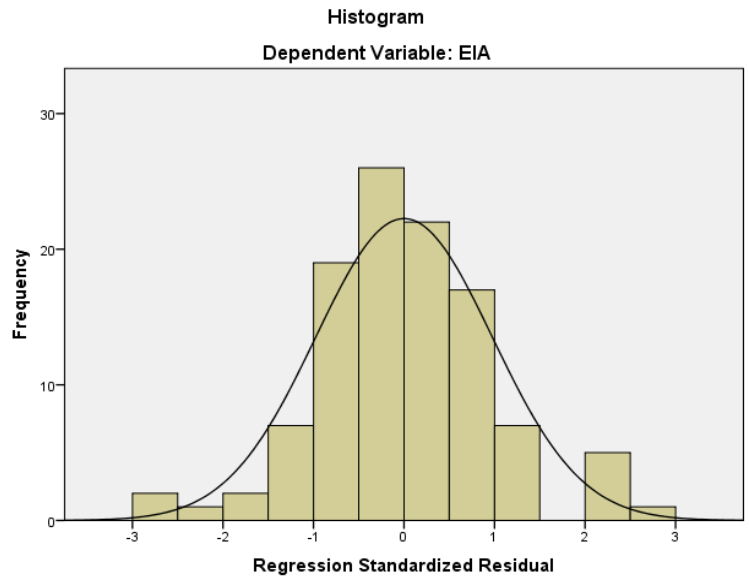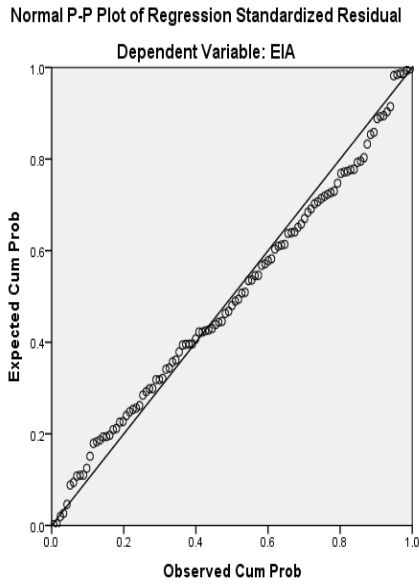| Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	16.906	5	3.381	87.907	.000
1	Residual	3.962	103	.038		
	Total	20.868	108			

Source: SPSS

As we see from the above ANOVA table the P value is 0.000 which is less that the level of significance or 0.05. Therefore, the overall regression model is significant. The value of R^2 is 0.810 which implies that about 81 % of variation in EIA is expressed by the variation in OS, IAQ, MS, and AVARIA. But the remaining around 19 % is unexplained variation this is due to the non-inclusion of other variables.

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT   17

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

http://ijrcm.org.in/

TABLE 3: MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.900ᵃ	.810	.801	.19612

Source: SPSS

FIGURE 1: NORMAL P-P PLOT

Source: SPSS

FIGURE 2: SCATTER PLOT

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT   18

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

http://ijrcm.org.in/
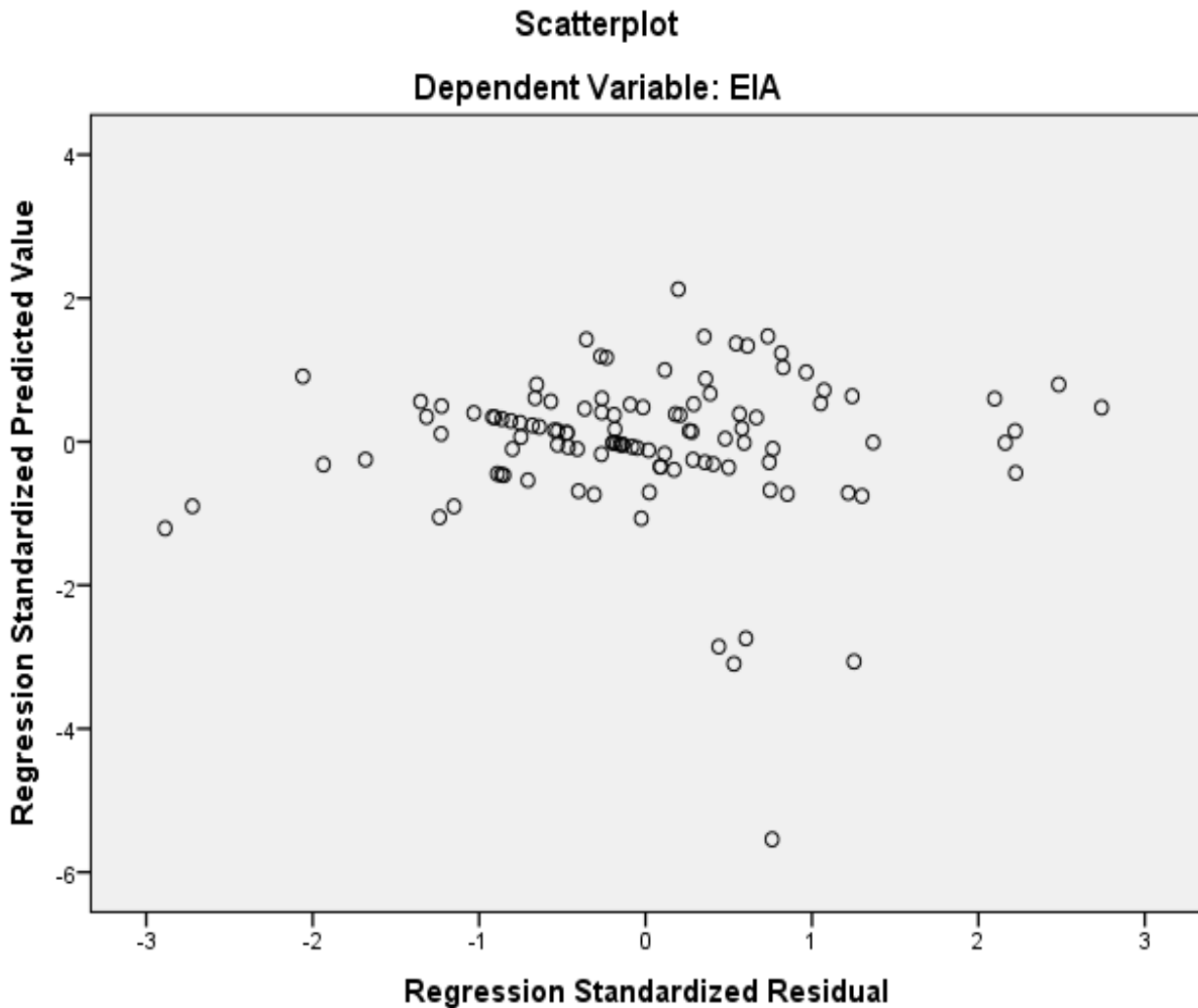
FIGURE 3: PARTIAL AUTOCORRELATION FUNCTION (PACF)
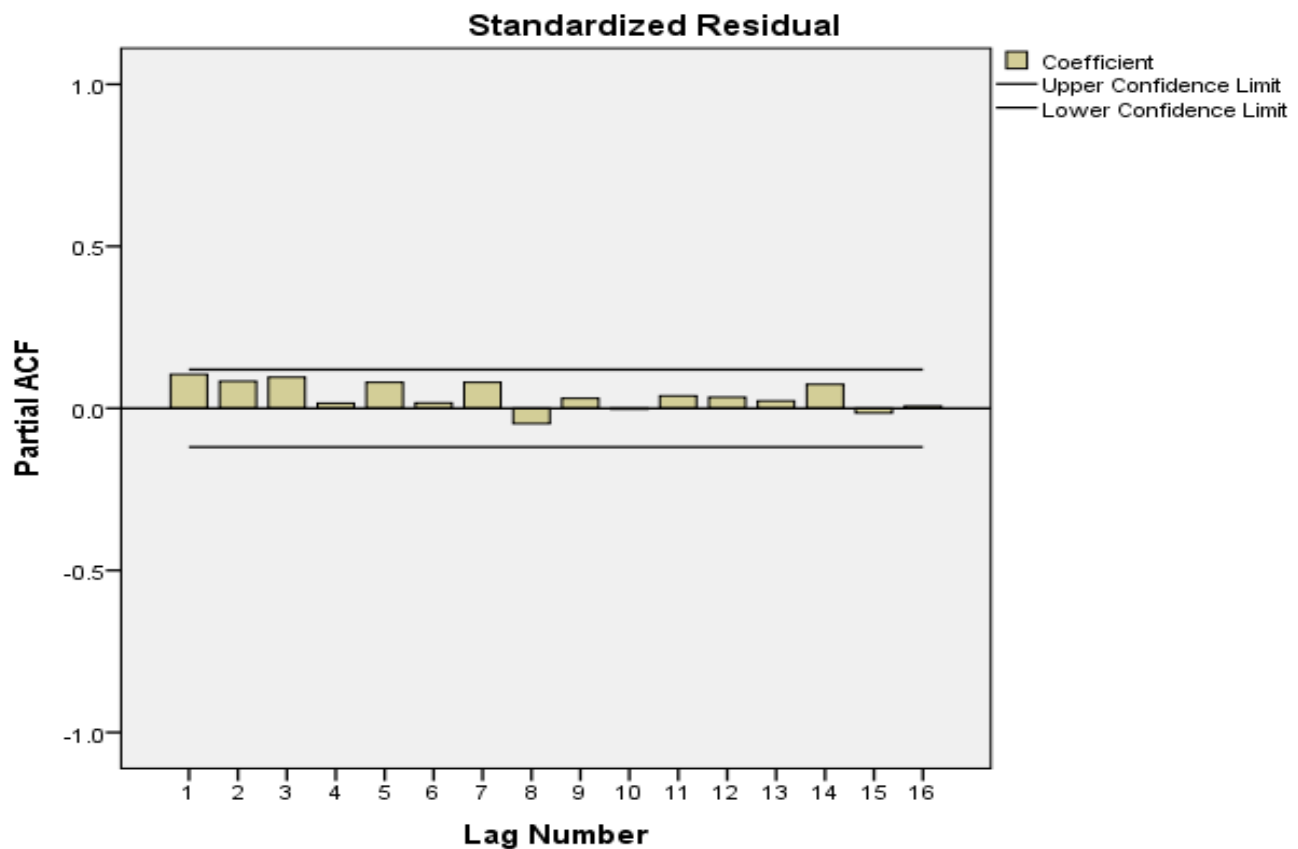
Source: SPSS

As we have seen the assumption of multicollinearity, normality, hetroscedastic, linearity and autocorrelation, there is no any kind of problem or all assumptions are full field. Then after let us come to the individual variable coefficient that is whether it is significant or not on the basis of P value. The following table 4 shows the coefficient of individual independent variable with corresponding to its P value.

TABLE 4: COEFFICIENTS OF THE SELECTED VARIABLE

	Unstandardized Coefficients		Sig.	Collinearity Statistics	
	B	Std. Error		Tolerance	VIF
(Constant)	1.065	.259	.000		
OS	.384	.069	.000	.562	1.780
IAQ	.120	.086	.016	.410	2.440
EFM	.062	.067	.035	.559	1.789
MS	.174	.084	.041	.440	2.274
AVARIA	.533	.065	.000	.536	1.866

Source: SPSS

As we stated in the methodology part Y is the dependent variable (EIA) and the independent variables are denoted by X letter and X_1= OS, X_2= IAQ, X_3= EFM, X_4= MS and X_5= AVARIA. Based on the above denotation we can fit the multiple linear regression as follows:

$$Y_i = 1.065 + .384X_{1i} + 0.120X_{2i} + 0.062X_{3i} + 0.174X_{4i} + 0.533X_{5i}$$

From the above simple linear regression model, all the coefficient of independent variable is positive and we can recognize that if we improve OS, IAQ, EFM, MS and AVARIA inside automatically the dependent variables EIA is also improved by some extent.

CONCLUSION AND RECOMMENDATION

Based on the already concluded information, it is possible to make recommendations to correct deficiencies in existing internal audit practices of Development bank of Ethiopia.

The internal control activities of the internal audit unit in the Development bank of Ethiopia internal audit functions that focuses on compliance with laws and regulations, evaluating accounting errors and fraud, addressing risk management and productivity. Management do give the internal auditors the necessary support. The internal audit recommendations are implemented even though the units lack adequate resources and technology to employ auditing lack of manpower and there is no regular in-service training for them.

In general, the internal auditors have experience. The Development bank of Ethiopia do have well-defined and clear policies, procedures and programs for internal audit units. The structure and the organizational settings of the Development bank of Ethiopia are not restricting the roles of the internal auditors in delivering their services. The Development bank of Ethiopia have clear policies and procedures for internal auditors. Management perceived them as not fault-finders and the units are given high status in the Development bank of Ethiopia. The internal auditors play advisory roles such as good corporate governance, unethical practices and corruption, designing and implementing internal controls, risk management and sound business practice. The factors identified as ensuring effective internal audit in the Development bank of Ethiopia are expertise and experience of internal auditor, management support, approved internal audit mandate and standards, unrestricted access to records, implementation of audit recommendations, organizational independence, and quality of leadership of chief internal audit staff. It can be concluded from these evidences that; the Development bank of Ethiopia internal audit is effective.

Based on the already concluded information, it is possible to make recommendations to correct deficiencies in existing internal audit practices of Development bank of Ethiopia:

➢ The internal audit units need to be adequately resourced including the use of appropriate technology. The availability of resources would enable the internal auditors to do quality work within the timeframe.

➢ The Development Bank of Ethiopia had limitations in development of skilled, certified, and professional auditors. In this regard, give a chance and opportunity to take Certified Public Accountant or other Internal Audit related certification can be considered as a good solution. Similarly, extending in-source trainings can have a great contribution in the competence of Internal Audit teams especially to new comers.

➢ In the modern audit, using Internal Audit soft wares is not luxurious instead inelastic item. In the process of advancing the Internal Audit process; Internal Audit soft wares play the crucial role through making the audit activity simple. Therefore, ECBs are recommended to work in using Internal Audit soft wares to enhance the quality Internal Audit work. Correspondingly, provide trainings related with such soft wares are under consider.

REFERENCES

1. Adams, M. B. (1994). Agency theory and internal audit. *Managerial Auditing* Journal, 9(8), 8-12.
2. Andrew Chambers (1992). Effective Internal Audits (First Edition). London: Pitman Publishing.
3. Belay, Z. (2007). A study on effective implementation of internal audit function to promote Good Governance in the public sector. *Managerial Auditing Journal.*
4. Bethelehem Zemene (2006). Perception of Auditors Independence. Addis Ababa University.
5. Bishop, W., Hermanson, D., Lapides, P., & Rittenberg, L. (2000). — The year of the audit committee‖. *Internal Auditor*, 46-51.
6. Committee of the Sponsoring Organization of the Treadway Commission (COSO) (1992). *Internal Control-Integrated Framework.* Jersey City: New Jersey. Available at http://www.coso.org (accessed on 20th April, 2009).
7. David Flint (1992). Philosophy and Principles of Auditing. Hong Kong.
8. Diamond, J. (2002). The role of internal audit in Government financial management: An internal perspective. *IMF working paper* WP/02/94.
9. Dittenhofer, M. (2001). Internal audit effectiveness: An expansion of present methods. *Managerial Auditing Journal*, 16(8), 443-450.
10. Goodwin, J. (2004). A comparison of internal audit in the private sector and public sector. *Managerial Auditing Journal*, 19(5),640-650.
11. Goodwin, J., & Yeo, T. Y. (2001). Two factors affecting internal audit independence and objectivity: Evidence from Singapore, *International Journal of Auditors*, 5(2),107-125.
12. Gray, I., & Manson, S. (2000). *The audit process: Principles practice and cases* (2nd ed.). Bedford, London: Thomson Learning, 9-12.
13. Lawrence B Sawyer (1988). The Practice of Modern Internal Auditing Revised & Enlarged (Third Edition). USA: IIA INC.
14. Mihret, D.G., & Yismaw, A. W. (2007). Internal audit effectiveness: An Ethiopian public sector case study. *Managerial Auditing Journal*, 22(5), 470-484.
15. Nagy, A. L., & Cenker, W. J. (2002). An assessment of the newly defined internal audit function. *Managerial Auditing Journal*, !7(3), 130-137.

REQUEST FOR FEEDBACK

Dear Readers

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

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

If you have any queries, please feel free to contact us on our e-mail **infoijrcm@gmail.com**.

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

Looking forward to an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-
Co-ordinator

DISCLAIMER

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

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT   IV

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

http://ijrcm.org.in/