

# INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT

I  
J  
R  
C  
M



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

*Indexed & Listed at:*

[Ulrich's Periodicals Directory ©, ProQuest, U.S.A.](#), [Cabell's Directories of Publishing Opportunities, U.S.A.](#), [Google Scholar](#),

[Indian Citation Index \(ICI\)](#), [J-Gate, India](#) (link of the same is duly available at [Inflibnet of University Grants Commission \(U.G.C.\)](#)),

[Index Copernicus Publishers Panel, Poland](#) with [IC Value of 5.09 \(2012\)](#) & [number of libraries all around the world](#).

[Circulated all over the world & Google has verified that scholars of more than 7835 Cities in 197 countries/territories are visiting our journal on regular basis.](#)

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

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

# CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	<p style="text-align: center;"><b>ANALYZING THE VALUE CHAIN OF HARICOT BEANS AND FACTORS AFFECTING THEIR PERFORMANCES IN RIFT VALLEY AREAS OF SOUTHERN ETHIOPIA: THE CASE OF GEDEO ZONE AND BURJI DISTRICT</b></p> <p style="text-align: center;"><i>JILO WOLDE, MESAFINT WORKIYE &amp; AYALEW GIZACHEW</i></p>	1
2.	<p style="text-align: center;"><b>NUTRITIONAL DEFICIENCY AND WELFARE COMPARISONS ACROSS AGRICULTURAL AND NON-AGRICULTURAL HOUSEHOLDS IN RURAL INDIA</b></p> <p style="text-align: center;"><i>Dr. K ANTONY AKHIL</i></p>	9
	<b>REQUEST FOR FEEDBACK &amp; DISCLAIMER</b>	16

**FOUNDER PATRON****Late Sh. RAM BHAJAN AGGARWAL**

Former State Minister for Home &amp; Tourism, Government of Haryana

Former Vice-President, Dadri Education Society, Charkhi Dadri

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

**CO-ORDINATOR****Dr. BHAVET**

Former Faculty, Shree Ram Institute of Engineering &amp; Technology, Urjani

**ADVISOR****Prof. S. L. MAHANDRU**

Principal (Retd.), Maharaja Agrasen College, Jagadhri

**EDITOR****Dr. NAWAB ALI KHAN**

Professor &amp; Dean, Faculty of Commerce, Aligarh Muslim University, Aligarh, U.P.

**CO-EDITOR****Dr. G. BRINDHA**

Professor &amp; Head, Dr.M.G.R. Educational &amp; Research Institute (Deemed to be University), Chennai

**EDITORIAL ADVISORY BOARD****Dr. TEGUH WIDODO**

Dean, Faculty of Applied Science, Telkom University, Bandung Technoplex, Jl. Telekomunikasi, Indonesia

**Dr. M. S. SENAM RAJU**

Professor, School of Management Studies, I.G.N.O.U., New Delhi

**Dr. JOSÉ G. VARGAS-HERNÁNDEZ**

Research Professor, University Center for Economic &amp; Managerial Sciences, University of Guadalajara, Guadalajara, Mexico

**Dr. CHRISTIAN EHIIBUCHE**

Professor of Global Business/Management, Larry L Luing School of Business, Berkeley College, USA

**Dr. SIKANDER KUMAR**

Vice Chancellor, Himachal Pradesh University, Shimla, Himachal Pradesh

**Dr. BOYINA RUPINI**

Director, School of ITS, Indira Gandhi National Open University, New Delhi

**Dr. MIKE AMUHAYA IRAVO**

Principal, Jomo Kenyatta University of Agriculture &amp; Tech., Westlands Campus, Nairobi-Kenya

**Dr. SANJIV MITTAL**

Professor &amp; Dean, University School of Management Studies, GGS Indraprastha University, Delhi

**Dr. D. S. CHAUBEY**

Professor &amp; Dean (Research &amp; Studies), Uttaranchal University, Dehradun

**Dr. A SAJEEVAN RAO**

Professor &amp; Director, Accurate Institute of Advanced Management, Greater Noida

**Dr. NEPOMUCENO TIU**

Chief Librarian &amp; Professor, Lyceum of the Philippines University, Laguna, Philippines

**Dr. RAJENDER GUPTA**

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

**Dr. KAUP MOHAMED**

Dean &amp; Managing Director, London American City College/ICBEST, United Arab Emirates

**Dr. DHANANJOY RAKSHIT**

Dean, Faculty Council of PG Studies in Commerce and Professor & Head, Department of Commerce, Sidho-Kanho-Birsha University, Purulia

**Dr. SHIB SHANKAR ROY**

Professor, Department of Marketing, University of Rajshahi, Rajshahi, Bangladesh

**Dr. S. P. TIWARI**

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

**Dr. SRINIVAS MADISHETTI**

Professor, School of Business, Mzumbe University, Tanzania

**Dr. ABHAY BANSAL**

Head, Department of Information Technology, Amity School of Engg. & Tech., Amity University, Noida

**Dr. ARAMIDE OLUFEMI KUNLE**

Dean, Department of General Studies, The Polytechnic, Ibadan, Nigeria

**Dr. ANIL CHANDHOK**

Professor, University School of Business, Chandigarh University, Gharuan

**RODRECK CHIRAU**

Associate Professor, Botho University, Francistown, Botswana

**Dr. OKAN VELI ŞAFAKLI**

Professor & Dean, European University of Lefke, Lefke, Cyprus

**PARVEEN KHURANA**

Associate Professor, Mukand Lal National College, Yamuna Nagar

**Dr. KEVIN LOW LOCK TENG**

Associate Professor, Deputy Dean, Universiti Tunku Abdul Rahman, Kampar, Perak, Malaysia

**Dr. BORIS MILOVIC**

Associate Professor, Faculty of Sport, Union Nikola Tesla University, Belgrade, Serbia

**SHASHI KHURANA**

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

**Dr. IQBAL THONSE HAWALDAR**

Associate Professor, College of Business Administration, Kingdom University, Bahrain

**Dr. DEEPANJANA VARSHNEY**

Associate Professor, Department of Business Administration, King Abdulaziz University, Saudi Arabia

**Dr. MOHENDER KUMAR GUPTA**

Associate Professor, Government College, Hodal

**Dr. BIEMBA MALITI**

Associate Professor, School of Business, The Copperbelt University, Main Campus, Zambia

**Dr. ALEXANDER MOSESOV**

Associate Professor, Kazakh-British Technical University (KBTU), Almaty, Kazakhstan

**Dr. VIVEK CHAWLA**

Associate Professor, Kurukshetra University, Kurukshetra

**Dr. FERIT ÖLÇER**

Professor & Head of Division of Management & Organization, Department of Business Administration, Faculty of Economics & Business Administration Sciences, Mustafa Kemal University, Turkey

**Dr. ASHOK KUMAR CHAUHAN**

Reader, Department of Economics, Kurukshetra University, Kurukshetra

**Dr. RAJESH MODI**

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

**YU-BING WANG**

Faculty, department of Marketing, Feng Chia University, Taichung, Taiwan

**Dr. SAMBHAVNA**

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

**Dr. KIARASH JAHANPOUR**

Dean of Technology Management Faculty, Farabi Institute of Higher Education, Karaj, Alborz, I.R. Iran

**Dr. TITUS AMODU UMORU**

Professor, Kwara State University, Kwara State, Nigeria

**Dr. SHIVAKUMAR DEENE**

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

**Dr. BHAVET**

Former Faculty, Shree Ram Institute of Engineering & Technology, Urjani

**Dr. THAMPOE MANAGALESWARAN**

Faculty, Vavuniya Campus, University of Jaffna, Sri Lanka

**Dr. VIKAS CHOUDHARY**

Faculty, N.I.T. (University), Kurukshetra

**SURAJ GAUDEL**

BBA Program Coordinator, LA GRANDEE International College, Simalchaur - 8, Pokhara, Nepal

**Dr. DILIP KUMAR JHA**

Faculty, Department of Economics, Guru Ghasidas Vishwavidyalaya, Bilaspur

***FORMER TECHNICAL ADVISOR***

**AMITA**

***FINANCIAL ADVISOR***

**NEENA**

Investment Consultant, Chambaghat, Solan, Himachal Pradesh

***LEGAL ADVISORS***

**JITENDER S. CHAHAL**

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

**CHANDER BHUSHAN SHARMA**

Advocate & Consultant, District Courts, Yamunanagar at Jagadhri

***SUPERINTENDENT***

**SURENDER KUMAR POONIA**

## CALL FOR MANUSCRIPTS

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

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

## GUIDELINES FOR SUBMISSION OF MANUSCRIPT

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

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

#### **THE EDITOR**

IJRCM

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

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

#### **DEAR SIR/MADAM**

Please find my submission of manuscript 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.

<b>NAME OF CORRESPONDING AUTHOR</b>	:
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.aea-web.org/econlit/jelCodes.php](http://www.aea-web.org/econlit/jelCodes.php). However, mentioning of JEL Code is not mandatory.
  8. **MANUSCRIPT:** Manuscript must be in **BRITISH ENGLISH** prepared on a standard A4 size **PORTRAIT SETTING PAPER. It should be free from any errors i.e. grammatical, spelling or punctuation. It must be thoroughly edited at your end.**
  9. **HEADINGS:** All the headings must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.
  10. **SUB-HEADINGS:** All the sub-headings must be bold-faced, aligned left and fully capitalised.
  11. **MAIN TEXT:**

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

12. **FIGURES & TABLES:** These should be simple, crystal **CLEAR, centered, separately numbered** & self-explained, and the **titles must be above the table/figure. Sources of data should be mentioned below the table/figure. It should be ensured that the tables/figures are referred to from the main text.**
13. **EQUATIONS/FORMULAE:** These should be consecutively numbered in parenthesis, left aligned with equation/formulae number placed at the right. The equation editor provided with standard versions of Microsoft Word may be utilised. If any other equation editor is utilised, author must confirm that these equations may be viewed and edited in versions of Microsoft Office that does not have the editor.
14. **ACRONYMS:** These should not be used in the abstract. The use of acronyms is elsewhere is acceptable. Acronyms should be defined on its first use in each section e.g. Reserve Bank of India (RBI). Acronyms should be redefined on first use in subsequent sections.
15. **REFERENCES:** The list of all references should be alphabetically arranged. **The author (s) should mention only the actually utilised references in the preparation of manuscript** and they may follow Harvard Style of Referencing. **Also check to ensure that everything that you are including in the reference section is duly cited in the paper.** The author (s) are supposed to follow the references as per the following:
- All works cited in the text (including sources for tables and figures) should be listed alphabetically.
  - Use (ed.) for one editor, and (ed.s) for multiple editors.
  - When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc., in chronologically ascending order.
  - Indicate (opening and closing) page numbers for articles in journals and for chapters in books.
  - The title of books and journals should be in italic printing. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.
  - For titles in a language other than English, provide an English translation in parenthesis.
  - **Headers, footers, endnotes and footnotes should not be used in the document. However, you can mention short notes to elucidate some specific point,** which may be placed in number orders before the references.

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

**BOOKS**

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

**CONTRIBUTIONS TO BOOKS**

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

**JOURNAL AND OTHER ARTICLES**

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

**CONFERENCE PAPERS**

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

**UNPUBLISHED DISSERTATIONS**

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

**ONLINE RESOURCES**

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

**WEBSITES**

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



## ANALYZING THE VALUE CHAIN OF HARICOT BEANS AND FACTORS AFFECTING THEIR PERFORMANCES IN RIFT VALLEY AREAS OF SOUTHERN ETHIOPIA: THE CASE OF GEDEO ZONE AND BURJI DISTRICT

**JILO WOLDE**

**LECTURER**

**DEPARTMENT OF LOGISTICS & SUPPLY CHAIN MANAGEMENT**

**DILLA UNIVERSITY COLLEGE OF BUSINESS & ECONOMICS**

**DILLA, ETHIOPIA**

**MESAFINT WORKIYE**

**LECTURER**

**DEPARTMENT OF MANAGEMENT**

**DILLA UNIVERSITY COLLEGE OF BUSINESS & ECONOMICS**

**DILLA, ETHIOPIA**

**AYALEW GIZACHEW**

**LECTURER**

**DEPARTMENT OF ECONOMICS**

**DILLA UNIVERSITY COLLEGE OF BUSINESS & ECONOMICS**

**DILLA, ETHIOPIA**

### ABSTRACT

*The main heading of this study was analyzing the value chain of Haricot Beans and the Factors affecting their Performances in the Gedeo zone and Burji district in Southern Ethiopia. Meanwhile, it was designed to assess the value chain activities, market channels, value chain actors, and the factors that affect their performances. In the ways of collecting data both descriptive and explanatory research designs as well as qualitative and quantitative research approaches were used in this study. Totally 252 sampled respondents participated in this study and the data of the study were obtained from both primary and secondary sources. Questionnaires and interviews were used to collect primary data and the secondary data were obtained from reports, books, and published and unpublished documents. Regarding the analysis of data, the qualitative data were analyzed through narrative analysis, and the quantitative data were analyzed by using simple descriptive statistics. Further, a linear regression model was used to estimate the relationships between the dependent and independent variables of the study. The study found that many value chain actors including supporting actors, input suppliers, producers, traders, local processors, brokers, transporters, and consumers participate in the value chain of Haricot beans. As they differ by their nature these value chain actors perform input supplying, land preparation, sowing, growing, weed controlling, harvesting, post-harvest storage, marketing, training, and extension and credit services value chain activities specifically.*

### KEYWORDS

Gedeo, Burji, value chain, haricot bean, value chain actors, market channels.

### JEL CODE

M11

### 1. BACKGROUND OF THE STUDY

In Ethiopia numerous variety of crops are planted by large number of farmers. Due to this the country is known as the homeland of several produces. Among the crops grown in the country pulse is one and it ranked the country 13<sup>th</sup> among the pulse supplying countries in the world (FAO, 2015). In Ethiopia a different variety of haricot bean types are grown in different regions of the country. The well-known varieties of beans grown in Ethiopia include the mottled, red, white and black varieties. From these varieties the pure red and pure white colored beans are the most common commercial varieties (Ferris and Kaganzi, 2008). In Ethiopia many smallholder farmers grow Haricot beans for monetary and dietary purposes. Its relevance for smallholder farmers to produce it abundantly is justified by the quick maturity time, high nutritional content, cheap input demand, and improvement of soil fertility as well as its ability to boost export revenues, employment generation, and food security for the country's economy (Selam, 2020). For the production of Haricot beans Ethiopian small-scale farmers have excessive chances to produce and export large amounts of Haricot Beans all over the world. These opportunities include a high request for quality Haricot Bean on the world export market, the appropriate climate of the country, little production costs of Haricot Beans, availability of farming land, and the right to use the port of Djibouti (Bisschop and Dijk, 2007). According to research, Ethiopia produces 100–200 thousand tons of beans annually where approximately 35–40 thousand tons of beans are exported through Djibouti to foreign markets. At the same time, an estimated 10,000 tones are dispatched to Kenya through the Moyale border (Ferris and Kaganzi, 2008). The exports of Haricot beans boost the national economy by roughly USD 134 million per year (ERCA, 2015). In Ethiopia, the movements of the Haricot Beans from farmers to consumers are viewed as the river where a little amount of them are produced by a large number of smallholder farmers over a wide area. Before they are delivered to the central market of Nazret they are collected by registered or unregistered village or urban center small traders from isolated local markets. Then, they are delivered to district-level suppliers and transported to central wholesale markets (FAO, 2015). In these processes, input suppliers, producers, assemblers, cooperative unions, retailers, whole-sellers, and exporters have participated in its operations as specific actors (Broek et.al, 2014).

### 2. STATEMENT OF THE PROBLEM

Among the important pulse crops found in Ethiopia and the world, one is Haricot Bean. It takes the first position in a global context and ranks second next to Faba Bean at the national level (Gebriel, 2018). However, its value chain faces multidimensional problems due to various hindering factors. Among the affecting factors one is financial restriction. Financial restrictions push producers to sell off their products immediately after harvest when selling prices are small (Tewodros, 2013). Also, shortage of market information, low quality of the product, disjointed suppliers, stretched value chain networks, extreme transaction costs, and absence of quality controlling and grading systems are other factors that affect the value chain performances of Haricot beans (Ephrem, 2016). Likewise, the nonexistence of extension services, low farming experiences, absence of access to credit, distance from access roads, and lack of support activities are major constraints of Haricot Bean value chain activities (Gebriel, 2018). Above all, even though there is a huge demand for Haricot beans in the local and global market by different consumers,

still its production, marketing, storage, and distribution face a number of problems. Thus, this shows a need for a more comprehensive and holistic study that would examine and suggest necessary remedial measures that will resolve the existing constraints of the Haricot beans value chain in the study area. But, we got limited studies like Agete (2014), Ephrem (2016), Shewaye et.al. (2016), Hunegnaw (2017), Gabriel (2018), Selam (2020) and Adino et.al. (2021) in Ethiopia that have been done before this study on Haricot bean crops. Unfortunately, the aforementioned studies deal with Haricot bean market issues than the Haricot bean value chain and factors affecting its performance. From these, researchers recognized that the previous studies do not consider the problems of Haricot beans before the marketing stages like constraints of input supply, farm preparation, sowing, weeding, disease controlling, pest controlling, harvesting, and storage. Moreover, in the current study's districts even though there is an abundant production of Haricot beans we haven't seen any previous studies conducted on the current study's problem. So, these are gaps we identified from the former works of literature. Therefore, the main motive of this research was to fill these gaps based on the specific questions of this research and by searching answers for to the research questions given hereunder.

**3. OBJECTIVES**

This research was designed based on the following specific research objectives:

1. To overview value chain activities of Haricot Bean in study Districts
2. To observe the market channel of Haricot Bean in its value chain
3. To outline actors within the value chain of Haricot Bean in the study districts
4. To identify major factors that affects the Value chain performances of Haricot bean in the study area

**4. RESEARCH QUESTIONS**

This study was done by answering the following research questions

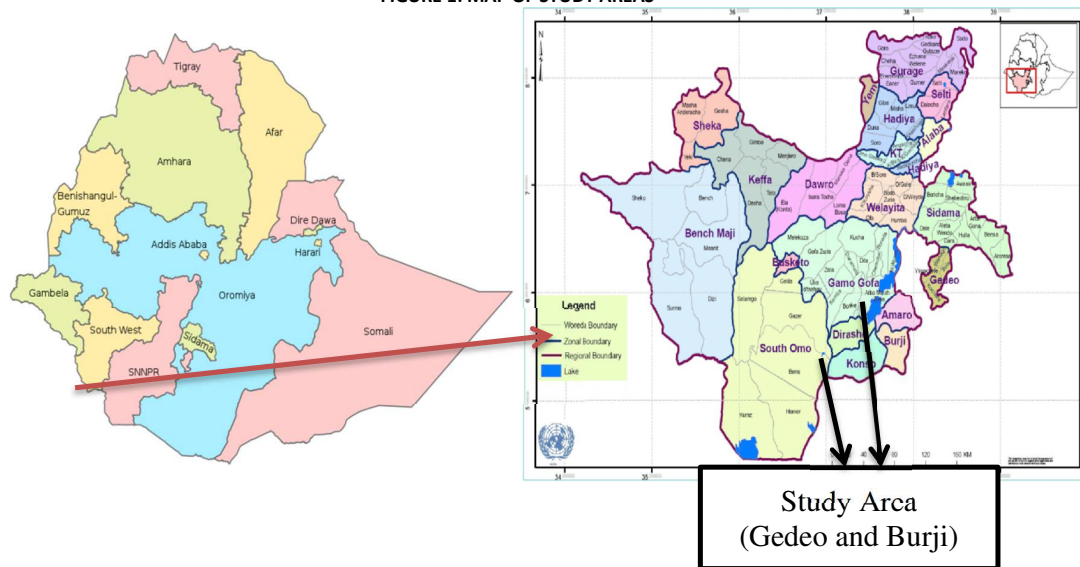
1. What are the value chain activities of Haricot Bean in the study Districts?
2. How the market channel of Haricot Bean is mapped from farmer to consumer?
3. Who are actors within the value chain of Haricot Bean in the study districts?
4. What are factors affecting the Value Chain performances of Haricot bean in the study districts?

**5. RESEARCH METHODS**

**STUDY AREA**

This study was done in the Gedeo zone and Burji districts in the rift valley areas of Southern Ethiopia. The Gedeo zone is one of the provinces in the rift valley area of Southern Ethiopia. Gedeo shares its northern border with the Sidama Region and Dilla serves as the zone's administrative center. The Oromia Region also borders the zone on the east, south, and west. The altitude of the Zone ranges from 1268 meters above sea level in the vicinity of Lake Abaya to an elevation of 2993 meters at Haro Wolabu Pond. The Gedeo economy is mainly based on their historical heritage of Enset-based agro-forestry and it is the origin of Yirgacheffee coffee which is preferable by a large number of consumers globally. Besides, another district of this study was the Burji district. Burji nationality lives near to Southwest of Lake Abaya and Lake Chamo which is 280km far from the Northern Kenyan border. They mainly depend on agriculture and the woreda is bordered by the Western Guji Zone to the East and Borana Zone to the South, Amaro special Woreda to the North, and Konso Zone to the West. The population of the woreda resides in different agroecological zones living on mixed agriculture by growing different varieties of crops where 'Teff' and Haricot Bean/Bura Burje/ take the prominent share.

FIGURE 1: MAP OF STUDY AREAS



Source: Google Image

**RESEARCH DESIGN**

In this study, both descriptive and explanatory research designs were implemented to describe the study problem and explain the problem of this study which has not been well studied and explained previously. Further, mixed (qualitative and quantitative) research approaches are used to collect and analyze the subjective and objective responses of respondents. Also, the data of this study were collected from both primary and secondary sources of data. Hence, the primary data were obtained from Haricot bean producers, traders, extension service experts, and Trade and Industry development office workers through questionnaires and interviews where secondary data were obtained from reports, books, and published and unpublished documents to make the study comprehensive. The Haricot bean producers, traders, kebele development agents, and Trade and Industry office workers were the population of the study who had participated in interview and questionnaire. To select respondents three stages of sampling techniques were employed where woreda, kebele, and households were selected at the first, second, and third stages respectively. In the Gedeo zone from eight woredas Gedeb, Kochore, and Wenago were selected randomly in the first stage. Then in the second stage, Harimufo kebele from Gedeb woreda, Buno Kebele from Kochore woreda, and Deko Kebele from Wenago woreda were also selected randomly. In the third stage, 57 respondents among which 30 producers 10 of each from three kebeles, 15 traders, and 6 extension workers from similar aforementioned kebeles were selected for interview. Additionally, 6 trade and industry office workers 2 of them from three woreda of Gedeo zone namely Gdeb, Kochore, and Wonagao were selected purposively for interview. Similarly, three-stage sampling techniques were employed in the Burji district where Burje and Galana clusters were selected randomly in the first stage. In the second stage from selected two clusters six kebeles namely Kilicho and Mure from the Burje cluster and Wordeya

Gude, Raleyta Bila, Gera, and Walaya Kebeles from the Galana cluster were selected. In the third stage, from selected six kebeles sampled Haricot Bean producers were selected randomly for the questionnaire by using a simple random sampling technique. The sample size of Burji district were determined by Khotari (2004) sample size determination formula which is based on,  $Z = 1.96$  to 95%,  $p = 0.5$ ,  $q = 1 - p$ ,  $e^2 = 0.07$  and  $N = 2602$

$$n = \frac{z^2 N p q}{e^2 (N - 1) + z^2 p q}$$

Where:  $N$  = total households;  $n$  = size of the sample;  $Z$  = standard variation at a given confidence level;  $P$  = proportion of successes;  $q$  = proportion of failures;  $e^2$  = acceptable error

$$n = \frac{z^2 N p q}{e^2 (N - 1) + z^2 p q} \text{ we found that } n = \frac{2602}{14.2} = 183$$

TABLE 1: SAMPLE SIZE OF BURJI DISTRICT

No	Selected Kebele	Number of Household	Percentage share	Sample Size
1	Kilocho	427	16.3%	30
2	Mure	421	16.1%	30
3	Gude	431	16.5%	30
4	Bila	459	17.5%	32
5	Gera	399	15.6%	29
6	Walaya	465	17.7%	32
	Total	2709	100%	183

Source: Own Design, 2023

As shown in Table 1 above 183 Haricot beans procedures/farmers participated in a questionnaire in the Burji district. Additionally, 6 extension service workers, 4 licensed local traders, and 2 Trade and Industry development office workers total of 12 respondents were interviewed from the Burji district. In general, the total sample size of the study was 252 respondents where 57 of them were from the Gedeo zone and 195 of them were from the Burji district. Further, the data were analyzed in mixed data analysis methods. Here, qualitative data of research were analyzed narratively, and quantitative data were analyzed in simple descriptive statistics. For collecting data first of all we get a go-ahead permission from Dilla University. During the distribution of the questionnaire, respondents were informed about the purpose of the study along with their full right to refuse or completely reject participation. Also, we told the respondents about their responses would be kept confidential and their identity would not be exposed. To estimate the relationship between the dependent and independent variables of the study we used the linear regression model as presented here under

$$Y_i = \beta_0 + \beta_1 VA + \beta_2 VCA + \beta_3 MC + \beta_4 AF + \epsilon$$

Where:  $Y$  = the outcome/Value chain Performances of Haricot beans/

$VCA$  = Value chain activities,  $VCA$  = Value chain actors,  $MC$  = Marketing Channel,  $AF$  = Affecting factors of value chain performances,  $\epsilon$  = standard error,  $\beta_0$  = the intercept term- constant which would be equal to the mean if all slope coefficients are 0.  $\beta_1, \beta_2, \beta_3, \beta_4$  are the coefficients associated with each independent variable which measures the change in the mean value of  $Y$ , per unit change in their respective independent variables. In this study we used Cronbach's Alpha as a standard test for questionnaires' consistency. Regarding this, Tavakol and Dennick (2011) reported as Cronbach's alpha of less than 0.5 is unacceptable, Alpha less than or equal to 0.6 is poor, Alpha less than 0.7 is questionable and Alpha equal to or greater than 0.7 is acceptable. Besides, the validity of content was assured by using various previous sources of literatures and the construct validity was assured by structuring the questionnaire according to the specific objectives of the study.

## 6. RESULT AND DISCUSSIONS

TABLE 2: DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Gender	Male	Female				Total
	113(61.7%)	70(38.3%)				
Marital Statuses	Single	Married		Divorced		Total
	30(16.4%)	148.8(80.9%)		5(2.7%)		
Ages	< 20	20-29	30-39	40-49	>50	Total
	14(7.7%)	37(20.2%)	66(36.1%)	38(20.8%)	28(15.3%)	
Education Levels	Illiterate	Grade 1-8		Grade 9-12		Total
	35(19.1%)	96(52.5%)		31(19.1%)		
Farming experiences	<5 years	5-15 years		>15 years		Total
	12(6.5%)	101(55%)		70(38.5%)		

Source: Survey Result, 2023

The result of study respondents' male respondents was highly participated than females and the majority of respondents were married. Also, a high number of respondents were at a productive age level and most of them have education level from grade 1 to 8 and majority of them had long time experiences which were more than 15 years.

### PRODUCTION TRENDS OF HARICOT BEAN IN STUDY AREA

The finding of this research shows in the Burji district Haricot bean is the leading crop in production and marketing. In this area the 1<sup>st</sup> adapted variety of Haricot bean was called 'Kenya' because it was imported from Kenya. But currently it is known as 'Bura Burje'. In Burji almost all farmers practice sole cropping, rain fed and traditional farming which uses human labor and ox powers. On other side, in the Gedeo Zone Haricot bean is optional crop where most of farmers produce it for home consumption rather than selling. As well, small-scale farmers practices intercropping systems i.e., growing Haricot beans with other crops like maize, Enset, banana and coffee. This was due to shortage of farming land which is covered by large number of populations resides in the zone.

TABLE 3: BURA BURJE HARICOT PRODUCTION FROM 2020-2022 IN BURJI DISTRICT

Year	Allocated land for Production	Product Gained
2020	11160 Hector	222,300 quintals
2021	5580 Hector	89,280 quintals
2022	4487 Hector	17,948 quintals

Source: Burji Special woreda Office of Agricultural and Rural Development Office report, 2022

Table 3 above shows the size of land and the Haricot beans gained in Meher season in three successive years in the Burji district. The result shows both the allocated land size and production level of Haricot beans had decreased extremely. For this it has reported as shortage of rainfall and social instability at the border areas with Western Guji Suro-Barguda area communities of Oromo ethnic groups were the main reason that limits its production in this district.

FIGURE 2: IMAGE OF BURA BURJE HARICOT BEAN AT GROWING STAGE



Source: photo captured by researchers, 2023

#### VALUE CHAIN ACTIVITIES

In both the Gedeo zone and Burji district interlinked value chain activities were carried out by different value chain actors. These were supplying farming inputs to farmers, receiving and using inputs, land preparation (clearing and plow), sowing, growing, weed controlling, harvesting, post-harvest storage, marketing (selling and buying), training, extension, and credit services. As the data revealed farming inputs like seeds, fertilizer, herbicides, pesticides were supplied by traders and Agricultural and rural development offices of Woreda. Besides, land preparation, sowing, growing, weed controlling, harvesting, post-harvest storage, and handling activities were done by the family members' of producers.

#### MARKET CHANNELS

As cited by Kotler and Armstrong (2003) marketing channel is a business structure of interdependent groups that reach a product from the point of production to the destination of final consumption. The market channel of Haricot beans in the current study area starts with small farmers and passes different stages to reach the final consumer. In the Gedeo zone, four market channels of Haricot beans are identified among which the first channel was the shortest that connects farmers and consumers directly without the involvement of market intermediaries. But, in the second, third, and fourth channels of Haricot bean markets local collectors, wholesalers, and retailers were involved between producers and consumers. Above all, the first market channel was the shortest one and the fourth market channel was a little bit longer than others where local collectors, wholesalers, and retailers were involved between farmers and consumers.

FIGURE 3: MARKET CHANNEL OF HARICOT BEANS IN GEDEO ZONE

Channel I: Farmers → Consumers

Channel II: Farmers → Local Collectors → Consumers

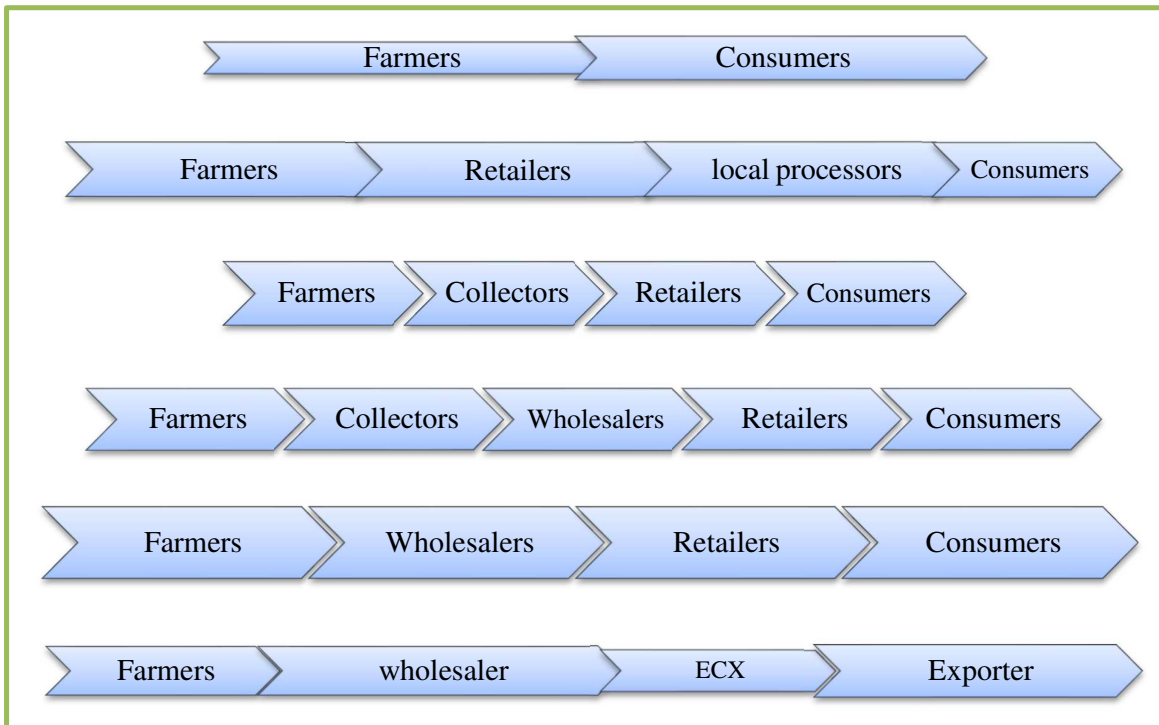
Channel III: Farmers → Retailers → Consumers

Channel IV: Farmers → Local Collectors → Wholesalers → Retailers → Consumers

Source: Interview result, 2023

Similar to the Gedeo zone, the market channel of Haricot bean between producers and consumers were long in the Burji district. Also, the produce of Haricot beans moves from farmers to consumers either legally or illegally. In legal flow, Haricot beans were traveled by traders who have legal trading licenses. On another side, a large amount of dry Haricot beans was dispatched from Burji to Northern Kenya as illegal cross-border trade, especially to Marsabit County. For this illegal cross-border flow of beans, the blood relationship of the Marsabit county people of Kenya with the Ethiopian Burji people was one enabling factor. Also, the blocking of the Burji to Bule Hora, and Burji-Amaro-Dilla route because of unsolved security problems occurred at the administrative border of Guji and Burji ethnic groups were another critical factor that gives a wide opportunity for illegal traders to move this product beyond the border of the country illegally. Above all, our research identified six market outlets of dry Haricot beans from farmers to final beneficiaries in the Burji district as presented here under.

FIGURE 4: MARKET CHANNEL OF BURA BURJE HARICOT BEAN



Source: Researchers, 2023

In study area, input suppliers, farmers, traders, transporters, local collectors, and consumers were the main value chain actors of Haricot beans that overtakes various activities.

**Supporting actors:** They are the value chain actors who provide supportive services of training, extension, and credit for other value chain actors. In the study area, agricultural and rural development office workers, cooperative work office workers, and Kebele agricultural extension workers/development agents were the main supporting service-providing actors who play a central role in the awareness creation of production, storing, and marketing of beans. Also, the micro-finance institution was a value chain supporting actor that was responsible for providing credit services for various value chain actors.

**Input suppliers** - they are the value chain actors responsible for supplying farming inputs like fertilizer, herbicide, pesticides, and other farming implements. In this study area, the Office of Agriculture and cooperative work were the main fertilizer suppliers for local farmers, and traders were also involved in supplying herbicides; pesticides, and farm implements in their shops.

**Farmers** - they are small-scale farmers who prepare land, Sow and grow beans, control weed, pest, and diseases as well carry harvesting, post-harvest handling, and marketing activities specifically.

**Local collectors** - they are part-time collectors or represented actors assigned for collecting produce at primary markets from farmers. Specifically, they were responsible for negotiating market prices, buying a few bags of beans from many farmers, storing them for some duration of time, and finally dispatching it to the body who assigned them by pack animals and small trucks.

**Brokers** - They are the value chain actors who connect buyers and sellers together. But, in our study area producers complained that due to cheating marketing information of brokers, they have no trust in brokers.

**Retailers** - Retailers are the value chain actors that buys Haricot bean from farmers or wholesalers and sell them to end users or customers.

**Wholesalers** - These are the value chain actors who purchase large volumes of Haricot beans from different sources and resell them to exporters than selling them directly to the ultimate consumers. In the study area, they are small in number and have strong financial resources as well as management-know when compared with other value chain actors. Besides, they have good storage, transportation, and communication access than other actors.

**Transporters:** they are value chain actors who move Haricot beans from farm to home, from home to marketplace, and from marketplace to other destinations of consumption.

**Local processors** -They obtain beans directly from farmers or from retailers and take the milling process to make food like 'Shiro'.

**Consumers**- they are the final value chain actors who buy the beans for consumption purposes.

**FACTORS AFFECTING THE VALUE CHAIN OF HARICOT BEANS IN STUDY AREA**

**Socio-economic and input factors are affecting the value chain of Haricot beans in the study area** - These are farmers-related factors such as illiteracy, lack of training, not using improved bean varieties, obeying to use fertilizer/using the unbalanced ratio of fertilizer with beans, low farming income, traditional farming practices of farmers as well as input related factors such as high cost of farming inputs (fertilizer, herbicide, and pesticide), shortage of farming lands, delay in supplying fertilizer, lack of irrigation with a combination of weed, disease, and insects. In the study area, the illiterate and low educational background farmers are not active to accept new agricultural extension directions provided by the government to upgrade the production levels of beans and have no ability to record and use market information. Similarly, inexperienced and untrained farmers have low skills how to use fertilizers and pest control chemicals. Also, farmers with low farming incomes cannot buy farming inputs and other necessities on time which contributes to extra production.

**The lack of proper storage facility is affecting the value chain performances of Haricot beans in the study area** - availability of proper storage facilities help farmers and traders to ensure the quality of beans and get a price advantage after harvesting season. Because during harvesting time large amount of beans are supplied to the market which reduces purchasing demand of consumers which will in turn reduces the selling price of beans. But, the finding of this study shows the lack of proper storage facilities for farmers and traders in the current study area. During our research, we observed that farmers stored their beans under the roof of their homes with simple packing materials. Due to this, the harvested beans are exposed to sun, rain, moisture, and theft. These also resulted in a decrease in product quality and supply to the market. Because of these farmers do not store their beans with them for more than two months. Similarly, traders who purchase Haricot beans in large quantities store them in the market areas by covering them with unsecured covering materials until they dispatch them to exporters. Consequently, we observed the loss of products with thefts and other factors particularly in the Burji area.

**Marketing factors are affecting the value chain performances of Haricot beans in the study area** - these are factors that are related to marketing information, market accessibility, selling price, and involvement of brokers in the marketing process of beans. So, it has been reported as small-scale Haricot bean producers have no on-time marketing information because of their inability to use modern information-seeking devices. They get marketing information through telephone

calls from different value chain actors and brokers are the main sources of marketing information. Further, traders and brokers have high power to decide the price of beans in the market. Also, there is a long marketing channel of haricot bean between producers and consumers which creates a delay in supply and increase the cost of transactions. Furthermore, remoteness of farmers from central markets, cheating in weighting machines, and fluctuating marketing prices of beans were some of the market-related factors that have been affecting the value chain performances of beans as reported by sampled respondents in the study area.

**Environmental factors are affecting the value chain performances of Haricot beans in the study area** - these are ecological factors including shortage/surplus of rains, deterioration of soil, disease, and pests that are limiting the production and supply of beans in the study area.

**Transportation factors are affecting the value chain performances of Haricot beans in the study area** - here the collected data revealed as due to the poor conditions of roads and the lack of access to means of transportation, the movements of beans from producers to consumers are costly and time-consuming. These challenges enforce producers to use human power (on the head, shoulder, and back), packing animals and motorbikes to transport their produce. This was also time-consuming and unsafe for users which related to accidents and damage to their products.

**Extension, Credit, and Training Service factors are affecting the value chain performances of Haricot beans in the study area** - the respondents of the study have complained that the existing extension services were poor and unsatisfactory due to the limited number of development agent workers services for all crops in a given Kebele. Besides, it has been reported as the Omo-micro finance institution is the only institution that gives credit to most value chain actors. Besides, there is limited access to credit and the service given by this institution is bureaucratic and time-consuming. Similarly, even if it has initiated to promote knowledge of farmers how to use modern agricultural technologies, and accept and adopt new varieties through training the existing evidence shows that there is a shortage of farmers training in the study area. Also, there is a lack of and poor existence of Farmer's Training Centers (FTCs) in the study area.

TABLE 4: RELIABILITY OF QUESTIONER DIMENSION

Category	Cronbach's Alpha (α)	No. of Items	Comments
Value chain activities	0.828	7	Accepted
Market Channel	0.836	5	Accepted
Value chain actors	0.726	6	Accepted
Value chain performances	0.992	6	Accepted
Affecting factors of Value chain	0.861	7	Accepted
Overall reliability	0.905	31	

Source: Survey SPSS result, 2023

Table-4 above shows that all the variables had Cronbach's Alpha greater than the acceptable value of 0.7. Also, it has been shown that the value chain actors have the least internal consistency of 72.6% while the value chain performances have the highest internal consistency of 99.2%. Above all, all variables in the model have Cronbach's Alpha (α) value greater than 0.7 which is an acceptable value.

**Correlation Analysis**

According to Dancy and Reidy (2004), the coefficient of correlation could take values ranging from -1 to +1, where the signs signify the direction of the relationship. A correlation value of 0 implies the absence of relationships among variables, a result between 0.1 and 0.3 indicates weak relationships, a result between 0.4 and 0.6 shows moderate relationships, a result of 0.7 and 0.9 specifies strong relationships and a result of 0.9 to 1 shows very strong relationships and a correlation coefficient of 1 suggests a perfect relationships between variables. Thus, in this study, Bivariate Pearson Coefficient (r) was used to examine the relationship between the four value chain dimensions using a two-tailed test at a 95% significance level, P <0.05. To that end, a correlation analysis was conducted to determine whether a statistically significant relationship existed between the dimensions of independent variables (value chain activities, marketing channel, value chain actors, affecting factors of the value chain) and the dependent variable, namely Haricot beans value chain performance. Hence, the correlation analysis of this study is presented in the subsequent table:

TABLE 5: CORRELATION ANALYSIS

		VCA	MC	VCAC	AF	VCP
VCA	Pearson Correlation	1	-.184*	.035	.441**	.774**
	Sig. (2-tailed)		.013	.641	.000	.000
	N		183	183	183	183
MC	Pearson Correlation		1	.414**	-.001	-.083
	Sig. (2-tailed)			.000	.989	.264
	N			183	183	183
VCAC	Pearson Correlation			1	.419**	.110
	Sig. (2-tailed)				.000	.138
	N				183	183
AF	Pearson Correlation				1	.635**
	Sig. (2-tailed)					.000
	N					183
VCP	Pearson Correlation					1
	Sig. (2-tailed)					
	N					183

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\* Correlation is significant at the 0.01 level (2-tailed).

Table-5 above presents the correlation coefficients and the respective significance of the correlation. Accordingly, value chain activities and value chain performances have strong positive and significant relationships (r=0.774, p=0.000) at a 0.01 significant level. Also, the marketing channels and value chain actors have weak negative and insignificant positive relationships (r) =-0.083 and p=0.264 and weak positive and insignificant positive relationships (r) = 0.110 and p= 0.138 with value chain performances of Haricot beans respectively. Again, the Pearson moment correlation coefficient of affecting factors of the value chain with value chain performances shows that there is a moderate positive relationship with a Pearson coefficient of (r= 0.635, p=0.000) with a significance value at 0.01 level. To sum up the correlations of dimensions results the analysis implies that at a 0.01 level of significance, it was discovered that value chain activities and affecting factors of the value chain of beans play a significant role in determining the value chain performance of Haricot beans in the study area. The highest correlation is signified by value chain activities (r= 0.774), followed by affecting factors of the value chain (r=0.635), value chain actors (r=0.110), and marketing channels (r=-0.083) respectively. From this, we can understand that as their value falls between -0.083 and 0.774, low to high positive correlations are found between the three independent variables namely value chain activities, value chain actors, and affecting factors of the value chain and the value chain performances of Haricot beans (dependent variable). But a negative correlation is found in one independent variable (marketing channels) with the dependent variable of value chain performances of Haricot beans.

**Regression Analysis**

Linear regression analysis is a method of estimating the value of the dependent variables on independent variables (.Marczyk et.al, 2005). So, in this study, the predicting power of independent variables on the dependent variable through linear regression is reported hereunder

TABLE 6: MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.846 <sup>a</sup>	.715	.709	.74968

a. Predictors: (Constant), AF, MC, VC, VCA

Source: Survey result, 2023

In Table 6, the coefficient of correlation R is 0.846 which indicates the strong positive correlation between the dependent and independent variables of the study. The coefficient of determination R square is 0.715, which means that our independent variables of the study cause 71.5% variations in the dependent variable. This further implies that there are other factors (not covered in this study that explains the remaining 28.5% in the value chain performances of Haricot beans in the study district.

TABLE 7: ANOVA

Model		Sum of Squares	DF	Mean Square	F	Sig.
1	Regression	251.210	4	62.803	111.743	.000 <sup>b</sup>
	Residual	100.041	178	.562		
	Total	351.251	182			

a. Dependent Variable: Value chain performances of Haricot beans

b. Predictors: (Constant), AF, MC, VC, VCA

The ANOVA table 7 above indicates that the overall model was in a good fit with statistical (F-value=111.7 and P-value =.000 < 0.01. In a linear regression analysis of such sort, the ANOVA test shows the acceptability of the model from a statistical perspective. Accordingly, the regression row indicates the extent of variation explained by the model, whereas the residual row indicates information about the variation that is not accounted for in the model, i.e., variation on the dependent variable explained by factors not included in the model.

TABLE 8: COEFFICIENTS OF THE VARIABLE

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.924	.302		-6.377	.000
	VCA	.143	.011	.609	13.296	.000
	MC	.021	.012	.078	1.712	.089
	VCAC	-.032	.013	-.117	-2.353	.020
	AF	.088	.011	.415	8.259	.000

a. Dependent Variable: Value chain performances of Haricot beans

Table 8 shows the coefficient result of the study. The un-normalized coefficients β1 to β4 are the coefficients of the anticipated regression version. Thus, the value chain performance of Haricot beans therefore is written as:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon_i$$

Where, α= is the intercept term- constant

Y= Value chain performance of Haricot beans, X1 = value chain activities, x2= Marketing channel, X3= Value chain actors, X4= Affecting factors of Haricot value chain

$$Y=1.924 + 0.143X_1 + 0.021X_2 + .032X_3 + 0.088X_4$$

The findings indicate that in the absence of the predictor variables, the value chain performance of Haricot beans in the Burji district equals 1.924. Similarly, a unit increase in value chain activities increases the value chain performances of Haricot beans by 0.143. The implication of this outcome is that effective value chain activities can enhance the value chain performances of haricot beans in the study district. At the same zero value, one unit increase in marketing channel and value chain actors increases performance by 0.021 and 0.032 respectively. Also, one unit increase in affecting factors of the value chain resulted in 0.088 increases in value chain performances of Haricot beans in the study district.

7. CONCLUSIONS

In the Gedeo zone and Burji district, the Haricot beans are produced for home consumption and generating cash purposes. In the value chain of Haricot bean input suppliers, farmers, collectors, traders, local processors, transporters and consumers are the major value chain actors who perform various value chain activities including inbound logistics activities (supplying, receiving, warehousing, and distributing of farming inputs like fertilizer, herbicide, pesticide), production activities (land preparation, input supply, sowing, weed controlling, disease controlling, pest controlling, harvesting, post-harvest storage, and handling), marketing activities such as transporting, selling and buying of beans and services(providing extension, credit and training services) to the value chain actors. Further, delays or short-ages of supplying and distributing fertilizers, herbicides, and pesticides to farmers, weak integration of value chain actors, traditional farming practices, and poor storage and handling practices which is exposed to loss and damage of beans with moisture, sunlight, and pests, lack of timely market information, low bargaining powers of farmers in marketing, unnecessary interventions of Brokers, poor transportation access, conflicts, deterioration of soil, shortage/excess of rainfall, disease, and pests as well as weak agricultural extension, training and credit services were factors which are influencing the value chain performances of Haricot beans in the study area.

8. RECOMMENDATIONS

Based on the findings of the study, the following recommendations are made in order to ensure effective value chain performances of Haricot beans in the study area

- Farming inputs especially fertilizer, herbicide, and pesticide should be supplied and distributed to farmers timely with affordable cost.
- To increase the competitiveness of the Haricot bean in the global market the existing Haricot beans variety should be replaced by an improved variety that resists disease and has competent quality.
- Training should be given continuously for value chain actors concerning production, marketing, transportation, and storage.
- The value chain activities of beans should add value at each stage rather than stretching the chain between producer and consumer.
- There should be strong bondage between the value chain actors of Haricot beans.
- Government should protect against the unnecessary intervention of brokers and the illegal cross-border flow of beans attentively.
- To encourage farmers to supply Haricot beans to the market transportation services should be improved and accessible to rural kebele farmers.
- The agricultural extension and credit service-providing institutions should be accessible to farmers' area.
- The farmers' training centers (FTC) should be accessible in farmers' areas to encourage farmers' training on how to promote the production level of beans.
- Social instability (resource-based conflicts) occurring in the Burji area should be managed and resolved by federal or state government bodies.

9. FUTURE RESEARCH

We suggest that the researchers should additionally explore on harvesting and post-harvest storage time loss of beans, haricot bean value chain governance, linkages of value chain actors, and production and marketing opportunities of Haricot beans in the current study area.

**10. ACKNOWLEDGMENT**

The researchers of this study would like to acknowledge the participants who had participated in this study by providing genuine information while we search information for the accomplishment of the study. Also, we want to thank Dilla University College of Business and Economics dean's staffs who coordinated the process of this study. At the end, we would like to thank Dilla University for the financial support to complete this work. The funding was granted in the 2022 annual calls for papers.

**REFERENCES**

1. Agete, J. (2014) "An analysis of factors influencing participation of smallholder farmers in red bean marketing in Halaba Special District, Ethiopia", MSc Thesis, Haramaya University, Haramaya, Ethiopia, PP 44-48
2. Andaregie, Adino, Tessema Astatkie, and Fentaw Teshome. "Determinants of market participation decision by smallholder haricot bean (*Phaseolus vulgaris* L.) farmers in Northwest Ethiopia." *Cogent Food & Agriculture* 7.1 (2021): 1879715.
3. Bishop and Sambrook, C. (2007), "Dynamics of the HIV/AIDS epidemics in value chain development in rural Ethiopia and responses through market-led agricultural initiatives, Improving Productivity and Market Success (IPMS) of Ethiopian Farmers Project", International Livestock Research Institute (ILRI), Working Paper 12. ILRI (International Livestock Research Institute), Nairobi, Kenya, pp. 84.
4. Broek, J., Yared, S., Becx, G., Paulos, A., Tesfaye, B., Zenaw, D., Yidnekachew, E., Yemisrach, G., Addisu, G., Helen, G., Alazar, M., Mesfin, M., Meseret, S., Woldemichael, S., Berihun, T., Ermiyas, T. and Kebede, T. (2014), "Legume Value Chains in Ethiopia", Land scraping Study, PP 56-63
5. Ferris, S. and Kaganzi, E. (2008), "Evaluating marketing opportunities for haricot beans in Ethiopia", IPMS (Improving Productivity and Market Success) of Ethiopian Farmers Project Working Paper, ILRI (International Livestock Research Institute), Nairobi, Kenya pp 28-29
6. Gabriel, B. (2018), "an Analysis of Haricot bean Value Chain" The case of Boricha District, Sidama Zone, SNNPR, and Ethiopia PP 22-31
7. Hunegnaw, A. (2017), "Market Structure and Chain Analysis of Haricot bean", *International Journal of Development and Economic Sustainability* Vol.5, No.5 PP 12.
8. Kotler, P. and G. Armstrong, (2003), "Principle of marketing", 10th Edition, Hall of India Pvt. Ltd., New Delhi, PP 5-12
9. Lemu, E. T. (2016), "Review of haricot bean value chain in Ethiopia", *International Journal of African and Asian Studies*, 24, 65-72.
10. Selam, A. (2020), "Market Chain Analysis of Haricot Bean in Guba Koricha District of West Hararghe Zone, Oromia National Regional State", Haramaya University, Ethiopia, PP 26
11. Shewaye, A., Dawit, A., and Lemma, Z. (2016), "Determinants of Haricot Bean Market Participation in Misrak Badawacho District", Hadiya zone, Southern Nations Nationalities and Peoples Regional State, Ethiopia, *Ethiopian Journal of Agricultural Science*, 26(2).
12. Tavakol, M. and Dennick, R. (2011), "Making sense of Cronbach's alpha", *International Journal of Medical Education*, Volume 2, pp. 53-55.
13. Tewodros, T. (2013), "Market and consumer studies of pulse crops in Southern Ethiopia", Hawassa University School of Environment, Gender and Development Studies. Hawassa, Ethiopia, PP 59
14. Worako, T. K. (2019). Analysis of price incentives for haricot beans in Ethiopia for the time period 2005–2012. *Gates Open Res*, 3(376), 376.



## REQUEST FOR FEEDBACK

Dear Readers

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

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

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

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

Looking forward to an appropriate consideration.

With sincere regards

Thanking you profoundly

**Academically yours**

Sd/-

**Co-ordinator**

## DISCLAIMER

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

## ABOUT THE JOURNAL

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

### *Our Other Journals*

