Socio-economic Profiling of Indian Languages: With Special Reference to Worksites

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by

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I hereby declare that the work embodied in this thesis entitled **"Socio-economic Profiling of Indian Languages: With Special Reference to Worksites"** is carried out by me under the supervision of Dr. K. Parameswari, Centre for Applied Linguistics and Translation Studies, University of Hyderabad, Hyderabad, and has not been submitted for any degree in part or in full to this university or any other university for the award of any degree or diploma. I hereby agree that my thesis can be deposited in Shodhganga/INFILBNET.

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Abbreviations

ACC	Accusative case
AP	Andhra Pradesh
Ar	Arabic
Bn	Bengali
Br	Bhjpuri
BR	Bihar
COND	Condition
CONC	Concessive
CONJP	Conjunctive Participle
COMP	Complement
DAT	Dative case
En	English
GDP	Gross Domestic Product
GER	Gerundival
HAB	Habitual
Hi	Hindi
Ka	Kannada
KA	Karnataka
KL	Kerala
Ko	Koya
KTPS	Kothagudem Thermal Power Station
La	Lambadi
Mal	Malayalam
Mar	Marathi
MH	Maharashtra
N	Number
Nom	Nominative case
OBL	Oblique form
PL	Plural
PROG	Progressive
QUES	Question

QUE	Quotative
REF	Reflexive
SCCL	Singareni Collieries Company Limited
SIG	Singular
SPSS	Statistical Package For The Social Sciences
Ta	Tamil
Te	Telugu
NSLKSF	NSL Krishnaveni Sugar Factory
Ur	Urdu
VBF	Vastad Beedi Factory

Contents

CHAPTER 1

INTRODUCTION

1.1 Introduction

Language is predominantly a social phenomenon. Understanding language and its function in society have always been an object of research in sociolinguistics. Language is not used solely for communicative purposes between individuals, but it is also used as an indispensable tool in the realms of politics and economy. In other words, a language is linked to various social domains such as politics, economy, culture, religion, and other spheres of human life. A certain set of logical motives mark the choice of language in each domain. Language used by a community is often seen as a sign of power, identity, ethnicity, and right. Most importantly, language functions as a means of production, which is not studied much in the realms of linguistics and economics. The choice of languages in the economics and political domain may have a direct impact on society. The present research aims to uncover the underlying relationship between language and economy involving real-time.

Language is not solely used to communicate with each other; besides, it has an economic trait. It plays a vital role in wealth creation which is a distinct disposition of human beings. Communication and knowledge are prerequisites for creating wealth, they are expressed through the use of language. Every human possesses a language (verbal or sign language) through which an individual acquires knowledge and skills. Likewise, it is through the language an individual share or teaches various skills to others. The use of language by a group of people enables them to work together to produce goods and services. “The wealth of all human knowledge is based on the exchange of words… All treasure of civic and social life, on the other hand, is related to money as their universal measure” (Hamann 1761:97 as quoted in Coulmas 1992:4). Hamann's argument reveals the vital role of language in wealth creation. Uma Maheswara Rao, G. (2017: 40), in his book titled *telugu rāṣṭrāllō bhāṣāsaṅkshūbhaṁ (Language in Chaos in the Telugu States),* argues that "every language inherently has a certain value in the society whoever speaks it. In a particular sense, language should be considered as a symbol of a person's economic ability and social power." His argument warrants scholarly attention to understanding the relationship between language and economy.

The term 'socio-economic profiling of language' reveals the interaction between language and economy. The socio-economic profiling of speech involves the study and mapping of language(s) in a given socio-economic context at a given time. It is an approach to identifying the link between language and the economy. The aspects of social life such as education, occupation, and mother tongue are actors of objects of growth in the economy. It investigates how industrial workers communicate through language(s) concerning addressees in terms of their social variables. The main aim of this study is to understand and identify how languages, especially Indian languages, are used across all classes of workers in their language selection during production at workspaces. In this research, the terms 'worksite' and 'workplace' are used interchangeably to mean places where economic activity takes place.

1.2 Economic Characteristics of Language

Marshak (1965), an American economist, coined the term 'Economics of Language' where he argues language has certain economic characteristics from the explanatory economic point of view. Marshak (1965;136) poses a critical question concerning the economic characteristics of language "Why are the known languages of the present and past what they are and are?". "Language has economic characteristics, such as value, utility, costs, and benefits" Marshak (1965) as quoted in Zhang and Grenier (2012:3). Pendakur and Pendakur (2002: 136) argues that "Individuals may see language knowledge as a direct consumption good or may use language knowledge as a tool to expand their consumption. The costs of language acquisition are multifaceted. Individuals may have to sacrifice time, money, and effort to learn a language, which may result in multilingual having less labour market experience or education as compared to unilinguals" . These characteristics are realised when someone uses a particular language in economic activity. It is also noted that the survival of the language is directly proportional to its use in economic activities.

The economic nature of language is evident in the workplace where it is used. The use of language in the workplace during the production of goods and services has a specific purpose. The selection of a language for conversation in the workplace benefits and enhances production. Hence. economic principles are manifested in the choice of language. The choice of which language to be used in a particular economic activity has been studied from a microeconomic perspective Leblanc (1994). The present study also attempts to find out the economic characteristic of language, which is realized in the form of work

instructions on the industry premises, such as health, safety, and other instructions on workplaces. The instructions are filled with information that has a special purpose in stimulating the execution and success of the task. Workers understand the instructions if they are written in their known language(s). In case the instructions are provided in a language that workers are unable to follow, it causes communication failure and directly affects the execution of the task. The choice of language in workplaces is also a part of the production.

According to the census of India (2011) recognizes 121 languages and each of which has more 10,000 or more speakers in India. The multilingual situation in India requires language choices and their effective use in the workplaces for economic activities such as production, trade, services, and business. During production at a given workplace, workers determine the choice of language when they are migrants with different language backgrounds. They select a common language for their communication and this situation decides the choice of a particular language. For migrants, the language of the destination place is essential in order to communicate with the native workers at the workplace. Selection and choice of language in economic activities and consumption of goods and services is an object of study in microeconomics. Sometimes borders of ethnicity and languages are seen as barriers to most economic activities. Learning a language for the sake of economic activity is seen as a part of human capital in economics (Breton, 1978; Grenier, 1982; Vaillancout, 1980). Language skills positively affect people's socioeconomic status, which is evident through several empirical studies in the case of Canada and the United States (Boult, 1980; McManus et al., 1983, Vaillancourt, 1980; Grenier and Vaillancourt, 1983). It was also found that language skills that are acquired deliberately are seen as an economic advantage (Grin, 2003)

1.3 An Illustration of Language and Economy

To understand how language and economics interact with each other, the following illustration helps us: everything is a resource for humans in nature. The five elements of nature, such as water, earth, air, fire, and sky, are resources for human survival. A farmer who cultivates land using land and water recognizes land and water as primary resources for livelihood. The capital, manpower, tools, mills, markets, and roads fall under secondary resources. Farming is an economic activity. People who work in the field are economic actors. Any economic activity requires knowledge. Knowledge of weather, seasons, tilling the ground, sowing, planting, watering, using pesticides, harvesting, and using instruments

is an essential part of farming. The knowledge of farming are continuously learned from one generation to the other and through one's own experience. There comes the language intervention in economic activity: the acquisition of knowledge of economic activity happens through the language. From conceiving a thought to the execution of the same happens through the use of language. However, Farming can't be done by a single person alone. The farmer asks daily labourers and describes the work and wages. In some cases, he uses machines to work in the field, and he negotiates with the market to sell his crop. Thus, in each and every stage of farming, the farmer uses language. Farming is a common economic activity found in every country as it is quite essential for humans to survive. In a similar vein, every economic activity is performed through the use of language. In this connection, language is one of the main resources in economic activity as it plays a significant role in production. Without the use of language and communication with one another at the workplace, it is impossible to produce goods and services. Therefore, the land, water, labour, money, tools, etc., as well as the language in which the farmer gathers information and for communication, can be considered as resources. Usually, the ones that are visible to our eyes are identified as resources. However, a language that is the means of any knowledge needs to be considered as a resource as it is the tool for the activity.

1.4 Language as Human Capital

Knowledge is a prerequisite to every economic activity, and knowledge is acquired through language, and economic actors use language to perform the economic activity. The time, education, energy, skills, and language of an individual which are used in economic activity can be considered as human capital. Human capital can be realised when firms pay wages to the labour - they pay wages to the amount of time an individual spares at the workplace. Investment of time doesn't alone offer the salary; the amount of time an individual puts his energy into the work and the levels of education determine the salary of economic actors, and the skills of an individual while performing an economic activity bring forth rewards according to the skills. Above all, language is an essential component of human capital because language is the source of acquiring skill sets that are essential for economic activity. No work is independent of knowledge and skill. Skilful work saves time and energy. Economists find language as human capital. They describe the human capital theory as the productive power of labour as different from other forms of capital and functions as a most important instrument to explain wage differences. (Becker, 1975; Riedler and Pons-Riedler, 1986; Robinson, 1988). Following Beckers's framework (1975),

Lazear (1999:110) introduces a formal model which explains language capital in the context of immigrants in which learning of a language happens when benefits exceed the cost of learning the destination language. Chiswick (1998:255) views language skills are an essential form of human capital. The language skills of an individual are productive in the labour market and consumption. Chiswick & Miller (2003:470) argue that "Language proficiency can also have a direct impact on productivity through more efficient communication, orally and in writing, with supervisors, Sub-ordinates, peers, suppliers and customers (higher productivity on the job). This greater efficiency in communication raises the productivity of labour". Knowledge of a language was viewed as a human capital by Pendakur et al.(2002: 148) and states that "…language knowledge is economically functional". Chiswick (1991) finds that labour earnings are associated with language skills of labour, such as speaking and reading. McManus, Gould, & Welch (1983) prove the link between language and economy and show that in the labour market, the economic performance of English-speaking Hispanic-Americans is higher than non-English-speaking immigrants in the United States.

1.5 Native Languages in Economy

Communication among the workplace has a greater significance among the workforce. Whether it is the exchange of information or coordination purpose, one would communicate with one another. It is hypothesised that most of the workforce use their native languages at workplaces. Because of the precision of the information, time-saving, and energy-saving, the use of native languages is preferred for communication in economic activity. It is also easier for the workforce to acquire knowledge and skills in their mother tongue to transfer and execute the same through the use of their mother tongue. However, the use of a language other than their mother tongue was also found at workplaces as they are migrants to the destination place, but their number can be few. The majority of the economic activity happens through the use of native languages in India. Finding mother tongue as an economically more viable language, Pendakur et al. (2002: 150) observed that "Mother tongue may also be associated with the quality of language knowledge. In particular, people may be more comfortable with, and therefore, more fluent in their mother tongue than languages learned later in life. If this is the case, then people who speak a majority language by mother tongue should perform better in labour markets than those who learn the languages later in life". Uma Maheswara Rao (2017) showed that only 10.33 percent of the workforce English used in their economic activity as against 89.67% who used non-English

languages, including Telugu as the major language while in work in the Telugu states. It indicates that native languages have contributed more in the economic activity than English.

Pool (1970) found the corelation between diversity of language in various countries and of gross domestic product (GDP). Lian and Oneal (1997) argued that there is a relation between linguistic fragmentation and economic growth of the country. Nettle (2000) observed that linguistic heterogeneity causes low economic development and that was directly reflected in GDP of those countries.

1.6 Language Dynamics

The use of language at workplaces may display a wide range of dynamics. Therefore, one of the objectives of the research is to observe the dynamics of the use of languages across all classes of workers at workplaces and all forms of use to show its significance at workplaces. Spoken communication is of great significance among the workforce at the workplace. Besides formal instructions, the exchange of information, queries, suggestions, assigning a task, work description, distribution of work happen to be more through the use of spoken communication. Hence, the choice of language for spoken communication plays a vital role in workplaces. The choice of language On the other hand, other dynamic of language is written form of language is used in workplaces. Written form of language used for official purposes. By and large the written form of language used by the officials at the workplaces. Issuing work instructions, notifications, notices, etc. mostly takes place from top to bottom, Super-ordinates to the Sub-ordinates. The lower level of workers are little into use of written mode of communication. However, written mode of communication in the form of work instruction and their choice of language has immense importance in economic activity.

1.7 Aims and Objectives of the Study

The present study envisages the following aims and objectives of the research:

- To understand the use of native languages in economic activity and how they interact with each other at the workplace.
- To uncover the relationship between language and economy through empirical evidence.

- To survey selected workplaces to solicit responses from the workforce in understanding the language choice and its use in the production.
- To analyse the vast amount of numerical data using econometric tools.
- To demonstrate the dynamics of the use of languages across all classes of workers at workplaces and all forms of use to show its significance at workplaces.
- To identify language use in the instructions and its significance in the workplace.

1.8 Research Questions

The research questions play an essential role in this study. Indeed the research began seeking answers to the research questions. The following questions provide a window to understand the research aims and objectives.

1. How do language and economy interact with each other?

2. What are the roles and requirements of languages at workplaces?

3. Is the use of native languages helpful in production?

4. What is the significance of the choice of language at workplaces?

5. How are the dynamics of languages used?

1.9 Hypotheses

As the present study aims at understanding the choice of language and their use in workplaces, it starts with a certain set of propositions in terms of general hypothesis and null hypothesis.

1.9.1 General Hypothesis

The general hypotheses are proposed explanations set to test with empirical evidence.

(i) The use of Indian languages contributes more to economic activity than the use of English at workplaces

(ii) Native language-speaking illiterates and non-graduate literates contribute more in production than English-speaking graduates.

(iii) The choice of language changes according to the class of work.

1.9.2 Null Hypothesis

The null-hypotheses are alternative statements to the above-mentioned general hypotheses. The following null- hypotheses are formed for the present study.

(i) The use of Indian Languages does not contribute more than the use of English in economic activity at workplaces

(ii) Native language speaking illiterates and non-graduate literates do not contribute more in production than English speaking graduates

(iii) The choice of language does not change according to the class of the workforce.

The above mentioned hypotheses will be tested using econometrics tools such as SPSS ana Stata. Results of the data may accept or reject the hypotheses provided above.

1.10 Organisation of the Thesis

Chapter 1: Introduction

The first chapter deals with the interaction of language and economics. It provides the theatrical basis for the thesis. This chapter describes how language is used as human capital in the workplace. The economic characteristics of the language are discussed in this chapter. It consists of the aims and objectives of the research and hypotheses.

Chapter 2: Review of literature

Chapter two presents a review of the literature on language and economics. Some of the works which that provide a necessary background have been reviewed on a critical note. Methods involved various studies on wage differentials and

Chapter 3: Methodology

Chapter two discusses the methodology that forms the backbone of this research. The design of the questionnaire and the tools used in this research are discussed extensively. Methods employed in this study provide a detailed picture of the selection of the samples of data and analysis. Software employed in the analyses f the data is also presented.

Chapter 4: An overview of selected workplaces

In the chapter, we can find the brief profile of the workplaces selected - the aim and objective of the workplace and the strength of workforce and location are given, besides the production of their industry and contribution to the economy of India.

Chapter 5: linguistic landscaping of selected workplaces

This chapter deals with the linguistic landscaping of workplaces. It talks about the work instructions and their types provided by the firms. This chapter links how language instructions serve as human capital and the economy involved in it.

Chapter 6: Data Analyses and Discussion

This chapter is devoted to data analyses and discussion. The data are analysed using SPSS and Stata statistical software. The analysis of data shows the choice of language determined by social variables such as age, native place, gender, educational levels, and class of work.

Chapter 7: Conclusion

The final chapter focused on a conclusion based on data analyses and discussion. It describes how native languages contribute to the Indian economy based on the empirical evidence obtained from the analyses in chapter 6.

CHAPTER 2

A REVIEW OF LITERATURE

2.1 Introduction

This chapter provides a review of literature related to language and its relation to economics. It is important to understand how natural languages are used in economic activities. Language use at workplaces has greater significance because controlling and managing language at workplace is an inherent part of employment (Hua, 2014; Boutet, 2012 & Cameron, 2000). The determinants of the language used in a given work and the characteristics of firms are examined by economists. They focused on the determinants of the internal communication and external communication of language in market and production (Breton and Mieszkowski, 1975). Research on the importance of native language in private sectors shows that owners of private firms and employees tend to use their native language at their workplaces (Vaillancourt, 1980; Breton and Mieszkowski, 1975; Hocevar, 1975; Vaillancourt, Champagne and Lefebvre, 1994 and Leblanc 1994). As the main argument of the thesis is that there is a correlation between employees use of their native languages and their successful completion of tasks in workplaces, this chapter aims to review the literature which deals with the relation between language and economy.

In this chapter, two parts of the discussions are taken forward. The first part focuses on works related to language and economy, which show the importance of language used at workplaces and how they contribute to production. The discussion on how immigrants are discriminated against language use at the destination workplace, which affects their earnings, and on highlighting some studies of language use at workplaces which influences in formulating language policies are provided.

The second part of this chapter aims to show the importance of works related linguistic landscaping and sociolinguistic profiling of language. Linguistic landscape generally refers to the visibility and prominence of language used on boards and signs in the public domain. Since this research covers the various types of instruction boards placed at the workplace, it is quite essential to show that the language used on signboards bear

relevance to economic activities. To profile language use at the workplace, some sociolinguistic aspects of language analysis on covered because social variables such as age, gender, education levels, occupation, and native place play a vital role in the choice of language at the workplace.

2.2 Works Related to Language and Economy

This section reviews some of the key works which show the relationship between linguistic and economic variables; and the study of language-related issues where economic variables do play a role. Some of these works cover the following concepts: language used at work, consumption, business, ethnicity, language policies, and language dynamics. A review of these works provides a firm understanding of the present research to conceptualize and know language choices and their use at workplaces are determined by socio-economic variables, and they are found significant to the current research.

2.2.1 Language and Economy in World Languages

This section aims to review the works related to language and economy in world languages. A brief introduction about the various studies, methodology, results, and a critique of those works are provided in this section.

Jacob Marschak (1965), in his article *Economics of Language,* introduced the term "economics of language." Marschak (1965:136) posed questions such as: "[What are the] communication systems [that are] the best suited to a goal [?] […] Why are the known languages of the present and the past what they are or are? […] What determines the probability that a set of traits will remain in existence for a given length of time". Marschak viewed language as an object of choice, of policy, in exactly the same sense in which the communication system of the fighter plane had to be chosen. He argued that through time, the most effective languages would sustain, and these languages would be those that need the least amount of time to transmit a given amount of information. Marschak emphasized a key point that there is a close relationship between the use of language optimization and economics. He regarded language as an essential tool in human economic activities, and it has economic characteristics such as value, utility, costs, and benefits.

The research on the relationship between language and emerging ways was studied in the context of the relationship between the two Canadian official language groups. Vaillan court (1980); Boutet, Josiane. (2012), They noticed that language is still one of the

determinants of earnings to study the way different aids as well as their social-economic states.

Lang (1986), in his article *A Language Theory of Discrimination* focuses on the wage differentials of various language groups; he explains with a cost-minimizations model. He finds that the owners who speak one language, and a greater number of the workforce speak other languages. The model has two types with presence and absence of a bilingual supervisor. The study shows that the rise in costs is due to communication problems that cause language-based separation between work groups.

In 1990, McManus discussed Hispanic American males' earnings regressions as a consequence of demolinguistic enclaves in his article titled *labour market effects of language enclaves: Hispanic men in the United States*. The results of this paper show that residing in such enclaves decreases the earnings loss due to poor skills in English.

Rivera-Batiz (1990) in his work *English Language Proficiency and the Economic Progress of Immigrants* which examines the survey data and its effect on the earnings of 241immigrants in the US based on English language proficiency. Unlike the other works, this study uses test-based reading proficiency in English. These measures compare the results of literary skills to circumvent the limitations of the studies based on the individual level, self-assessment of competence. This paper concludes and shows that a lack of English reading skills is a major determinant factor of non-English speaking immigrants.

The paper entitled *The Official Language Problem* was authored by Pool, J (1991), suggests a rational choice model for official languages selection in the multilingual polity and brings forth a language policy that not only considers official languages but states taxes have to be levied on language groups (especially equal to 'he groups' demographic number) whose languages have the official status that includes translation cost of the policy. The model used in this study proves that the sound language is supported by the sound theory and develops a choice relevance to make sure an appropriate evaluation of the costs and benefits of every policy alternative.

The monograph entitled *Language and Economic Status in Quebec, 1980-1985* was written by Vaillancourt in 1991. His monograph focuses on the language skills of labour and their impact on their earnings in the labour market in Quebec. It investigates the impact of language skills of Anglophones and, Francophones by age, education, occupation, and

industry and those language skills' impact on the earnings of labour. The study shows that the language skills of the workforce affect participation in work, time of work, and opportunities at the workplace.

Vaillancourt's (1991) in his *Language and public policy in Canada and the United States: an Economic Perspective* examines the language policies of the United States, Canada, and Canada from 1960 to 1990. To analyse the determinant factors of earnings of English and Spanish speaker, the author used the demand and supply framework of existing language policies in respective countries. The paper shows that the language policies affect the earnings of Anglophones and Francophones in Quebec.

Selten and Pool (1991) developed a model for foreign language learning in their paper titled *The Distribution of Foreign Language Skills as a Game Equilibrium.*The paper uncovers the fact that individuals learn a second language for better payoffs. The results are shown when they minus the cost of a second language learning from the benefits or the payoffs they receive. The authors argue that with the use of at least one language, individuals receive communicative benefits as a proportion of the population of the world, which allows the interdependency, which is accounted for by the game theory. This model discussed that languages differ in difficulty, and language learning ability also varies from person to person. However, the results of this study show that the language learning ability and languages which are learned have an equilibrium point. which means the choices of individuals are optimal.

Francois Grin, in 1992 developed a model for the vitality of minority languages in the paper entitled *Towards a Threshold Theory of Minority Language Survival.* He analyses language shift and reverse language shift as an act of bilingual speakers' demographic weight, attitudes, and expectations of the vitality of language. For the protection of minority languages, this model locates and defines thresholds of languages survival and derives policy-oriented implementations. This study shows that language decline or language spread are not essentially self-sustaining.

Bloom and Grenier (1992b) provide their economic perspectives, which determine the language earring value of French and English. The authors discuss these determinant factors and empirical findings with an illustration. This chapter presents the debate between

Canada and the United States and an assessment of North American economists' contribution to language policy.

Church and King (1993), discussed in their paper titled *Bilingualism and network externalities*, present a game theoretical model. This theory finds that the decisions of actors to learn another language, consider similar decisions by others. They show that second language learning, in a bilingual polity, in private and social domains do not coincide as it is backed by positive externalities of skills in a given language. The paper reveals that, through the model, the government's intervention is essential for optimising second language learning.

Francois Grin's (1994) ideas helped this study to understand and improve the economic factors that are related to language issues discussed in his book titled *The Economics of Language: Match or Mismatch?* This book demonstrates how the economics of language fall into interdisciplinary research. The author shows how language variables and economic variables affect each other. However, it requires a firm emphasis on expanding the very nature of the interdisciplinary field of investigation and modelling.

Chiswick and Miller (1995), in their work entitled *The Endogeneity Between Language and Earnings: International Analysis,* examines the dominant language fluency of immigrants based on the data from Canada, Australia, the US, and Israel. The variables of this study are the following: exposure to the language, acquisition of a second language at the individual level, and economic benefits from language fluency. The second half of the paper shows that competence in the host country's languages(s) has a positive effect on earning regressions on labour income. A wide range of methods and issues are covered in this paper.

The paper *Economic Approaches to Language and Language Planning* was written by Grin (1996c). This paper consists of the contributions of eight major authors that covers the theoretical foundations of language, US Spanish-English earning differentials, a vast amount of literature review of language economics, language and economic variables and their relationship in Quebec, Scottish Qaelic's promotion and macroeconomic impact, development of language and its impact on the economy in third World War, approach to

the multilingual problem in Europian Union, theoretical underpinnings of instructions in the second language as compared to translation provisions.

Francois Grin and Froncois Vaillancourt (1997) presented a brief literature review of some key works related to the language and economy field and provided an overview of the economics of multilingualism with an analytical framework in a paper entitled *The Economics of Multilingualism: Overview and Analytical Framework*. The authors covered some significant works such as language as ethnic culture, language as a medium of trade, language as human capital, language as human capital and ethnic attribute, language and earnings, the language of work, consumption, and business, and language dynamics, language policies. However, these reviews report particular results in this paper. The second part of this paper provides an analytical framework on the benefits and costs of market and non-market in the private and public domains in which multilingualism exists. The perspectives of the authors in this paper are useful to the language policies in multilingual contexts. The views of the authors in these regard offer solutions to language-related issues. However, the paper has certain limitations in the analytical framework and presenting the concepts such as language as human capital.

Ariel Rubinstein (2000) is an Israeli economist who proposed a game theory for language. He believes that the economic theory endeavours to explain the uniformity in human interaction, and the most basic nonphysical uniformity of inhuman interaction is natural language. He provides the reason for why language is related to the theory of economics by saying economics agents are human beings for whom a language is a central tool in making decisions and executing judgments (Rubinstein 2000: 4) game theory concerned with how ideas are expressed within one language. The author reveals how mathematical models are linked to the use of natural language. In this theory, language is seen as a signal sent by players in a cheap talk game, and words are given a *priori* meanings. He is concerned with binary relations-connection between elements in a set, especially in a language. For example, "person x knows y," or " tree x is to the right of tree y" are expressed binary relations (Rubinstein 2000: 9). He arrived at a conclusion that linear orderings are the most efficient binary relation under three inherent premises, which are *indication-friendliness*, *informativeness*, and ease of *describability* respectively (Rubinstein 2000: 13). He has treated language as a behavioural phenomenon, and if the

language does not meet the requirements of the population, evolutionary effects will act to improve its functioning.

Daniel Nettle (2000) shared the relationship between language and wealth of nation through his scholarly article 'Linguistic Fragmentation and Wealth of Nations: The Fishman-Pool Hypothesis Reexamned'. According to Nettle language is a part of the development of the nation, which can be measured in the gross domestic product (GDP).

Donald Lamberton (2002) in his second edited valume, *Economics of language* (2002) comprises of selected key papers on Language and Economy. Before Donald Lamberton focused on this work, the economics of language was an uncultivated territory. In the introduction, he addresses the key issues with regard to languages- why some languages survive and why other languages do not. He displayed the importance of language in the functioning of the development of worldwide business. The problems of language affecting economic development and how it works in new language technology and internet services are also discussed.

Vaillancourt (1983) quoted SECOR (1980a, 1980b) and Econosult (1981) surveys on languages used at workplaces in Quebec. Professor François Vaillancourt, a professor in the Department of Economics at the Université de Montréal since 1976. His field of research is language policy and intergovernmental financial relations in Canada and around the World. Vaillancourt has seen the connection between language and the workplace and concluded by saying that the language of a marketplace is an important determinant of the language of work. It is clearly shown that the little evidence of any links between the ownership of firms and their use of the language of work (Vaillancourt 1983:14). Vaillancourt's book on *Economics of Language* was the first book in the realm of Economics of language. This book consists of 12 chapters. This is devoted to exploring the various dimensions of the economics of language in Quebec. The author finds a link between Quebec language policy's impact and the saving, earnings, and consumption choices of Francophones in Quebec. Vaillancourt presented economists' three views on language in 1983. These perspectives help this study to understand the use of language from economic approaches. Earning differentials based on language choice at workplaces shows ethnic aspects related to language use. The first view focuses on the ethnic aspects of language in English and French earnings difference in Quebec in 1961 (cf. Raynauld and Marion (1972)). He held the view that information and screening costs are the major

reasons of the lower earnings of Francophones relative to those of Anglophones, but not discrimination. However, that finally resulted in the effect of knowing a second language on earnings being neglected.

The three views are presented here:

- The second view is that language has been seen as the human capital theory, the knowledge that repays similar to other types of knowledge, such as education. Here the main focus is to show differences in skill account for socioeconomic status among language groups and disregard the ethnic aspects of language, especially of the mother tongue.
- The third and final approach to the language used by economists is to strengthen the previous one that " the main language (mother tongue) of an individual as both an ethnic attribute and a type of knowledge while other languages are viewed as only knowledge" (Vaillancourt 1983:10).

- The third view, which connects the mother tongue as an ethnic aspect as well as human capital, provides theoretical support to the present study.

The paper *Language Planning and Economics* by Francois Grin (2003) studies the approaches in which linguistic and economic processes interact with each other. The author discusses the evaluation of public policies pertaining to language because language offers analytical tools for the identification and advantages and drawbacks of policy options. He argues that an economic perspective on language is politically and scientifically relevant. One complete section in this paper is designated to the economic approach to language policy, and another section is devoted to an application to education policy and presents the economics of second or foreign language education. The paper demonstrated the essential economic tools available to readers from various economic backgrounds. However, an inclusive methodology was selected for this approach for the selection, design, and implementation of language policies that need explicit and empirical support.

Barton, A, Lipman's (2003) paper entitled *Language and Economics* describe language as "the means by which we communicate with others (or with the self) for information, coordination, and persuasion, etc." Unlike other authors in this field of investigation, he did not present a literature review; rather, he focused on language as a medium of communication. The author especially discusses the 'optimal' structure of

language and the vagueness of language. He argues that language may function as a medium of thought; therefore, language can direct or constrain the decision-making of individuals. He extensively discussed Rubinstein's binary orderings of natural language. However, his theory lacks empirical evidence.

Grauwe (2006), in his *Language Diversity and Economic Development,* discusses economic development and hints at the pressure on local languages. He emphasizes that that specialization in trade requires a common language as a medium of communication which leads to economic development. The author finds language diversity and economic development are two different poles. In the processes of economic development, around 90 percent of local languages out of 6000 languages may disappear by the end of this century. He also hypothesised that economic development reduces linguistic diversity. The data was collected from the Human Development Index of enthnologes and World Bank (population, per capita income, and land size) The research considered instrumental variables in order to find the causal relationship between language diversity and economic development. The research suggests that although economic development is important for language diversity, there are non-economic factors that make the local languages disappear. However, the data analysis did not consider the time factor, which is essential to determine the causal link between the economic development of the economy and language diversity. Moreover, the per capita income of various country vary from one to another from time to time (Graawe, January 2006) the study found that economic development sets pressure on local languages. And it was due to the fact that economic development is grounded on specialization and trade, which in sequence entails a common language as a means of communication. Thus as economic development proceeds, more and more people take on a common language, thereby plummeting the importance of local languages and contributing to their extinction. He discussed how this process might remove up to 90% of the world's living languages before the end of this century.

Francois Grin (2006) wrote a paper titled *Economic Considerations in Language Policy* which constitutes a new development significantly in language economics. The author discusses the traditional discourse of language policy. He classified the main discourse of language policy into three categories. The first one is a legal one, in which the enunciation of language rights is concerned in given contexts; the second perspective on the language policy discourse is a culturalist one that describes language as manifestations

of culture, in twitch prime focus was given to improve the corpus and creation of literacy in that language. The third perception is an educational one that anchors language teaching. The author believes that economists omit language-related economics, and at the same time, language specialists are also paid little interest in the economic aspect of language. He argued that many linguists later realised that there are economic implementations in language policy. The anticipation of the author in this paper is that both economists and linguists come to a common ground and develop the economic theory of language policy. In the first section of this paper, he provides the conceptual framework for "language economics" or "economics of language,." The second section focuses on the latest strands of language economics. The author argues that economic approaches to the language policy must be considered as transportation and economic policy.

John Walsh (2006) in his paper titled "Language and socio-economic development: Towards a theoretical framework," presents the debate over the role of language and culture in socio-economic development. Based on his experience of Ireland, he examines the opulent historical tradition in which language can play a significant role in national development. The author also provides the theoretical grounding for his arguments. This paper brings forth an approach that posits that "all languages and cultures, regardless of their status or numerical size, can be integrated into processes of socio-economic development and that none is inherently anti-development " John Walsh (2006). However, his concept of development leads to debate which has various perceptions. But regardless of that, it facilitates a closer connection of the often distinct disciplines of socio-economic development and language planning and policy.

Chiswick (2008), in his paper titled *Economics and Language: An Introduction and Overview* provides a comprehensive picture over an introduction and overview of research on the Economics of Language. He argues that language skills of immigrants and native-born linguistic minorities can be considered as a form of human capital. This form of human capital has costs and benefits associated with the economic actors. The analysis of this work focuses on determinants of the demography and economy of proficiency of destination language among immigrants. The theoretical support of this work was based on the data gathered from Canada, Australia, US, Bolivia and Israel. The author finds out proficiency depends on efficiency, Exposure, and Economic Incentives. It was also found that earnings based on proficiency in the labour market for immigrants and native-born bilinguals.

However, the small set of data is insufficient to determine earning differentials of immigrants and non-native people.

The article by Garrouste (2008) employs a positivist epistemological approach which is accepted and widely used by the economics of education and the economics of language in order to study the returns to language skills. The author assumes that language competencies account for essential components of human capital. The paper discusses the initial results of the data gathered in a study from eight countries listed in the International Adult Literacy Survey (IALS) – Chile, Hungary, Finland, the Czech Republic, Italy, Norway, Denmark, and Italian-speaking Switzerland on economic returns to language skills. The study shows similarities between countries with regard to language skills valued, it was found that it was beyond the type of language policy that was applied at the national level. He observed that a major factor constraining affecting wage opportunities is the skills in a second language are estimated when In each of the eight countries is compared.

Jain Tarun (2011) investigates the impact of language on economic performance in a paper entitled " Common tongue: The impact of language on economic performance." The author used the 1956 reorganization of Indian states for linguistic aspects as a natural experiment in order to estimate the impact of the majority language on educational and occupational outcomes. His study shows that "districts that spoke the majority language of the state during colonial times enjoy persistent economic benefits, as evidenced by higher educational achievement and employment in communication-intensive sectors. After reorganization, historically minority language districts experience greater growth in educational achievement, indicating that reassignment could reverse the impact of history" (Jain, 2011).

The book *How Many Languages Do We Need?: The Economics of Linguistic Diversity* was written by Victor Ginsburgh and Shiomo Weber in 2011. The book argues that linguistic diversity affects economic and political development and public policies in positive and negative ways in the global economy. As a result, the communication barriers, financial costs, and divisions in national unity lead to conflicts and war in some extreme cases. However, on a positive note, it gives advantages related to individual and group identity. This book explores the certain disadvantages and advantages of linguistic diversity and its influence on economic and social progress. This book shows linguistic diversity as the greatest economic good and a global social phenomenon. The proximity of linguistic

groups and languages is demonstrated in this book. To measure the impact of linguistic diversity on development, growth, trade, translation issues, the quality of institutions, multilingual competitions in voting patterns, and the intensity of civil conflicts, the authors used economic, statistical, and linguistic tools in their study. They found that many languages might harm cohesiveness, especially in the context of the European Union, when it comes to language selection. Apart from demonstrating the value of linguistic diversity, this book also has drawbacks of the same. However, this book suggests useful ways and insights for appropriate linguistic policies for the current multilingual world.

Zhang and Grenier (2012) provide an overview of economic approaches to language issues in their paper entitled *How can language be Linked to Economics: A Survey of Two Strands of Research.* Also, they provided an exploration of the history of the economics of language. The paper reviewed the significant orientations of the traditional strand of the economics of language, a relatively new strand as well that include game theory to language issues. The interdisciplinary orientations and methods are also critically reviewed as a scope of this study. The review highlighted both positive and negative features of the field of language and economics. On the one hand, the positive characteristics recline not only in the increasing significance of the economics of language in the context of globalisation, but also in the new point of view on economics and linguistics. On the other hand, the paper finds that the negative features stem from its birth defects. In the authors opined that language and economics need to be broadened to make the research flourish in the field of investigation. The papers describe the game theory as a promising approach to language economics as it analyses the data on pragmatics grounds.

Jean- Louis and Francois Grin (2013) held a similar view that GDP per capita a development variable. They combined language and development and said the effect of language skills on labour income or proposed economic approaches to the selection, design, and evaluation of language policies.

2.2.2 Language and Economy in Indian Languages

Uma Maheswar Rao, in his book *telugu rāṣṭrāllō bhāṣā saṅkṣhōbhaṁ "*Language Chaos in the Telugu States) (2017)" discusses the use of native languages and their role in determining human development. The book focuses on the importance of the mother tongue medium of instruction in the establishment of equality in society. The study shows a link between the mother tongue medium of education and economic development of developed

and developing countries such as Germany, China, Japan, South Korea, North Korea, India, etc. The author finds how English medium education became a hurdle to the development of India. The evidence shows that nearly 46 percent drop out of school due to the English medium of education.

This book provides solid evidence to show the inextricable link between language and economy. The author argues that language plays a significant role in the creation of wealth. The economic status of everyone in a community is linked to the language they use. Thus he argues that every language in society has a certain value inherent in it, and language should be considered an indicator of economic viability and social power. He discusses that some languages are considered more essential than some other languages based on the economic capabilities of the languages in society. He says there are subtle economic benefits behind languages being chosen for the needs of the people. The native language is the source of the commercial potential of a society. Evidence shows that the use of native languages is more involved in economic activities than the use of English. The use of the mother tongue in economic activities is 89.67 %, whereas the use of English is 10.33% in the Telugu States. In India, 82.73 % of the Indian language involves economic activity, while English is confined to 17.26%. The study finds that the use of English in economic activities is associated with education which means employees and authorities who completed graduation tend to use English; illiterates and workers who completed their primary and secondary education use their mother tongue in economic activities. The author suggests that the use of native languages in economic activities as it is helpful to the Indian economy as they contribute around 82% to the GDP of India. He also recommends that the mother tongue medium of education has to be implemented in the Telugu States because it enhances skills and encourages humanity.

As shown in the review of various articles, it is found that there is a relationship between language and economics. These reviews provide theoretical support to the current research. Methods and techniques are adopted to carry forward to this research.

2.3 Works Related to Linguistic Landscaping and Sociolinguistic Profiling of Languages

In this section, three important works are discussed:

a. John Baugh's Linguistic Profiling

b. Labov’s study of Martha's Vineyard

c. The Social Stratification of /r/ in New York Department Stores

2.3.1 John Baugh's Linguistic Profiling

John Baugh (2003), an African Professor of Linguistics, developed a theory called *Linguistic Profiling* when he was subjected to discrimination because of his accent while he was looking for a house in California in 1980. He authored an article titled *Linguistic Profiling,* which can be seen in the Black Linguistics book, which is published in 2003. There he introduced the concept of “Linguistic Profiling” as the auditory equivalent of visual “racial profiling” (Cf. Sinfree Makoni et.al 2003:155).

The article *Linguistic Profiling* explains how Blacks are subjected to discriminatory practices based on their auditory cues. It shows how inclusion and exclusion happen through language by studying discriminatory linguistic profiles in the US. He begins this study by citing the legal paradox concerning linguistic profiling of “sounding black” and adds his personal anecdote on such profiling in search of a home for his family. However he thinks that "…just as linguistic diversity has been used to accentuate differences among us, it also unites us into the bundles of linguistic enclaves that reinforce our heritage and pride in our ancestry…" (Sinfree Makoni et al. 2003:165). He believes that linguistic profiling exists as long as human language exists, but he has a message to Americans and their fellow beings to have wisdom, patience, and tolerance and not discriminate against others whose dialect differs from others.

He proved this discriminatory practice towards Blacks through two experiments. John Baugh is good at speaking African American Vernacular English, Chicano English, and Standard American English. For the first experiment, he used these three dialects, he made hundreds of phone calls to landlords advertising apartments for rent in surrounding areas of San Francisco with varying concentrations of African Americans, Hispanics, and whites. In one white area, he was allowed to take view apartments with 70% of calls he made in standard American English. Again with African American Vernacular English, he got appointments to view apartments with 28.7% of the total calls he made. Finally, appointments speaking Chicano English he got an appointment to view the apartment only in 21.8% of calls out of the total number of calls he made.

In another area, he received 79% of appointments for the total calls he made more from African Americans than Hispanics and whites with African American vernacular English; with Chicano English he made 61.9% of calls to get appointments and 57.6% of calls with American Standard English.

With these two experiments and two other scientists who publishd a Journal of Language and Social Psychology article in 1999 and worked with him, the study proved that the use of nonstandard dialect is often determined by ethnicity and causes housing discrimination and racial discrimination as well. He expanded this research to issues of legal proceedings, employment opportunities, and education.

Landry and Bourhis (1997) wrote a paper entitled *Linguistic landscape and ethnolinguistic vitality: An empirical study* that defines linguistic landscape as the visibility and prominence of languages on public and commercial signs in public places. This study proposes that the linguistic landscape seems to serve significant and symbolic functions that display status and power in the territory of inhabiting linguistic communities. This study uses an ethnolinguistic vitality framework. The results of this study accept the hypotheses that the linguistic landscape experience of a language group contributes to social and psychological aspects of bilingual development. The results show that despite other linguistic contacts, the linguistic landscape surfaces as a distinct factor. This study also finds the ethnolinguistic vitality that presents. This factor was an important correlate of subjective ethnolinguistic vitality representing perceptions of the vitality of the in-group language in various domains. The study also found relations between the linguistic landscape factor and degree of in-group language use, especially in institutional settings, suggesting a carryover effect of the linguistic landscape on language behavior.

2.3.2 Labov's study of Martha's Vineyard (1966)

Labov's studies Martha's Vineyard (1966), and his observations on this study serves as a model for his master's essay and his observations in New York as a model for his dissertation. Martha's Vineyard is an island located about 3 miles off New England on the East Coast of the United States of America. It has a permanent population of about 6000. The population is divided into three main groups: English Yankee settlers, aboriginal Indians and recent Portuguese settlers. Martha's Vineyard exhibits a contrasting distribution of population on the island because on the one side, there is a densely populated

area at the down-island where the population of the main town lives on tourism during the summer months, while on the other side there are mostly farmers and fishermen.

In his study, Labov focused on the realization of diphthongs [aw] and [ay] (as in mouse and mice). He came to these realizations based on the interviews that he counted with a number of speakers of different ages and ethnicities on the island. He observed that among the younger (31-41 years) speakers, notably the Chilmark fishermen, subconsciously different in pronunciation which is away from associated with the standard New England norm. They did it in order to identify themselves as a distinct social group with a special status to the undesired summer visitor. A large number of users of this pronunciation are young men who wanted to display that they are natives and reject the values of the mainland. This is to resent the invasion of wealthy summer visitors on the traditional island way of life. This innovation took place despite their exposure to the educational system. Particularly, college-educated boys from Martha's Vineyard have been extremely strong users of the vernacular vowels.

2.3.3 The Social Stratification of /r/ in New York Department Stores

The Social Stratification of /r/ in New York Department Stores was the best-known work of Labov (1972) which was conducted in New York in 1966. It is known as a reformatory way of studying sociolinguistic variables.

While conducting his study, Labov formulated his hypothesis that if any two subgroups of New York City speakers are ranked on a scale of social stratification, then they will be ranked in the same order by their differential use of /r/ (Labov 1972:44). The variants of the phonological variable /r/ are dependent on the presence or absence of post-vocalic /r/ as on the *fourth floor,* where the /r/ is pronounced or omitted. Historically, New York City speech had been characteristically r less. That is featured as a nonrhotic accent. However, the general attitude towards this accent feature was rather negative, and the pronunciation of /r/ seems to have been reintroduced to New York City the pronunciation of /r/ occurred, and its frequency of use depended on the speakers' membership to particular socioeconomic status groups, i.e. social classes.

The results of the department store survey are mirrored more generally in the speech of New York residents. For both variables, there was a characteristic social stratification: the higher the socioeconomic status, the higher the frequency of /r/ pronunciation and of

the using the velar nasal variant [ŋ] in all styles of speech. Labov's study, therefore, revealed the style stratification: Each socioeconomic status group pronounced /r/ and [ŋ] more often as the speakers' attention paid to speech was increased in different speech styles.

2.4 A Critical Understanding of Language in Economy

The review of literature presented in the previous sections covered the relationship between the language variables and economic variables. The terms 'economics' and 'economy' referred in this study are taken in a limited sense and linked with the language use in economic activity. In spite of that, the present study make use of some economic theories such as game theory and human capital theory pertain to language variables at workplaces. Language bridges ideas to the execution of economic activities. A large number of existing studies in the broader literature have examined an ethnic attribute, and the choice of language among immigrants that has become a determinant factor in earning differentials.

In a multilingual country like India, there is a greater significance to studying the relationship between language and economy. Since many workplaces have a workforce from various language backgrounds, the language used in the workplaces has an intrinsic link to the economy. The previous studies did not cover determinant factors of choice of language in the workplaces. In India, the choice of language is determined by various social variables such as age, gender, native place, education level, and occupation. The earlier works focused on immigrants and their language problems but did not give much scope or no solid evidence to show the returns to the mother tongue use in the workplace. As far as previous studies are concerned, no previous research has investigated language contribution to the production and language issues in multicultural settings. Although studies have been conducted by many authors addressing language issues or discrimination against immigrants, this problem is still insufficiently explored. In addition to that, the native culture, language, and linguistic landscaping in native languages are hardly covered in work environments. Previous research can only be considered a first step towards a more profound understanding of language and economy. However, the present study adopted economic theory, i.e. Human Capital theory, to link the use of language and its vital role in production.

CHAPTER 3

METHODOLOGY

3.1 Introduction

This chapter provides a detailed methodology employed in this research. This chapter provides the four phases of the research methodology, namely, the formulation of hypotheses, the questionnaire design, data collection, and data analyses. Each phase consists of a few steps, and they are discussed in detail in this chapter.

Knowledge provides the underlying support for any economic activity. Language plays a vital role as an essential tool to link knowledge and economic activity. Language/s used in communication provide/s a deep understanding of work and help/s to exchange views among the workforce. As a whole, language can be seen as a means of production in workplaces. Thus, it is quite essential to know what language/s contribute/s to the economic activity in India. In order to observe the language use and how various social variables such as age, gender, class of workforce, education levels, native place, and mother tongue of workforce affect the choice of language in economic activity, five workplaces selected which are located in Telangana State as it a hub of industries in India. To identify whether native languages contribute more to the economy of India or English, the class of the workforce and levels of education can be determinant factors that affect the choice of language in the workplace domain. Therefore, keeping those things in mind, three hypotheses are formulated:

General Hypothesis

The general hypotheses are proposed explanations set to test with empirical evidence.

(i) The use of Indian languages contributes more to economic activity than the use of English at workplaces

(ii) Native language-speaking illiterates and non-graduate literates contribute more in production than English-speaking graduates.

(iii) The choice of language changes according to the class of work.

Null Hypothesis

The null - hypotheses are alternative statements to the above-mentioned general hypotheses. The following null- hypotheses are formed for the present study.

(i) The use of Indian Languages does not contribute more than the use of English in economic activity at workplaces

(ii) Native language-speaking illiterates and non-graduate literates do not contribute more in production than English-speaking graduates

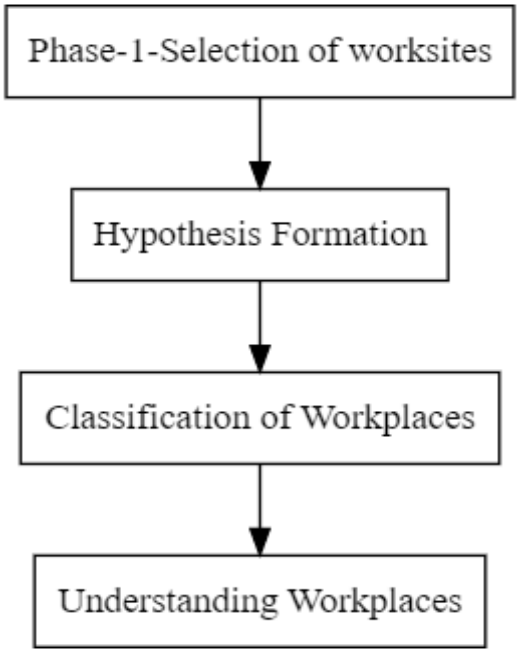
(iii) The choice of language does not change according to the class of the workforce.

3.2 Economy of India

The economy of India is the fifth largest economy in the world. According to the World Economic Outlook database of April 2022 by the International Monetary Fund, the nominal GDP of India is $3.535 trillion with $11.745 trillion purchasing power parity (PPP). Apart from the natural resources, the major strength of the economy of India is the labour force. India is the second largest country in terms of the labour force after China. According to the World Bank 2020, India has a 501 million workforce where 41.19% workforce is working in agriculture, 26.18% workforce is employed in the industry sector, and the service sector employees consist of 32.33%. As per the ministry of labour and employment of the Government of India, 93% of the total workforce work in the unorganised sector. Of the total workforce in both the organised sector and unorganised sectors, 12.22% are graduates and above, and illiterates are 24.3%, and the workforce who completed their primary education is 13.88%, and secondary, middle, and higher secondary completed workforce consists of 63.49 percent.

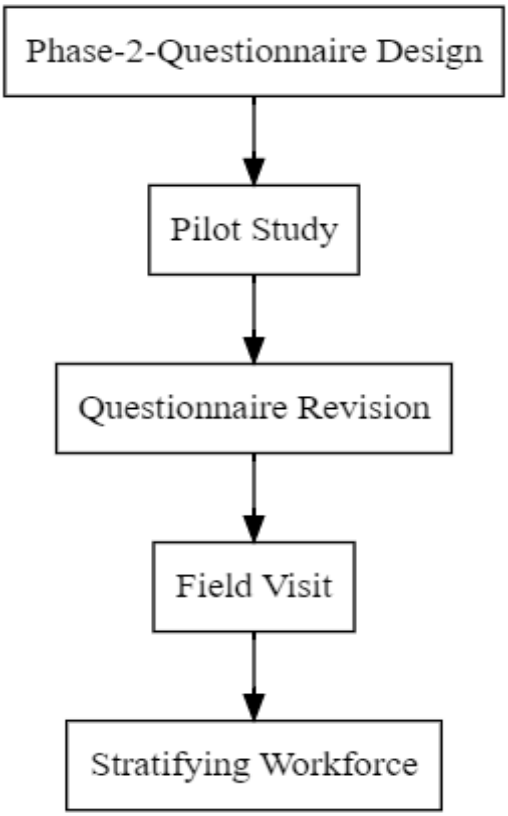
From the above data, it has been observed that the contribution or involvement of the graduates in economic activity seems less than illiterate and nongraduate. It is assumed that the workforce who completed their graduation and above tend to use English in their economic activity, and the rest use their native languages at the workplace. Contrary to that, there is a widespread belief that knowledge of English contributes more to the economy of India than Indian languages. Consequently, there is a growing demand for English medium education in India. To know the truth about whether English contributes to the economy of India or the Indian languages, the current research began with the hypotheses that are stated in section 3.0. Therefore, the aim of this methodology chapter is to provide how the

formulated hypotheses have been tested, how the data have been gathered, and statistical tools such as SPSS and Stata are used in analysing the data. Current research includes four phases. Each phase of the methodology employed in this current research is represented in the form of flow charts provided below:



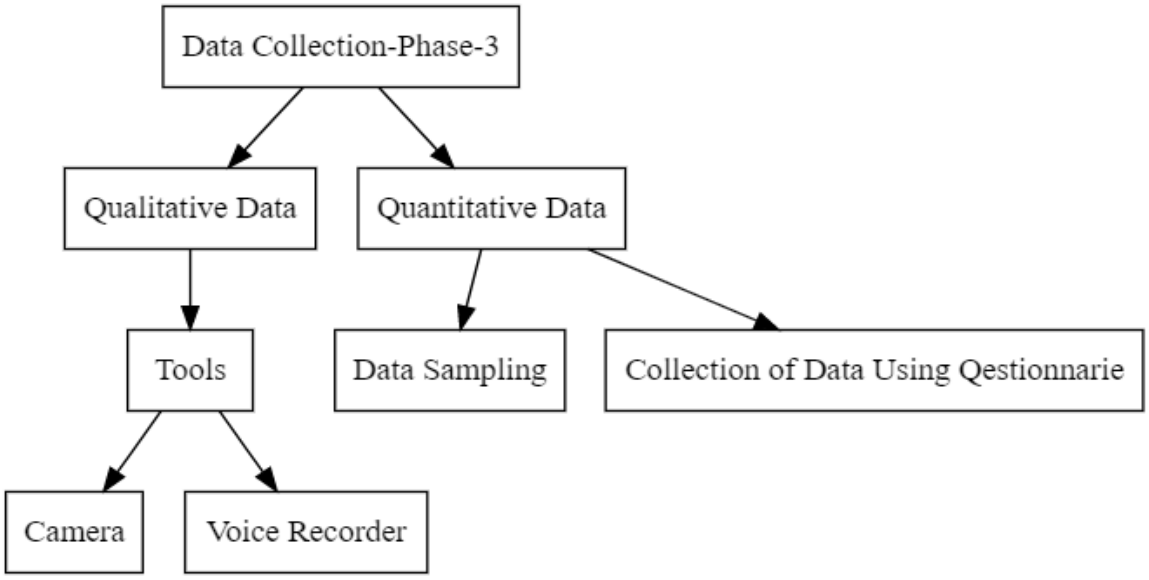
Flow chart 3.1

In the first phase, we selected worksites and then formulated three hypotheses which can be seen in introduction chapter 12. Then, worksites are classified based on their nature of work. After that, we understand the workplaces, their nature, and workforce.



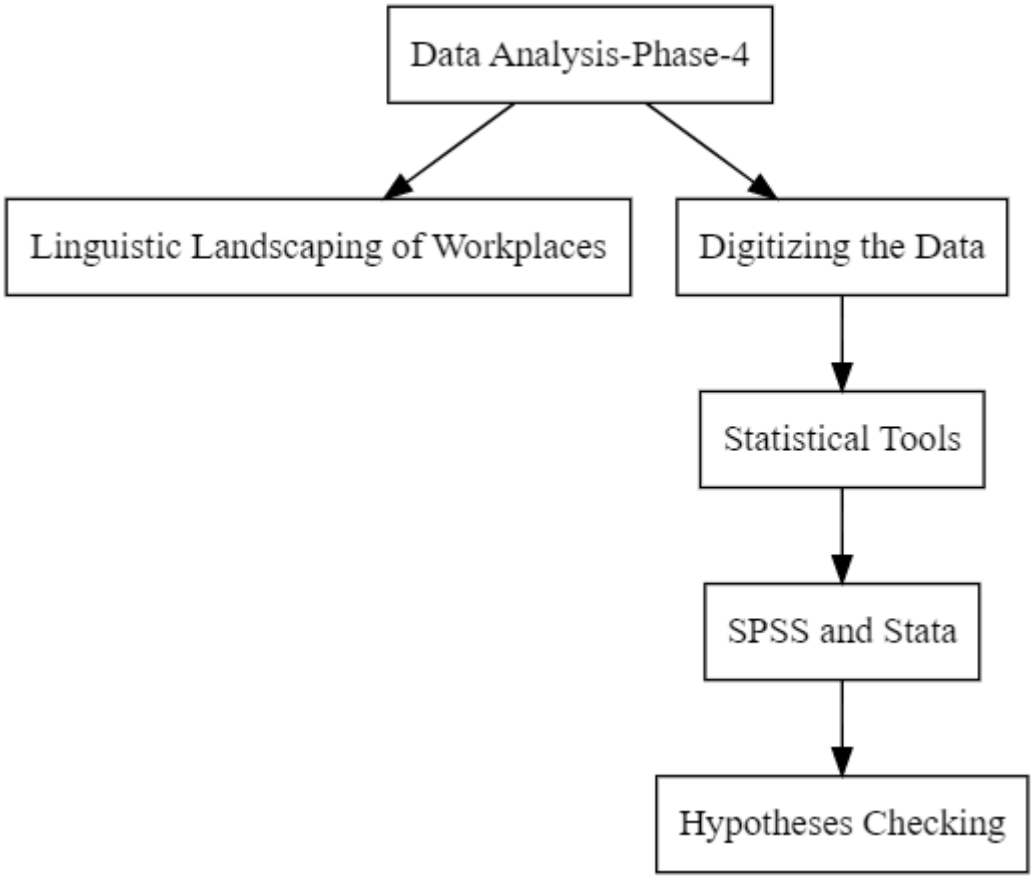
Flow Chart 3.2

Based on the understanding of the workforce in workplaces, we designed a questionnaire with 40 questions. Using the questionnaire a pilot study was conducted in textile shop in Hyderabad and then the questionnaire is revised and then number of questions are reduced to 20 questioned which aimed to collected exactly language use questions along with the meta data which includes their social variables such as name of the workplace, age, gender, native place, education levels, occupation, and mother tongue of the workforce. Then, we visited the field and stratified the workforce based on their occupation.



Flow Chart 3.3

Phase three aims to collect the empirical data, both qualitative and quantitative from the selected workplaces. camera and voice recorder are used to collect the qualitative data and using the questionnaire quantitative data were collected.



Flow Chart 3.4

Fourth phase is analysing the empirical data. Qualitative data is analysed for linguistic landscaping of workplaces. the quantitative data was first digitised and analysed using statistical tools such as SPSS and Stata to check the formulated hypotheses.

3.3 Selection of Workplaces

The study required information on the choice of language at workplaces to determine the relationship between language and economy. The targeted informants of this study consisted of employees who work at various workplaces. Five workplaces are selected for this study. Of which three workplaces come under the organized sector where salaries and work hours are pre-determined, and the rest of the informants are from an unorganized sector where the work is predominantly home-based, salaries and work hours are not pre-determined.

As it is mentioned in the previous section, most of the workforce, around 93 % mentioned in section 3.2, are working in the unorganised sector, whereas only 7 % of the total workforce employed in the organised sector; hence, workplaces belonging to both sectors are taken into consideration for the present study. There are various types of workplaces in both sectors. In this study, industries like small-scale and large-scale industries are considered, which are located in Telangana State, India. The reason behind selecting large-scale industries is because of the huge number workforce consisting of various classes of workers who are part of the economic activities of industries. The communication and choice of language among them might be the objectives of this study. Selecting small-scale industries, which are numerous in the unorganised sector, should also be investigated and compared the communicative patterns of these unorganised sectors with the organised sector. The selected workplaces are located in the Kothagudem, Mahabubnagar, and Wanaparthy districts of Telangana and have some prominence because of large-scale industries which are comprised of diverse language speakers and the most significant production workplaces in Telangana. Small-scale industries are selected from the Kothagudem, Magabubnagar, Wanaparthy, and Gadwal districts of Telangana.

As the current research requires empirical evidence from the organised and unorganized sectors of industries, they warrant the field survey. To gather the empirical evidence, five workspaces are selected located in Telangana State, India. Out of five industries, three industries belong to the organized sector, where fixed working hours,

monthly salary, regular intervals, and government tax are applied to production. In contrast, the rest of the two workplaces are an unorganized sectors that comprises small-scale production, small units of workplaces, irregular working hours, and unfixed salaries. Of the selected five workplaces, two industries fall into the unorganized sector—the details of the selected workplaces are discussed in Chapter 4.

3.3.1 Identifying Workplaces

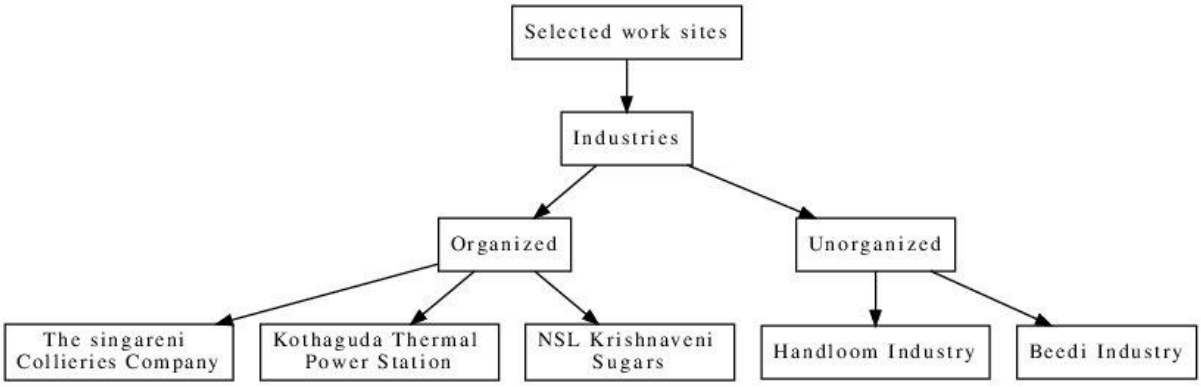
Five workplaces which are located in Kothagudem, Mahabubnagar, Wanaparthy, and Gadwal districsts of Telangana are selcted for this study. These five workplaces are categorized according to their sectors:

Organized sector industries

1. Singareni coal company limited (SCCL)
2. Kothagudem Tharmal power Station (KTPS)
3. NSL Sugar factory

Unorganized sector industries

4. Handloom industry
5. Vasthad Beedi industry



Phase 1- Selection of Workplaces

3.3.2 Understanding the Workplaces

A complete understanding of the workplace is a prerequisite before carrying out the study on profiling Indian languages and their contribution to the Indian economy. Economic activity is an essential part of our life journey, and people choose to work in various sectors.

People from various geographical backgrounds and different languages come together ad work for the industries. An industry consists of various workforces with a different hierarchies of workers. Language plays a vital role in connecting them to execute the tasks. The skills such as listening, speaking, reading and writing is used in daily activities in industries. It is useful to know the choice of language the workforce uses among themselves and communicate with the hierarchy of workforces to understand the hypotheses formed in the current study. It is also to be noted that the use of language varies from one type of industry to another. Language variables that the workforce use at workplaces may affect production, and economic variables such as capital, salaries, and facilities invariably support the choice of language at workplaces. Workplaces can be broadly classified into agriculture, industries, and the service sector. And also, various factors such as education levels of workers, geographical background, type of work, etc. have an impact on the choice of language respectively. Therefore, there is of greater significant to study the relationship between language and economy. The workplaces are the only field where we understand the dynamics of language and choice of language in the light of microeconomics. Hence, understanding the type of industry and its organisation helps in designing our research plan.

3.4 Questionnaire Design

We have chosen questionnaire as an instrument to collect information of language use, choice and participants. In the current study, the questionnaire is consisting of 20 questions.

This questionnaire has been divided into three sections. The first section of the questionnaire collects the metadata of the participants who take part in economic activity. Information regarding the name of the participant, name of their workspace, gender, age, occupation, native place, mother tongue, and other languages are known to the participants are collected.

The second section of the questionnaire focused on the choice of language in spoken communication used at the workplace. It aimed to collect language used among all classes of the workforce. As the entire workforce is divided into three groups such as superordinate, partners mean co-workers of the same domine who share a common task, and Sub-ordinates, the question is meant to obtain the information on choice of language from the workforce covering three sections of the workforce. Most of the workforce have Super-ordinates, partners, and Sub-ordinates, except the top position of the workforces which do

not have superordinate and last class of worker who does not have Sub-ordinates to him or her. Answering pattern of this question was multiple-choice, with most spoken languages of that geographical area provided as an option; The language provided as Telugu since selected workplaces are located in Telangana, a Telugu-speaking state, Hindi was also an option for migrated workers from North India, and English for well-educated employees who may converse with officials, and a blank option was also provided for those who do not speak in languages given and may communicate in other Indian languages.. When the workforce of all classes comes together and agitates for demands, they speak up in one voice and one language. The question pertaining to it is also asked. A following to the previous question was provided to know "what language do you use to make demands" followed by a tick mark multiple choices for language selection.

The third section of the questionnaire focused on the choice of language in written communication at the workplace. Apart from the spoken language, the written form of communication also takes place at the workplace. Written form communication has been divided into two types: personal and official. Questions such as language used in seeking leave from workers, writing leave letters or send a mail to the concerned officials which happen at a personal level, this subsection is termed as personal writing. Besides this, most of the official communication takes place in written form at workplaces. The official written form includes - order letters, recommendation letters, and complaint letters. For each question, multiple choices have been provided to select the language used. In total, the questionnaire consists of 20 questions is provided in annexure I.

3.4.1 Pilot Study

Before the questionnaire was administrated in workplaces to gather the information, it was piloted with 50 participants in the textile industry located in Hyderabad. Workers from different classes are found there. On the grounds of the availability and convenience of workers, the participants are chosen. Information was gathered from all types of workers: from the top class to the low class.

Since the questionnaire consisted of 40 questions, it was time-consuming for the participants to answer all the questions. Out of 50, 12 participants did not complete answering the questions as a couple of questions are open-ended in nature. Some of them left the open-ended questions part and completed the rest of the questionnaire.

Having seen the feedback and results of the pilot study, the questionnaire used for the pilot study has been revised and shortened by eliminating some questions that aimed to collect language use at home and in public spaces. The questions which directly relevant to the use of language at the workplace have been retained. Considering availability and time they can spare at the workplace despite their busy time, some open-ended questions aimed at gathering descriptive answers have been changed to multiple-choice questions. Therefore, the questionnaire was brought down to 20 questions in main study after careful study which are directly aimed at gathering information on the choice of language.

3.5 Data Collection

The number of workforces varies from one industry to the other. It depends on the scale of production that takes place at workplaces. Especially large-scale industries comprise a large number of employees and use machinery. These large-scale industries are organized. Contrary to organized industries, the unorganized sector consists of a small workforce in small units, but in totality, around 93% of the workforce work in the unorganized sector.

Drawing samples from each industry entirely depended upon the total number of employees. Therefore, a 10 percent sample size,1225 participants, has been collected from the five selected workplaces for the study. The sample size chosen displayed a wide range of significant demographic variables such as age, gender, education levels, native place, and mother.

The sample consisted of 346 females and 879 males, of which 342 females are native to Telangana State, 3 are from Andhra Pradesh, and only 1 was from Bihar. Out of 879 males, 839 belong to Telangana State, 24 workers are from Andhra Pradesh, 5 are from Karnataka, 4 are from Bihar, 3 are from Odisha, 1 are from Maharashtra, 2 are from Uttar Pradesh and 1 was from Tamil Nādu.

Education levels of the workforce are the key variable for the choice of language at workplaces. Hence the sample has covered a wide range of levels of workers in this study. Of the total workforce, 4.8% are postgraduates, 15.8% of the workforce completed their graduation, 16.0% achieved their secondary education, 35.9 % of them studied their primary school and stood as a large percentage of the workforce, and finally, the second largest of the workforce are illiterates with 27.5 %.

3.5.1 Data Collection Method

Stratified random sampling was employed in collecting the data for this current study. In stratified random sampling, the entire population is divided into small groups, homogeneous groups that are called strata, based on the shared attributes. Using the stratified random sampling method, the entire workforce is divided into small groups based on the work they do at a workplace. The reason for dividing the workforce into groups based on the work is because the choice of language might vary from one class of the workforce to another class of workforce. Since the study aims to find out to profile Indian languages used at the workplace as the choice of language, it is quite important to study how it varies among work classes based on gender, age, education levels, occupation, etc. The data required for the present study is of two types - quantitative and qualitative data. The methods employed to collect these types of data are different from each other. Concerning quantitative data collection, stratified random sampling was used in which the entire workforce of the workplace was divided into small groups based on their designation or class of work to gather the data. From each group of people, 10 percent of the workforce are selected and distributed the questionnaire in a physical form and are asked to fill the questionnaire during the tea or lunch break. When the workforce is huge in number, the researcher asked some volunteers from the same workforce to distribute the questionnaire. Before administering the questionnaire to the selected workforce, the researcher explained the purpose of the study, then the workforce showed interest in filling the questionnaire.

The data collection of qualitative data is for linguistic landscaping of workplaces. The visible written instructions at workplaces do play a significant role in economic activity. The choice of language used in writing that instruction needs to be captured and studied. Therefore, all types of written instructions at workplaces are covered with the help of a camera.

3.6 Data Analysis

Data gathered for this study is of two types, namely quantitative and qualitative data. Analysing data of these types vary from each other.

3.6.1 Quantitative Data Analysis

For quantitative data, a questionnaire is used to collect the data. Since the questionnaire was in a physical form, to extract data from the questionnaire, the MS Excel and assign numerical codes to each response. As this study has a huge amount of data, processing data

and analysing it using Excel is not possible. Therefore, the coded data was imported to IBM SPSS for analysis.

3.6.2 Qualitative Data Analysis

Work instructions at selected workplaces are captured and categorized based on the type of instructions. The instructions are in multiple languages; hence, English translation is provided for those instructions in the data processing. This linguistic landscaping data was set for qualitative analysis.

Workplaces are not only the places for the workforce to communicate work-related matters but written instructions do play an optimum role in economic activity. Written instructions such as work instructions, safety instructions, health instructions, pictorial instructions, etc, are captured on a mobile camera.

From the entrance of the workplace to the small units of the workplace instructions pertaining to the work, safety, health, etc, are displayed on boards, wall flexes, etc. Instructions of those kinds lead us to do linguistic landscaping of the workplaces and their relevance to the production. The pictures are taken to do the linguistic landscaping of the workplaces. Also, training the classroom environment of workers is another concern of this study. Therefore, the training classes of the workforce are observed and captured with the camera.

The other tool used in the fieldwork was a voice recorder. As communication among the workforce is the main objective of this study, a couple of conversations are recorded with the use of a voice recorder to find out how the choice of vocabulary items and language varies among workmen.

3.7 Statistical Tools

In Sociolinguistics, Purnell et al.(1999) used statistical tools to study the ability to recognize dialects at the micro-linguistic level. Their hypothesis for the test was that phonetic features in a short portion of speech are sufficient to trigger identification across dialects (African American Vernacular English (AAVE), Chicago English (ChE), and South Asian English (SAE)), and their null hypothesis was that there is no difference between the dialects by identification. Another study of sociolinguistics by Choi (2005) studied bilingualism in Paraguay. Indicate in which cases statistical change (over 40 years) is significant, and in which not. Both of these sociolinguistics studies used ANOVA, Chi-2, etc. to find the dependent variables and statistical significance.

3.7.1 Chi-Square Independence Test

SPSS Chi-Square Independence Test determines whether there is an association between two categorical variables drawn from the same data. The null hypothesis is a prerequisite to finding out the association between two variables. If a strong association occurs between two variables, therefore we refute the null hypothesis and accept the alternative hypothesis. The test statistic for the Chi-Square Test of Independence is denoted X^2 and is computed as:

$$\chi 2=\sum i=1R\sum j=1C(oij-eij)/2eij$$

The calculated X^2 value is then compared to the critical value from the X^2 distribution table with degrees of freedom $df = (R - 1)(C - 1)$ and chosen confidence level. If the calculated X^2 value > critical X^2 value, then we reject the null hypothesis.

3.7.2 Logistic Regression

Logistic Regression is a one of the Stata models is used when the dependent variable is dichotomous (two outcomes). The Logit Model approach is one of the important approaches for developing a probability model for the Binary response variables. It follows a Logistic distribution. We can estimate the Logit Model by the following formula,

Logit: $F(Y) = \log[Y/(1-Y)]$

$L_i = \ln (P_i/1-P_i) = \beta_1 + \beta_2 X_i + \varepsilon_i$

Where,

- Y is a binary dependent variable.
- X_i is Explanatory Variables.
- L_i is logit, β_1& β_2 are coefficients ε_i is a stochastic term.

P_i is a Probability of success.

Further, to understand the use of language at workplaces, uses Logit Model explains the different factors that will influence Which language to use? Here we have two potions one is English (0), and another one is Indian languages (1).

The Model:

$$\mathbf{L_i = \ln (P_i /1- P_i) = \beta_1 + \beta_2 Gender + \beta_3 Age + \beta_4 Education + \beta_5 ClassOfWork + \varepsilon_i}$$

Choice of language USE – English or Indian Languages (0 or 1)

Using these statistical tools the proposed hypotheses tested. The detailed analyses of the data and hypotheses testing results can be seen in chapter 5 on data analyses and discussion.

CHAPTER 4

AN OVERVIEW OF WORKPLACES

4.1 Introduction

Workplaces are areas where work is done with the workforce come from different places and use various languages to communicate with each other to produce goods. This is the place where language is used as a part of producing and thus language economy is with direct contact. Communication among workforces offers a great deal of understanding over the work and leads to achieve the desired output. All forms of communication - spoken and written involving in making a considerable mark on production. By and large, languages are used significantly in production and contribute to the economy. This is the reason studying and understanding workplaces warrant profound significance to the present research.

The chapter, an overview of workplaces, aims to provide a brief introduction to every selected workplace. Five workplaces are chosen considering the nature of the workplace and the workforce size for the present study. The overview of these workplaces discusses of the type of industry it belongs to, the kind of production, the location, the number of workforces, and their role in the economy of India. Out of five selected workplaces, three workplaces come under organized sector/formal sector, where the terms of work hours, work, and wages are fixed and recognized by the government. Besides, we also have three workplaces that fall under unorganised sector / informal sector, which do not have the terms of fixed wages, work hours and recognition by the government. The first three profiles of workplaces, namely the Singareni Collieries Company Limited (SCCL)[1], Kothagudem Thermal Power Station (KTPS)[2] and NSL Krishnaveni Sugar Company[3] are organised sector workplaces, and Handloom[4] and Vasthad Beedi Industry[5] come under unorganised sector.

[1] https://scclmines.com/scclnew/index.asp
[2] https://en.wikipedia.org/wiki/Kothagudem_Thermal_Power_Station
[3] http://www.nslsugars.com/
[4] https://handtex.telangana.gov.in/Default.aspx
[5] https://economictimes.indiatimes.com/company/bakran-beedi-works-private-limited/U16002TG1996PTC024541

4.2 Profile of The Singareni Collieries Company Limited (SCCL)

Coal mining is one of the largest economic activities in India. India is the second-largest coal-producing country in the world after China. More than 50 percent of the energy is generated by coal in India. According to the Ministry of Labour and Employment (2020), the coal mines are located in Jharkhand, Odisha, Chhattisgarh, Madya Pradesh Maharashtra, Uttar Pradesh, West Bengal, Assam, Telangana, and Jammu & Kashmir. Around 1.2 million workforce are directly employed in the coal sector in India, and nearly 20 million lives depend on this sector, according to the study carried out by Climate Investment Funds (CIF) (Sandeep Pai 2021:22). According to the Monthly Statistical Report Ministry of Coal, February 2022, The Telangana State contributes 8% to the total production of coal during February 2022. The share of coal production according to the states in India is as follows:

Sl No	State	Production during Feb			Production up to Feb		
		FY 22*	FY 21	Growth (%) M-o-M♦	FY 22	FY 21	Growth (%) Y-o-Y◊
1	Jharkhand	14.16	12.55	12.8	111.97	107.49	4.16
2	Odisha	18.16	14.71	23.42	165.3	135.58	21.92
3	Chhattisgarh	16.46	19.03	-13.51	131.62	130.92	0.53
4	Madya Pradesh	13.03	11.12	17.13	124.6	119.6	4.18
5	Maharashtra	6.73	6.8	-1.04	45.94	39.33	16.82
6	Uttar Pradesh	1.66	1.34	24.25	16.29	15.47	5.29
7	West Bengal	3.14	3.31	-5.23	25.15	26.02	-3.35
8	Assam	0	0		0	0.04	-100

* Fiscal Year

♦ Month over Month

◊ Year over Year

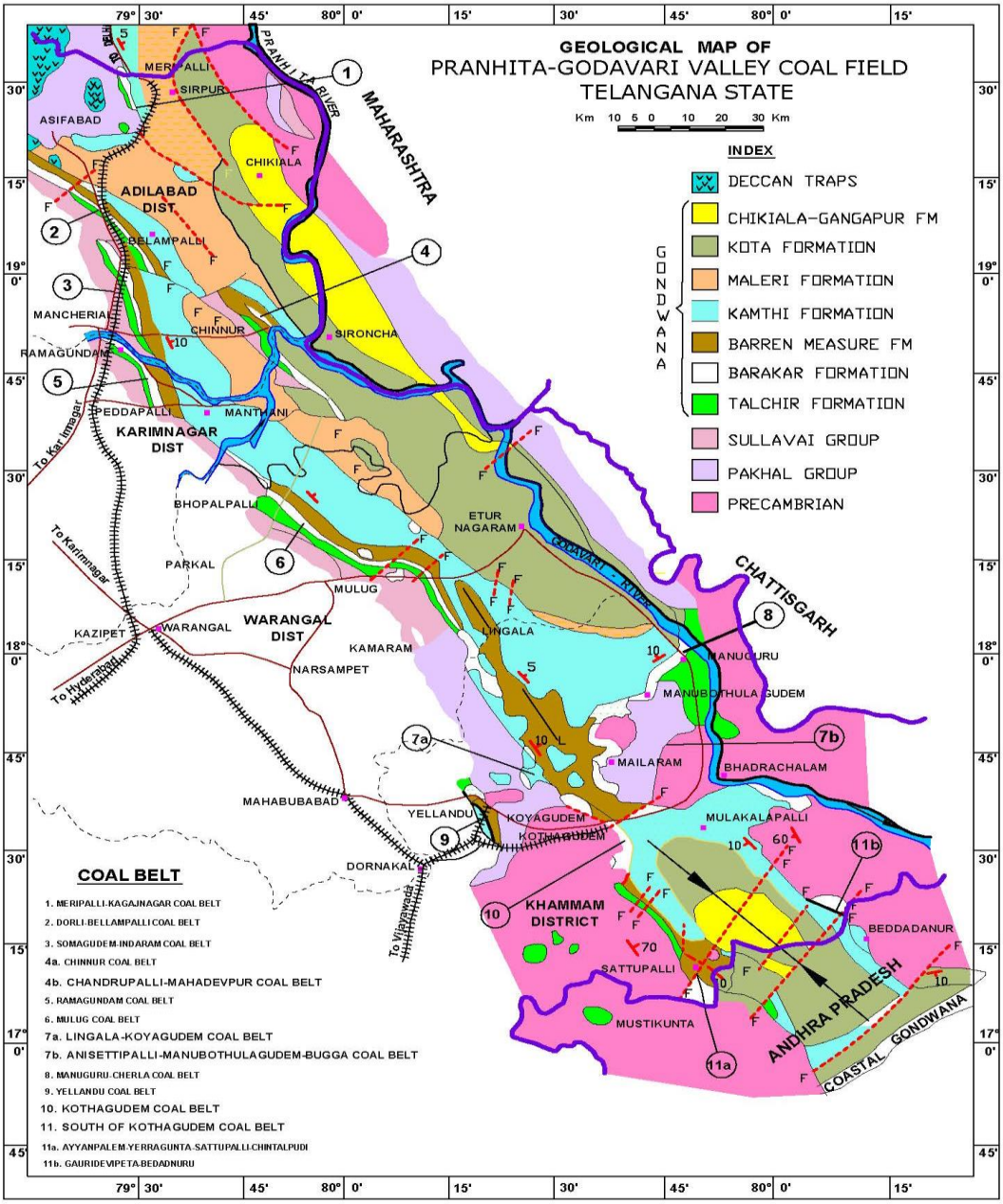
9	**Telangana**	**6.22**	**5.78**	**7.52**	**60.62**	**46 4**	**31.66**
10	Jammu & Kashmir	0	0	0	0.02	0.01	72.73
Grand Total		**79.54**	**74.6**	**6.63**	**681.51**	**620.5**	**9.83**

Table 4.1 The Share of Coal Production in Indian States:

Source: Monthly Statistical Report Ministry of Coal February 2022, Government of India.

The Singareni Collieries Company Limited (SCCL) is a Government coal mining company, the government of Telangana and the Government of India together owns the company on a 51:49 equity basis. The company plays an optimum role in the production of coal in India and it is the largest coal mine in the southern part of India.

The Singareni coal is located across 350 Km of the Pranahita – Godavari Valley of Telangana as shown in the map below. It consists of 24 underground mines and 20 opencast in 4 districts of Telangana.



Map 4.1 Geological Map of Pranhitha - Godavari Valley coal field Telangana State

Source: The Singareni Collieries Company Limited (SCCL).

The sample data are collected from the Kothagudem area, which is indicated by the number 1 in figure 4.3. The Venkatesh Khani, the name of the coal mine, is situated at a nearby village called Rudrampurwhich is 11.1 km away from the Kothagudem district. The size of the mine is around 580.20 Ha hectares. The empirical data are collected fieldwork from 02-10-2019 to 15-10-2019.

Figure 4.2 Field work at The Singareni Collieries Company Limited (SCCL), Rudhraram, Kothagudem District, Telangana, at 12:34 on 14-10-2019.

One of the key aims of this company is "to strive for self-reliance by optimum utilization of existing resources and adequate return on the capital employed" (100th Annual Report and Accounts, SCCL, 2020-21). The SCCL owns 43,895 thousand workforce in the year 2020-21. It has produced 505, 80 lakh tonnes from 2020 to 2021 as per the 100th annual report of The Singareni Collieries Company Limited (SCCL).

SCCL has 6 category of workforces and their details with manpower information is given in Tabe 4.2

Sl. No.	Category	As on 31 3.2021		As on 28 2.2021		As on 31 3.2020	
		Manpower	**% in total**	**Manpower**	**% in total**	**Manpower**	**% in total**
1	Officers	2338	5.33	2278	5.17	2306	5.01
2	Monthly paid staff	10541	24.01	10628	24.1	11457	24.9
3	Time rated workers	26974	61.45	25784	58.48	26884	58.42
4	Piece rated workers	147	0.33	153	0.35	216	0.47
5	Badli fillers	170	0.39	178	0.4	212	0.46
6	Badli workers	3725	8.49	5071	11.5	4946	10.75
Total		**43895**	**100**	**44092**	**100**	**46021**	**100**

Source: Performance report for the month of March 2021 and for the year 2020-21 by SCCL.

Table 4.2: Category-wise Manpower Status of SCCL.

Area/Region-wise manpower of SCCL is provided in Table 4.3.

Area / Region	As on 31 3.2020	As on 28 2.2021	As on 31 3.2021				Manpower reduction/ addition during	
			U.G.*	O.C.◊	Surface	Total	the month	progress
KGM	3516	3098	1088	1366	617	3071	-27	-445
YLD.	849	788	61	390	333	784	-4	-65
MNG.	2633	2664	511	1459	701	2671	7	38
KGM. Region	**6998**	**6550**	**1660**	**3215**	**1651**	**6526**	**-24**	**-472**
BPA.	1358	1208	1	647	566	1214	6	-144
MMR	5850	5728	3872	518	1286	5676	-52	-174
SRP	10009	9883	7824	648	1414	9886	3	-123
BPA. Region	**17217**	**16819**	**11697**	**1813**	**3266**	**16776**	**-43**	**-441**
RG-I	5687	5140	3349	359	1399	5107	-33	-580
RG-II	4119	4120	1466	1834	849	4149	29	30
RG-III	4150	3957	1261	2047	602	3910	-47	-240
BHP	5997	5750	4386	371	925	5682	-68	-315
RGM. Region	**19953**	**18967**	**10462**	**4611**	**3775**	**18848**	**-119**	**-1,105**
HYD. Office	109	114			113	113	-1	4
CORP. office	1597	1513	2		1500	1502	-11	-95
STPP	138	115			115	115		-23
Naini	9	14			15	15	1	6

* Under Ground

◊ Open Cost

Total	**46,021**	**44,092**	**23,821**	**9,639**	**10,435**	**43,895**	**-197**	**-2,126**
% in total manpower			**54.27 %**	**21.96 %**	**23.77 %**	**100%**		

Source: Performance Report for the Month of March 2021 and for the Year 2020-21 by The Singareni Collieries Company Limited.

Table 4.3: Area/Region-wise Manpower Details.

4.3 Profile of Kothagudem Thermal Power Station (KTPS)

Kothagudem Thermal Power Station (KTPS) plays a vital role in state sector power utilities in the country. KTPS is located at Palvonca village in Bhadradri Kothagudem district, Telangana State. Its mission is to generate reliable, cost-effective adequate, and eco-friendly power with the use of state-of-art-technology. To meet its vision and mission, Telangana State Power Generation Corporation Limited (TSGENCO) with its total of 3772.5 MW power generation, has stood first among state sector power utilities in the country with 72.35 % PLF for the period April 2020 to March 2021.

Figure 4.3: Kothagudem Thermal Power Station at Palvonca village in Bhadradri Kothagudem district, Telangana State

A fieldwork picture was captured on 17 December 2019 at the Vth Stage of Thermal Power Plant.

The empirical evidence on language use data was gathered from the Vth stage Thermal Power Plant 2 *250 MW in TSGENCO. The elevation of the site is above 98 meters - mean sea level (MSL). At 17o 3.7' 19.00'' (N) latitude and 80 o 42'7.29'' the plant is situated, 2.5 km away from the highway. In order to generate eco-friendly power, thermal power plants use coal and water as raw materials. Furnace oil is also used for start-up and a flame subsidization boiler is required whenever it is needed. The power production of the stages V and VI are 2500 MW, and the VIIth stage generates 1500 MW. Each unit production cost is 3 rupees while stage V and VI stages generate 24 million Units. The approximate production cost of power generation is 24mu*3*.

Around 4000 employees are employed on this workplace at various levels. The use of language in their daily communication at the workplace at each is the main concern of this study. There are so many ways where the choice of native language at the workplace results in benefits. In search of the choice of language used at the workplace, a questionnaire was designed and gathered the data is gathered through the questionnaire designed by the study (see Appendix I for more details) from the workforce 10 percent sample of 4000 employees.

Figure 4.4: Collecting language use data from the workforce in their available time using a questionnaire at KTPS at 2:51 pm on 17 December 2019.

* Million Units

4.4 Profile of NSL Krishnaveni Sugar Company

NSL Krishnaveni Sugars Limited (NSL) is one of the branches led by the NSL group of companies. Initially, the NSL group of companies was started as seeds company in the 1970s. Later they extended their business across some Indian states - Telangana, Maharashtra, and Karnataka. The reason behind expanding the business is that magro-based economic activity occurs in rural India. Currently, it is one of the top ten sugar industries in India. In South India, integrated sugar companies are the largest sugar industry. It produces sugar 27000 TCD, biofertilizer products, organic manure products. Distillery of 280 KLPD and a congeneration power of 152MW, according to its official website*.

Source: NSL Sugar official website

Figure 4..4: NSL Krishnaveni Sugar Factory.

The NSL Krishnaveni sugar company, a branch of NSL Sugar company, is located at Ramakrishnapur, Kothakota Mandal, Mahabubnagar district of Telangana. The village, Ramakrishpur, has located 60 km from Mahbubnagar district headquarters and has a papulation of 1957 population. The literacy rate of the village is 44 %, and the Telugu language is predominantly spoken by people in the village. The workplace i.e. NSL Krishnaveni Sugar Factory, consists of around 500 workers. From each workforce class, 10 percent of the sample was collected.

4.5 Profile of Handloom Industry

The Indian textile industry is one of the largest in the world, the strength of which lies both in its traditional hand-woven and commercial mill sectors. The conventional hand-woven sector like handlooms, handicrafts, and power loom units provide employment to nearly 45 million people, the majority being women. The handloom sector is one of the important sources of livelihood after the agriculture sector and also contributes to women's

* http://www.nslsugars.com/

empowerment as nearly 70 % of those involved in weaving are women. This sector employs 35.23 lakh weavers and allied workers, contributing 15% of the entire cloth production in the country as per the Annual Report 2020-21 of the Ministry of Textiles[♦].

Also, according to the fourth and the latest handloom census of India in the year 2019-20, 72% of the weavers working in the sector are women, and most of them come from rural areas. Some other key takeaways from the census include their social group, age and level of education as follows:

- **Social group** – The majority of handloom workers come from other backward classes with 36.0% followed by others with 32.4%, STs (17.8%), and SCs with 13.7%.
- **Age group** – Most of the workers come under the age group of 18 – 35 with 42.6%, with very few under the age of 18 years with 3.1%.
- **Level of Education** – The majority of the handloom workers have never attended any school, i.e., 23.2%, while others have their education ranging from below primary to graduation.

Most handloom workers are independent, i.e., 73.2%, and do not come under regulatory authorities.

Among the total number of households, i.e., 31,44,839 engaged in handloom activities, as per the fourth handloom census, out of which 27,916 households are from Telangana, and 1,22,644 households are from Andhra Pradesh (https://texmin.nic.in/documents/annual-report)

The present study collected the data from handloom workers from Amarchinta, a municipality and Mandal headquarters located in Wanaparthy district in the Telangana state of India. Nearly half of the Amarachincha papulation depends on the handloom work. They produce handloom pattu sarees and cotton sarees. These sarees have got massive demand across India.

♦ https://texmin.nic.in/documents/annual-report

Figure 4.5: Data collection picture at 11:17, 30-12-2.19 in Amarachintha.

4.6 Profile of Vasthad Beedi Industry

Beedi rolling employs nearly 6.4 million workers, as per the report published by AF Development Care, a New Delhi-based research consultancy group, in July 2020. Some of the key findings of the report include

- Of the total number of Beedi workers (44,60,076) , 96% (42,76,124) are home-based whereas 4% (1,83,952) work in factories. Women take the highest share, i.e., 80% of those who work home based.
- There has been an increase in the total number of Beedi workers from 4.47 million in 1993-94 to about 4.8 million in 2018.
- Highest number of Beedi workers are from the regions of Kolkata, Jabalpur, Allahabad, and Hyderabad.
- OBCs (37%) comprise the largest number of women Beedi workers.
- Nearly Rs.156 billion worth of Beedi consumption took place domestically in 2017 -18, earning revenue of Rs.25 billion for the government.

According to the latest Annual report published by the Ministry of Labour and Employment in 2020-21, the total number of registered Beedi workers is 49,82,294. In contrast, those from Andhra Pradesh and Telangana are 4,58,040.

Indian economy is majorly informal, with nearly 90% of the workforce in the unorganized sector as per the Periodic Labour Force Survey (2018-19), i.e., 419 million of the total 465 million workers. Many unorganized workers are home based in occupations such as Beedi rolling, tailoring, embroidery, etc.

CHAPTER 5

LINGUISTIC LANDSCAPING OF WORKPLACES

5.1 Introduction

The use of language in economic activity is goal oriented. Language has specific purposes to fulfil beyond mere conversations. The choice of language plays a certain role in various domains at workplaces. Thus, sociolinguistics studies the choice of language and its changes in society. Language usage varies from place to place in society. Language is realized in different forms. Language forms can be divided broadly into two types. The first is the spoken form, and the second is the written form. Language usage in the form of speech is used to greet each other, know certain things, inform, etc. It depends on the domain and the context. Language in the written form has the property of influencing both the individual and the public. When the language takes written form, then its purpose is likely to be fulfilled among the speakers who knew that language. Therefore there is a need to study the written instructions used in public places and domains and the language selection. Linguistics landscaping studies how writing boards, reference boards, figures, etc., are visible to everyone in public places. Landry and Bourhis (1997:25) define "The language of public road signs, advertising billboards, street names, place names, commercial shop signs, and public signs on government buildings combine to form the linguistic landscape of a given territory, region or urban agglomeration." In order to identify the dynamics of language used in the public arena, Cenoz and Gorter (2006:67) suggest that one has to focus on a specific place.

5.2 Linguistic Landscaping at Workplaces

Linguistic landscaping plays a vital role in the workplace. Linguistic landscaping involves identifying and maintaining workplaces. From the entrance gate of the workplace to a small cell of the workplace, various types of signboards can be found on the board, flexes. and on the walls. Signboards indicate what work is being done in which departments in the workplace. Even to all those who work signboards are important in work environment.

Work instructions, safety instructions, directives, etc in the workplace have economic characteristics. Each board planted in the workplace also has a specific economic purpose.

They work as reference entities in any workplace and help those who work there. The notice boards, paintings, safety instructions, etc. that appear all around provide a work environment for those who work in it. Economy in linguistic landscaping in the workplace can be viewed in two main ways from an economic point of view. Here, the word 'economy' is used from two perspectives.

- One of the perspectives of 'economy' in linguistic landscaping is 'brevity' which means concise and using only few words in writing to convey more infromation.
- The second perspective is that investment of capital on setting up instruction signboards at workplace and benefits of the invested capital on signboards.

5.2.1 The Economy in Language Use

This section aims to discuss economy in language use as brevity. Work instructions in the workplace such as safety instructions, environmental instructions, work instructions, etc., play a very important role. Workplaces invest some capital in setting up various instructions in the workplace, they set up those instructions in places where they are visible to everyone. There is an economic dimension to setting up such instructions. These instructions help the workforce to gain knowledge of the work and be aware of safety at workplaces, and they work accordingly. There is special type of language used in instructions used in the workplace. Lesser language usage to convey important things is attempted through instructions. The subject matter of the work is conveyed entirely either in the form of boards, or on the walls, or in the form of figures.

5.2.2 Economics of Language Use in Linguistic Landscape

There is a second economic dimension to the use of work instructions, safety instructions, environmental instructions, paintings, etc., that can be made public in the workplace. Work-related knowledge is essential in economic activities. Without work knowledge, it is not possible to do that work either in the industry or anywhere else. Therefore, the work in the industries is divided into different parts, and those who have done special training related to them are considered eligible and are selected for the job and kept in the job. Even if they take special training for that work, there will be a lot of need to take not only the work-related things in the work environment but also the environment safety records. In a way, even the amount of knowledge related to it becomes human capital. Economic activities based on that human capital are regularly carried out as a means of profit. Work-related

instructions in the workplace can help in effectively showing how to do that work so that those who work will do the work without any doubt. So that the product comes as desired.

There is an important economic trait to work and safety instructions that are publicly visible to all workers in the workplace. Owners of the workplace invest on workplace space, buildings, tools, facilities, workers' salaries, etc. In addition that, the cost of setting up work and safety instructions in the workplace can be considered as part of the investment.

5.2.2.1 Linguistic Landscaping as a Part of Human Capital

Instructions provided in various forms, such as boards, images, and directions, can be considered human capital. Information that is required to perform a task is the knowledge of economic activity. As human capital theory refers, the knowledge, skills, and language used to perform an economic activity is a form of capital at any given workplace.

Firms pay special attention to the placement of tools and machinery in the workplace to produce and the creation of workers who use them to produce products. The tools used to work in the industry, all the knowledge related to it, i.e., their performance, the process of using them, the safety instructions related to those machines, etc., are all set up in the workplace using them in the workplace. Ownership requires a new investment to make the machinery and equipment, as well as the knowledge related to it, available to the workers. Firms embody the contents of these machines, but also the process of using them and the knowledge they put into the workplace gives them complete insight into the work. Workplace safety signs and instructions, as well as environmental awareness boards and toy displays in the form of toys, all provide a holistic understanding of the work being done by workers. Work-related knowledge is used when they are working, so work is considered human capital for all the time, effort, and knowledge they spend on work. Work-related knowledge in the workplace is largely based on linguistic landscaping, so work is largely based on them. Therefore linguistic landscaping can be considered a part of human capital as it becomes a linguistic landscaping knowledge spent by the employer and used by the workers.

5.2.2.2 Linguistic Landscaping Investment and Returns

Investment in production in the workplace can be both profitable and unprofitable. Profits and losses are calculated on the final product of the work done with the investment in machinery, space, resources, and people in the workplace. In the same way, the investment

they make in investing in the workplace in the form of a board, such as safety instructions for workplaces, environmental instructions for work instructions, etc., also has direct and indirect benefits on them. This is because doing environmental testing in the surrounding areas on the spot is a profitable type of production. Similarly, knowing the performance details of the machines and using them from time to time in a proper manner to achieve the given production objective of the work-related instructions of the ministers etc. are beneficial to the product. Accidents in industries cause more damage to the industry. These accidents happen unexpectedly. To control these, the industry, from time to time, takes appropriate precautions while trying to reach the production target while protecting the workers. As part of this, instructions to prevent accidents are written in the mother tongue so that they are visible to workers in the surrounding area.

5.2.2.3 Savage of Material

Industry management has the opportunity to choose from a variety of methods to convey work instructions in the workplace. Instructions include writing on paper, cloth nose, board, walls, etc. Writing work-related instructions on paper is more likely to be of use. Suggestions written on paper or cloth need to be spread to more people, which means they will cost more. Instructions are given on the walls or on the boards in places where the ownership should be accessible to all to reduce the cost. This minimizes the use of materials such as paper and cloth or flexes.

5.2.2.4 Longevity

Work and safety instructions in the above industries have a short life when they written on paper. For example, work instructions or safety instructions written on paper that they read once or twice and then put aside and do not use them. Then they become obsolete. So writing instructions on boards or walls to spend less money and writing in a way that is more visible to the public can be considered a great option for longer durability. Therefore, there seems to be an economical convenience for industry owners choosing this way.

5.2.2.5 Choice of Language for Work Instructions

The language used in the workplace has economic advantages. Linguistic landscaping is helpful in providing work-related information equally to all who work. When the signboards are in their native languages, they can be easily understood by the native workforce who are the major strength of the workplace

The choice of language for work-related instruction in the workplace plays a key role in production. Work instructions provide direction regarding the work and try to prevent accidents in the workplace. The easier the instruction written is easier for the workforce to understand these instructions, it renders the better output. The workplaces selected for current research, display a wide varieties of instructions in multiple languages. However, it can be observed that workplace provided more instructions in Telugu, and some instructions in English and very few in Hindi.

Figure 5.1 shows instruction boards in Telugu at SCCL and importance of Telugu use at workplace.

Figure. 5.1: Instruction Board in Telugu at SCCL.

Figure 5.2 is an example of English.

Figure 5.2: Work Instruction boards in English at SCCL.

Figure 5.3 shows instruction signboard in Hindi at SCCL. Here, safety equipment and outfit are provided along with Hindi text. Even workforce who do not understand Hindi text can guess intended message of the signboard.

Figure 5.3 Work Instruction Board in Hindi at SCCL.

The following figure 5.4 is an example of bilingual signboard, i.e., English and Hindi. Some of the key steps for safety are provided in English and Hindi equivalent of the same.

Figure 5.4 Work Instructions in English and Hindi.

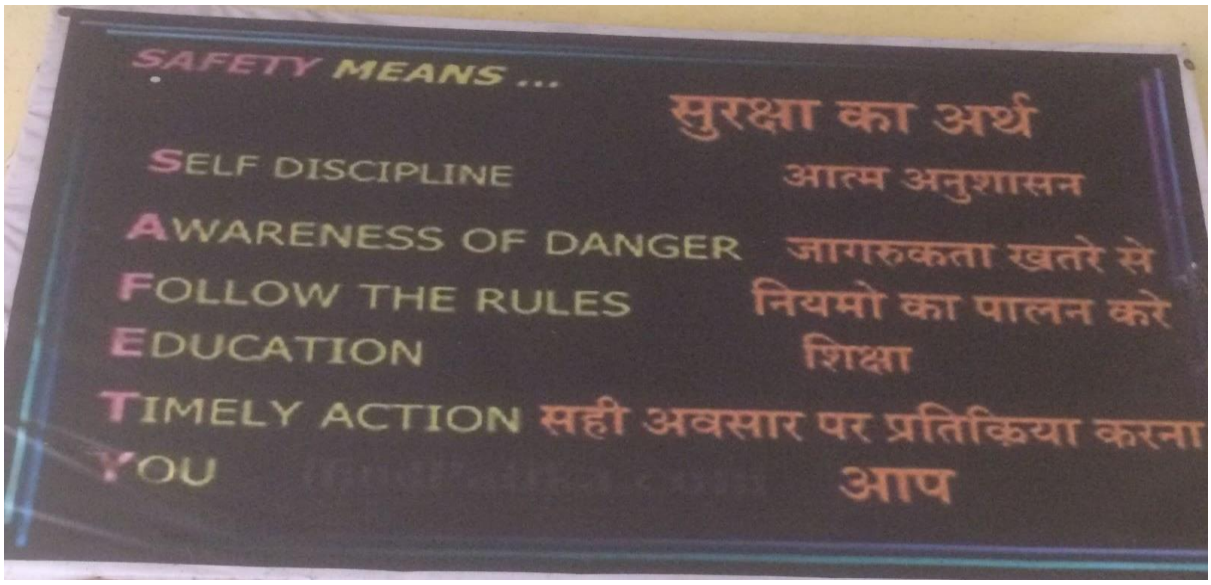


Figure 5.5 is a multilingual signboard in which contact details of concerned authority are provided in Telugu, Hindi, and English. The same font size is used for three languages.

Figure 5.5: Work Instruction Board in Telugu, English and Hindi at SCCL.

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5.3 Types of Instructions at Workplace

There are various types of instructions used at the workplaces. These instructions vary from the types of work economic actors do at workplaces. Besides, the firms also provide some general instruction as follow:

1. Directions
2. Safety Instructions
3. Health Instructions
4. Work Instructions
5. Pictorial Instructions
6. Name Boards
7. Notifications
8. General Instruction

5.3.1 Directions

Each workplace has different tasks related to production. Each task is divided into different departments depending on the work in the workplace. To identify those departments and units, each section in the workplace is given a name, and the name of that section is written on them. Local language or English is used to describe such things. The writing boards used to identify these sections play an active role in the workplace. These are used by workers from time to time and are most useful for making suggestions or other tasks for those who work in them. Above all, linguistic landscaping defines how the workspace is divided into various departments. It is because of these boards that a department is moved from one place to another so that it is known to all who work there. If the workspace is more spacious, these direction boards can be used to carry out work related to that department based on the information written on the boards.

Figure 5.6: Direction Signboard at SCCL.

(1) Te: అత్యవసర మార్గము

atyavasara-OBL *mārgamu*

En: 'Emergency exit'

Observation: As sown in figure 5.6, the direction signboard, the term 'escape route in English is translated as given in (1), the literal translation is not attempted as '*pāripoye mārgamu'*. However, the equivalent of the collocated form 'escape route' is translated.

5.3.2 Safety Instructions

Workplaces set up safety instructions to make sure workers do the work carefully so as not to cause any harm to their health. Their use is very active in the Singareni coal industry and in the thermal power plant. It is mandatory to wear a helmet on the head, shoes on the feet, etc. while working. Precautions are to be taken in coal mines for those who go underground to work there, to keep the air in the mines, to prevent the layers of earth in the mines from collapsing, and in the explosions while workforce dig the coal. Safety instructions on

collection methods, transportation methods, etc., are essential at every step of the way in the workplace. Similarly, for those who work on thermal electric power follow, these safety instructions are written everywhere on the walls on the boards on how to follow the safety rules everywhere without getting any kind of electric shock and accidents in various works. Illiterates are also told on the boards above the walls in the form of toys how to wear a helmet to convey these safety instructions and what precautions to take in the event of an explosion. Therefore these safety tips are very useful for working carefully without causing accidents in the workplace. These security instructions are mostly in Telugu, the local language, and in some places, the instructions are written in English and Hindi so that some of the migrants from other parts of the country can understand the work. Failure to comply with any safety precautions may endanger their lives. Hence, the industry owners should set up a safety unit everywhere and make sure that these safety instructions are always visible to the public at the work environment.

Figure 5.7: Safety Instructions at SCCL.

Observation: In the figure 5.7, as we see many instructions in (2), (3) and (4) below, if it observed that those instructions are rhyming units.

(2) Te: భద్రతను తెలుసుకో బంధాన్ని పెంచుకో

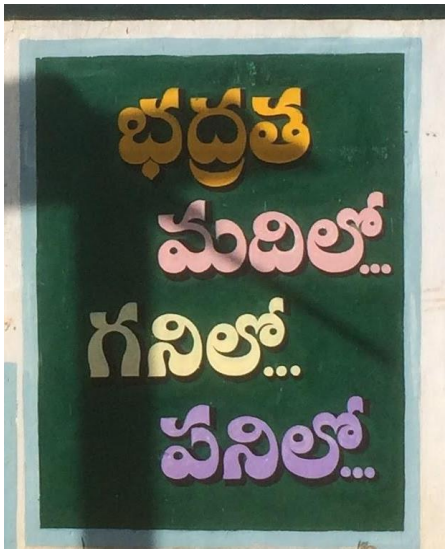
bhadrata-nu telusu-kō bandhān-ni peñc-kō

safety-ACC know-IMP relation-ACC increase-IMP

En: Learn to be safe and strengthen the relation

(3)	Te:	రక్షణ	నిర్లక్ష్యం	ప్రాణాలకే	ప్రమాదం
		rakṣaṇa	nirlakṣyaṁ	prāṇāla-kē	pramādaṁ
		safety-OBL	negligence	life-DAT-EMP	dangerous
	En:	Neglecting safety is dangerous to life			

Figure 5.8: Safety Instructions at SCCL.



(4) Te: భద్రత మదిలో... గనిలో... పనిలో...

bhadrata madilō… ganilō… panilō…

safety mind-LOC mine-LOC work-LOC

En: Safety in mind… in the mine… at work…

Figure 5.9: Safety Instructions at SCCL.

Observation: Similarly, in (5) and (6), the rhyming of two chunks can be seen.

(5) Te: రక్షణ సూత్రాలు మీ జీవిత మంత్రాలు

rakṣaṇa sūtrā-lu mī jīvita mantrālu

safety principle-PL I-POSS life-OBL hymns

En: Safety principles are your life incantation/hymns

(6) Te: భద్రత పాటించు ఆరోగ్యంగా జీవించు

bhadrata pāṭiñcu ārōgyaṅ-gā jīviñcu

safety follow-IMP health-ADV live-IMP

En: Stay safe and live healthily

(7) Te: రక్షనే ప్రథమం

rakṣan-ē prathamaṁ

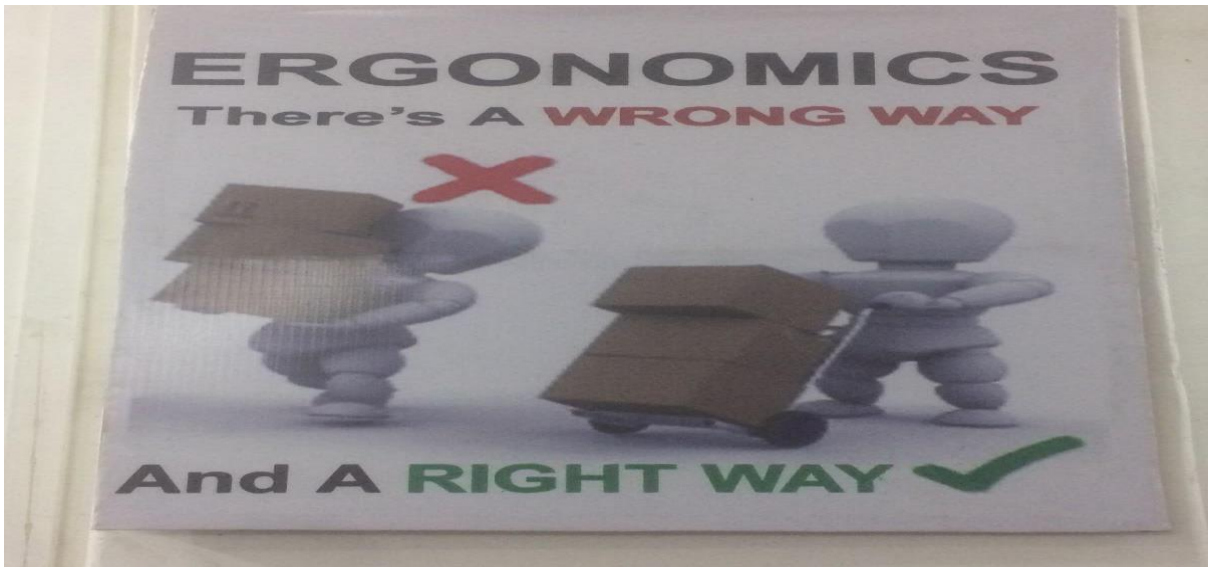
Protection-EMP first

En: Protection is first

Figure 5.10: Safety Instructions at SCCL.

Observation: As shown in figure 5.9, the English instruction is simple and the word is repeated finally. Though there is a picture but no association with what is written.

Figure 5.11: Safety Instructions at SCCL.



Observation: Both figure and language are used to comprehend the meaning. In the figure, it is shown with the symbol (∗) for wrong way and (√) for the right way.

Figure 5.11: Safety Instructions at SCCL.

Observation: Here, figure 5.11 attempts to show in the form of picture for what is written in the instruction. However, the phrase' don't have fun at work' is not properly conveyed.

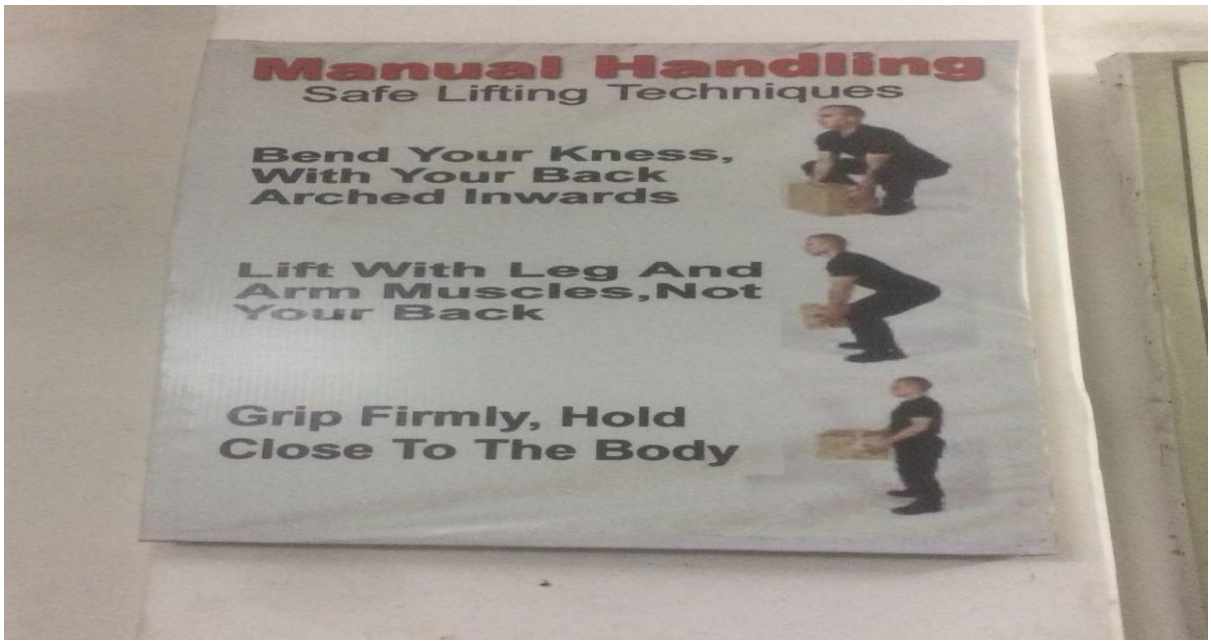
(8) Hi: मत करो कार्यस्थल पर मस्ती जिंदगी नही है इतनी सस्ती ।

math karoo karyalay par masthii jindagii nahii hai ithnii sasthii

Do-not do office but fun life not be that much cheap

En: Don't have fun at work, life is not that cheap.

Figure 5.12: Safety Instructions at SCCL.



Observation: In figure 5.13, both language and picture are used to describe the picture.

Figure 5.13: Safety Instructions at SCCL.

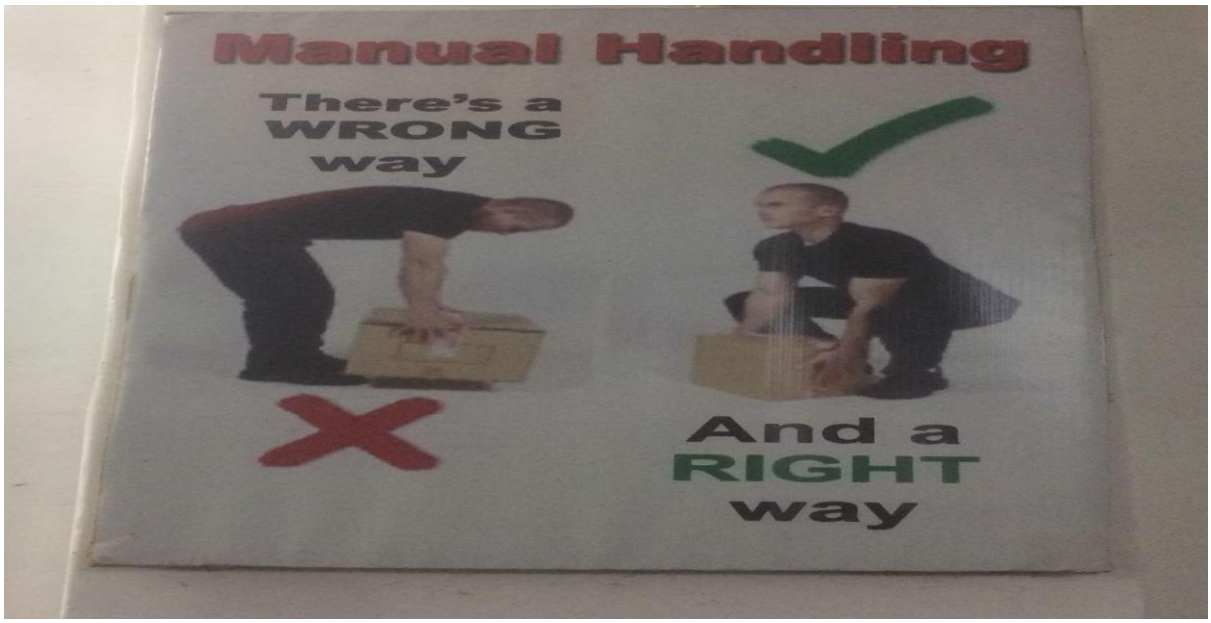
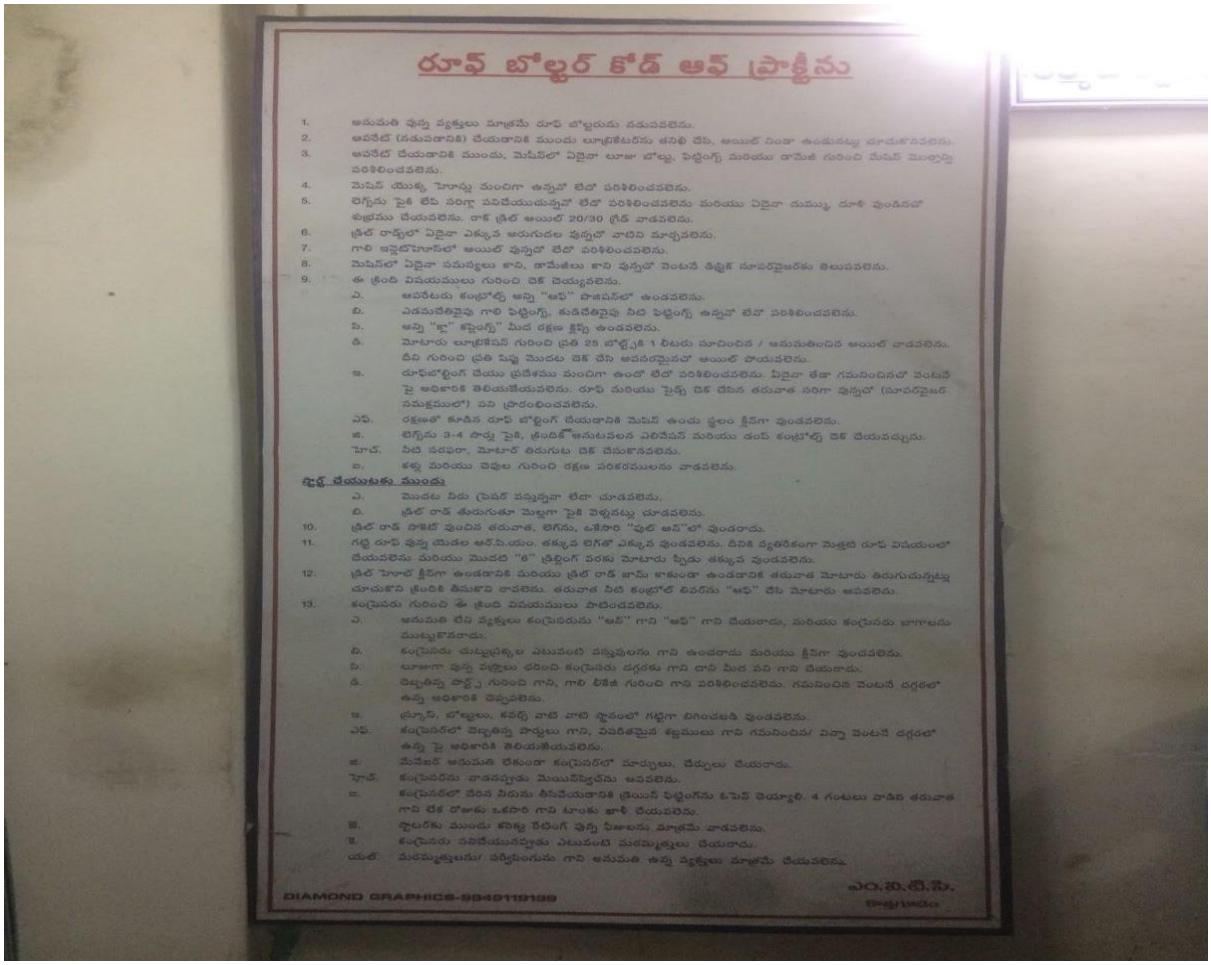


Figure 5.14: Safety Instructions at SCCL



(9) Te: రూఫ్ బోల్టన్ కోడ్ ఆఫ్ ప్రాక్టీసు

rūph bōltān kōḍ āph prākṭīsu

roof bolton code of practice

En: Roof Bolton Code of Practice

Observation: Sentence (9) is written in Telugu script but it is a transliterated from of English. but the rest of the information is explained e labourately in Telugu.

Figure 5.15: Safety Instructions at SCCL.

(10) Te: ప్రయత్నంతో అసాధ్యం అనేది లేదు

prayatnaM-tō asādhyaṁ anēdi lē-du

effort-with impossible QUO be-3.SG.N

En: Nothing is impossible with effort

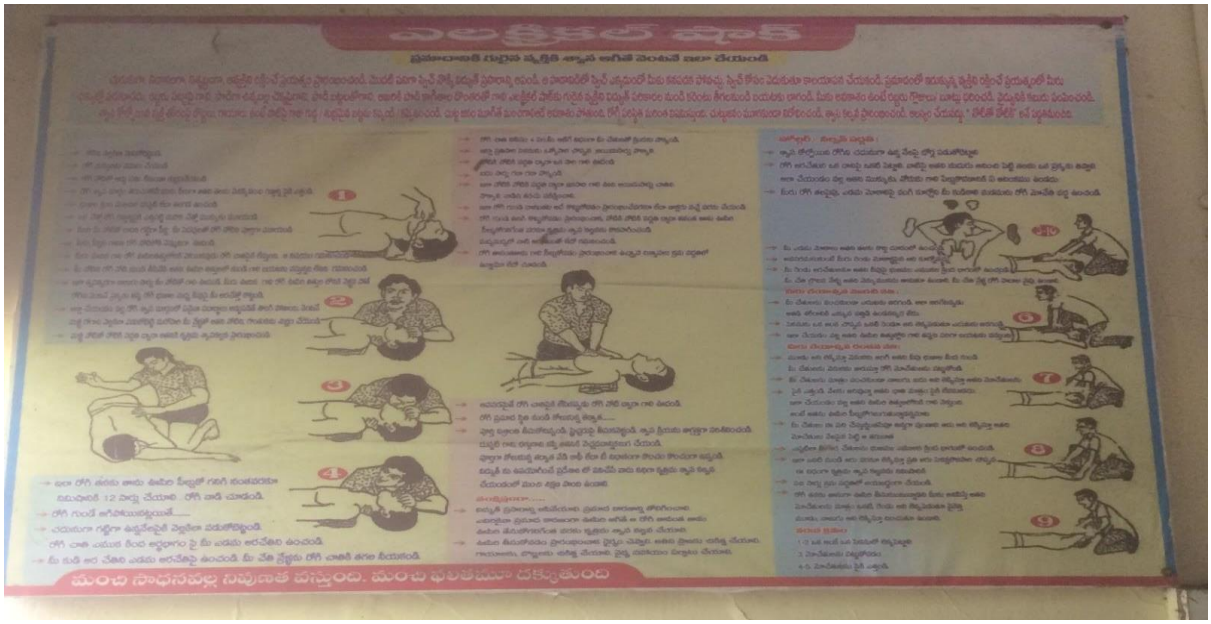
Observation: In figure 5.15, both verbal and non-verbal safety instructions are provided.

5.3.3 Health instructions

Industry owners set up health instructions for the benefit of those who work in the workplace, as well as their health, with a variety of instructions in the workplace. These health guidelines are set up with the intention of creating some health awareness for those who work in it. Appropriate precautions are written on the walls of the board in the form

of instructions to prevent the spread of common diseases to humans, such as malaria, dengue. Sunstroke, fits, heart attack, injury, electric shock, etc. There is another aspect of setting up health instructions in the workplace, keeping in view their health and the cost in case if they feel sick. Industry owners have to pay for the damage they have suffered in the event of injuries, electric shocks, sunstroke or accidents while working. So these health instructions are arranged in such a way that they are visible to everyone in the workplace to prevent such loss of life and unhealthy work from happening to them. Health instructions are given in their native language so that every worker can know the language used.

Figure 5.16: Health instructions signboard at SCCL.



(11) Te: ఎలక్ట్రికల్ షాక్

elakṭrikal *ṣāk*

electrical shock

En: 'Electrical shock'

(12) Te: ప్రమాదానికి గురైన వ్యక్తికి శ్వాస

pramādā-ni-ki *gur-aina* *vyaktiki* *śvāsa*

Accident-ACC-DAT Subjected to person-DAT *breath*

ఆగితే వెంటనే ఇలా చేయండి

āgi-tē *veṇṭanē* *ilā* *cēy-aṇḍi*

En: Do this immediately if the victim stops breathing

Observation: As observed in figure 5.16, the health instructions are given in Telugu. In some cases they are transliterated form of English as in 11. The complete information is in given in Telugu as exemplified in 12.

Figure 5.17: Health instructions signboard at SCCL.

(13) Te: పొగ త్రాగుట ఆరోగ్యానికి హానికరం

poga trāguṭa ārōgyāni-ki hānikaraṁ

smoke Drink-GER health-DAT injurious

En: 'Smoking is injurious to health'

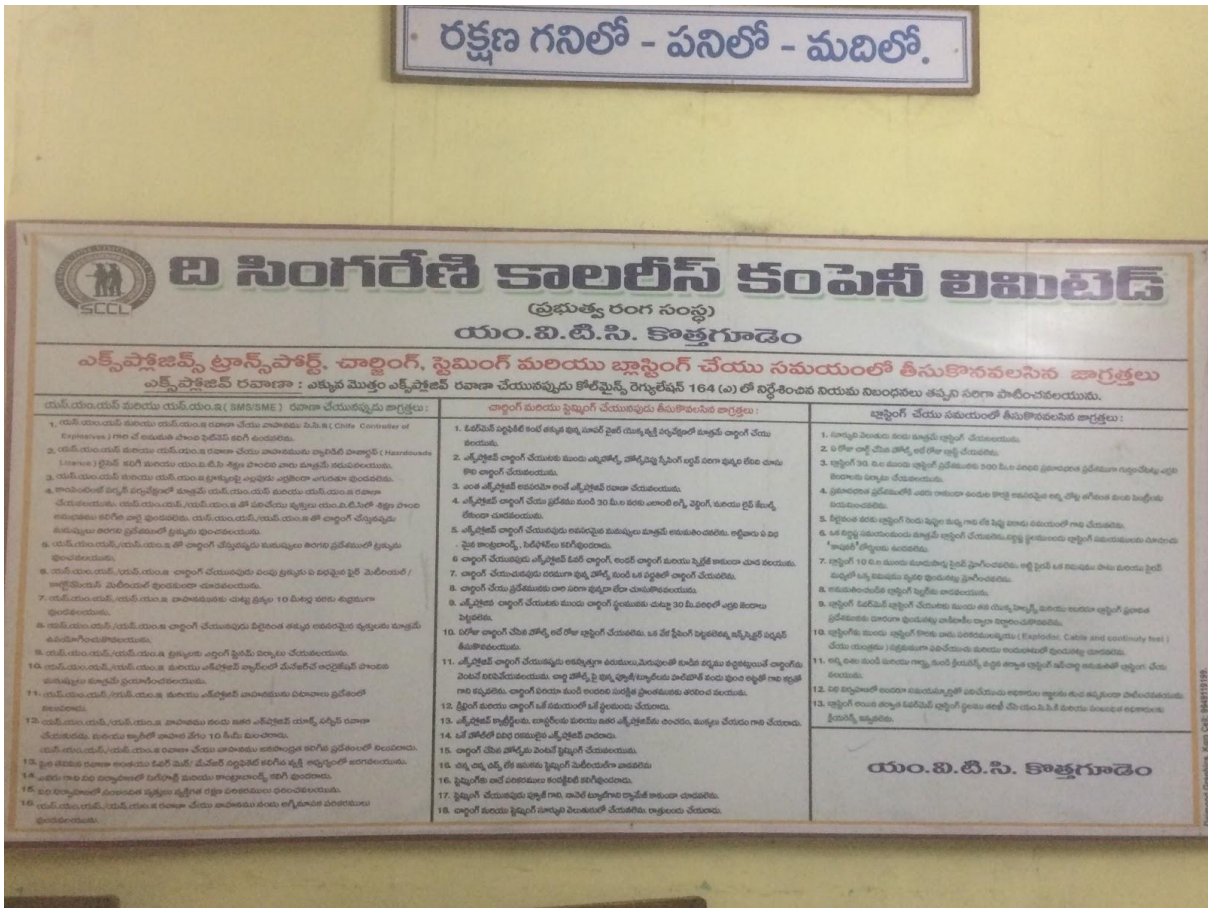
Observation: Figure 5.17 Telugu health instruction is provided in two different colours in order to highlight the instruction. Along with the instruction, an image of cigarette with avoiding mark is given, so as to convey the same information to those do not read and understand Telugu.

5.3.4 Work Instructions

The need for work instructions varies from workplace to workplace. Some workplaces do not provide work instruction since the employees are acquired the skills during the work. The work instructions can be found in an organized sector where there is a flow of employees. The workers of the organized sector require work certification in order to work. They also undergo rigorous training to gain skills. Although, some work instructions are mandatory for employees to keep them updated about the work. These instructions are always in use at workplaces. The benefits of the work instructions at the workplace are the workers always cross-check the task they do and are informative for newcomers.

For the sake of employees, these work instructions are categorized based on the designation of the employees. As the skill set and responsibilities vary from one type of work to other, there is a greater need to provide work instructions according to the types of work. Workers' education levels also vary from one class of employees to other. Therefore, the language used for instruction differs.

Figure 5.18:Work instructions followed by safety instruction quote at SCCL.



(14) Te: రక్షణ గనిలో- పనిలో- మదిలో

rakṣaṇa ganilō - panilō - madilō

protection mine-LOC work-LOC mind-LOC

En: Protection in mine - at work - in mind

Observation: As shown in figure 5.18, the name of the workplace is transliterated from English to Telugu. Some of the key activities such as explosives, transports, charging,

stemming, and blasting are also transliterated into Telugu. However, the detailed work instructions are provided in Telugu.

Figure 5.19: Work Instruction Signboards at SCCL.

(15) Te: ఎలక్ట్రిషన్ రక్షణ ప్రతిజ్ఞ

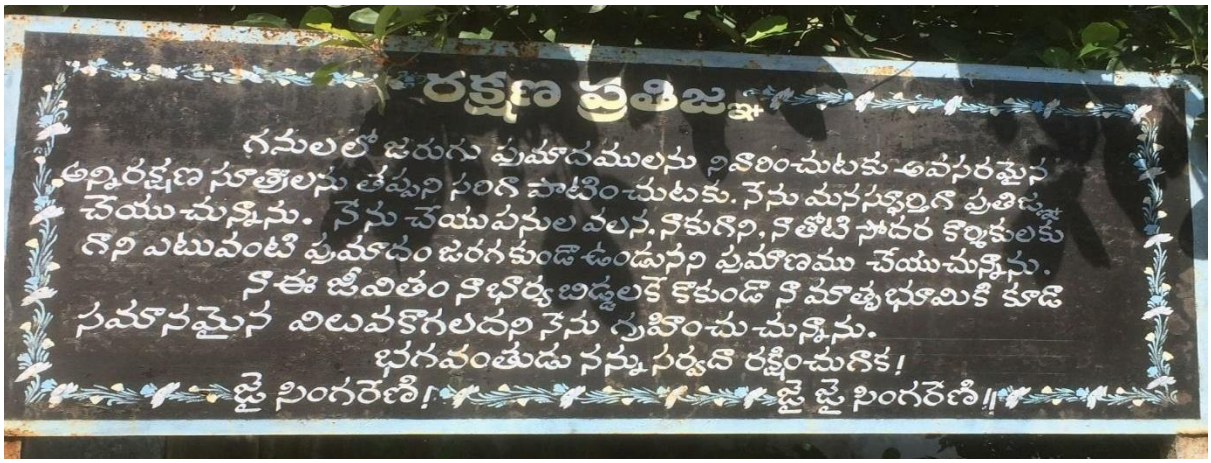
elakṭriṣan rakṣaṇa pratijña

electrician protection pledge

En: Electrician Protection Pledge

Observation: Work instruction provided for electricians can be seen in figure 5.19. For writing these instructions hand-written font is used. The word ‘electrician’ is transliterated into Telugu and other two words are written in Telugu. The title of work instructions can be considered as code-switching. Even a couple of phrases are transliterated in Telugu and rest of instructions provided in Telugu.

Figure 5.20: Work Instruction Signboards at SCCL.



(16) Te: రక్షణ ప్రతిజ్ఞ

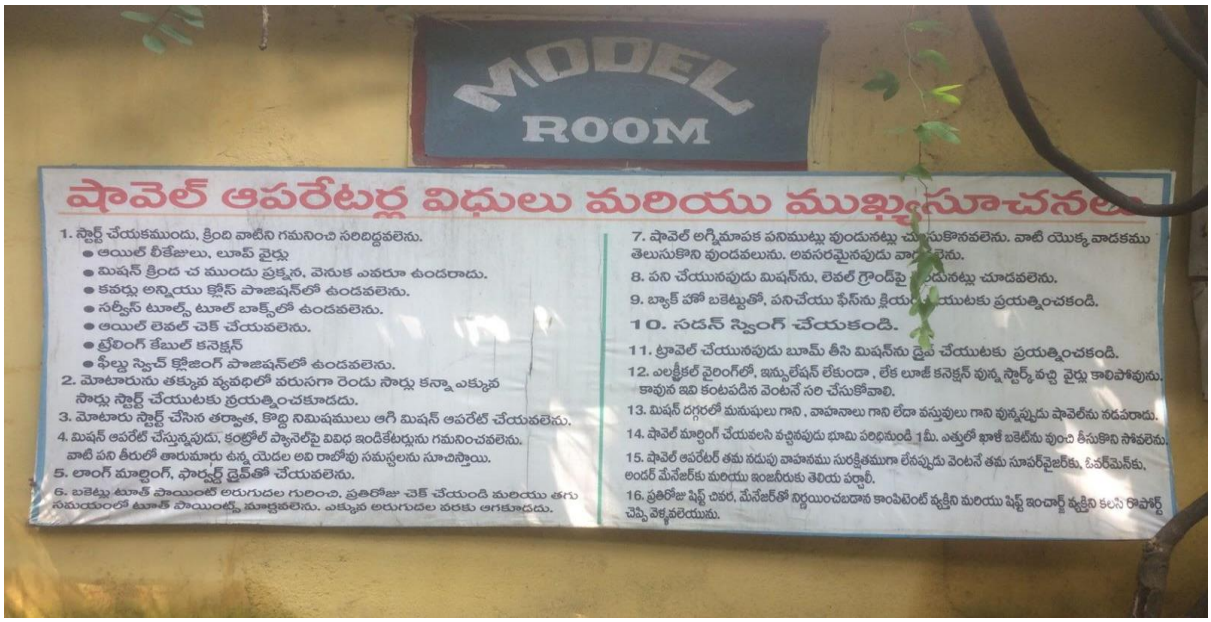
rakṣaṇa pratijña

safety-OBL pledge

En: Safety pledge

Observation: The safety pledge of workforce can be seen in figure 5.20. To put it simple and can be understood by everyone, the pledge is written in Telugu.

Figure 5.21: Work instruction signboards at SCCL.



(17) Te: షావెల్ ఆపరేటర్ల విధులు మరియు ముఖ్య సూచనలు

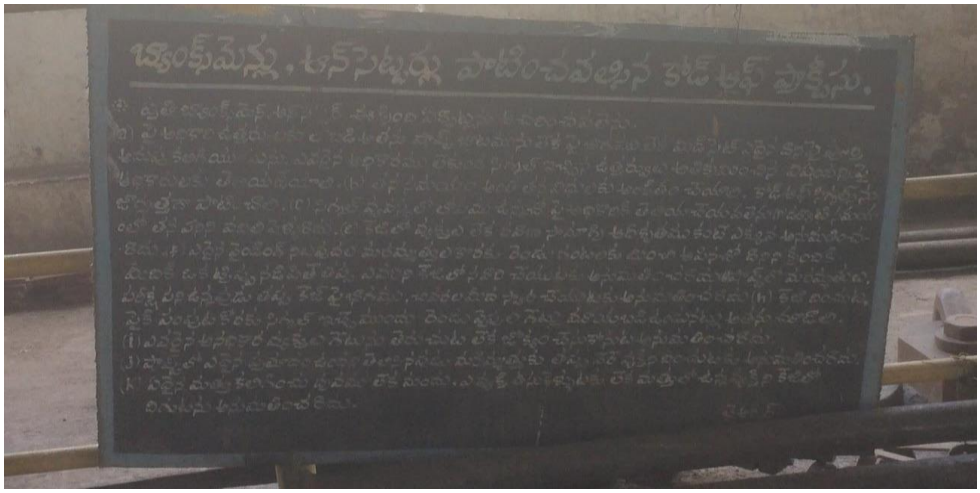
ṣāvel āparēṭarla vidhu-lu mariyu mukhya sūcana-lu

shovel operator-POSS Duty-PL and important instruction-PL

En: Duties and key instructions of shovel operators

Observation: As shown in figure 5.21, the occupation of workforce 'ṣāvel āparēṭarla' is transliterated into Telugu. This could be due to wide use of English names for machines at workforce and non-availability of names in native languages. Apert from the technical terminology, instructions are provided in Telugu in figure 5.21.

Figure 5.22: Work Instruction signboards at SCCL.



(18) Te: బ్యాంక్ మెన్లు, ఆపరేటర్లు పాటించవలసిన కోడ్ ఆఫ్ ప్రాక్టీసు

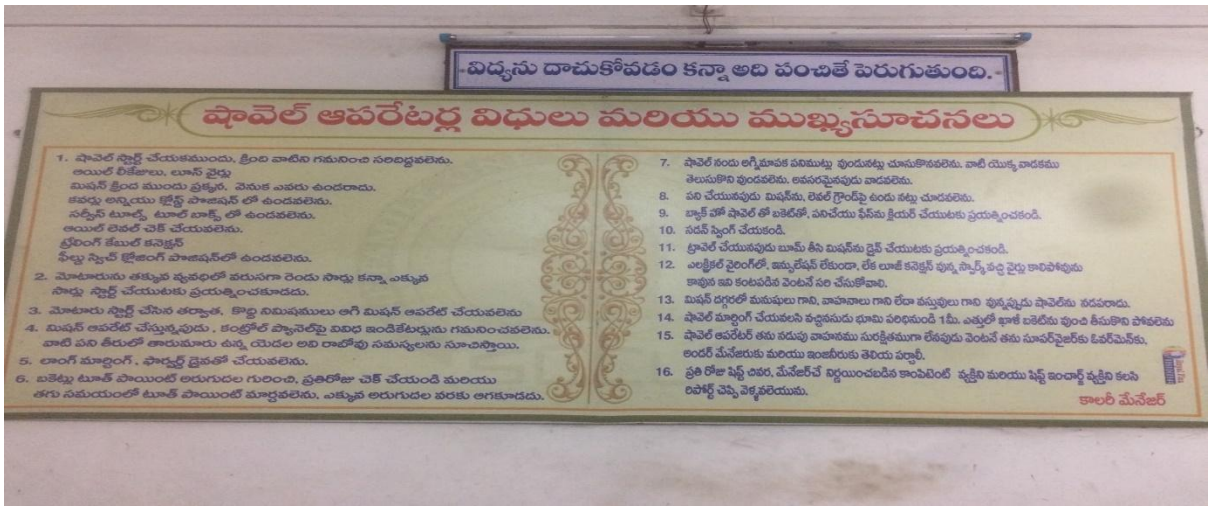
byāṅk men-lu, āparēṭar-lu pāṭiñca-valas-ina kōḍ āph prākṭīsu

bank-OBL people-PL operator-PL Follow-OBLG-ADJ code of practice

En: Code of practice to be observed by bank men and operators

Observation: In sentences (17) and (18) code-mixing is used to write titles of each instruction board. The phrase 'ṣāvel āparēṭarla' is transliterated in Telugu and rest of the words are written Telugu. Similarly, byāṅk menlu, āparēṭarlu and kōḍ āph prākṭīsu are transliterated and only one word is written in Telugu i.e, pāṭiñcavalasina.

Figure 5.23: Work instruction signboards at SCCL.



(19) Te: విద్యను దాచుకోవడం కన్నా అది పంచితే పెరుగుతుంది

vidya-nu dācu-kōv-aḍaṁ kannā adi pañci-tē perugu-tuM-di

Education-ACC Hide-REF-GER than that Share-COND increase-HAB-3.SG.N

En: Education is better if it is shared than withheld

Observation: A quote on knowledge sharing is provided in Telugu. Knowledge or work awareness sharing among workforce is common practice, therefore such quotes are relevant in work environment.

The language choice for work instructions depends on the native place of the workers. In the selected workplace for this study, majority of the workers are natives. Hence, most work instructions are provided in their native language Telugu. For non-native workers, some important work instructions are given in Hindi. For some highly educated employees, instructions are provided in English. Besides them, there are many uneducated workers; for them, the work instructions are presented in pictorial form on boards and walls.

5.3.5 Pictorial instructions

Many instructions can be found in workspaces, but pictorial instructions warrant the attention of workers. They represent the idea behind the instruction in the form of painting on walls or boards. These instruction boards are planted in the visibility of workers at workspaces. Since most of the pictorial instructions incorporate the safety instruments and wearing, they are often presented as attractive as possible. Unlike the other written

instructions, they display a clear and direct message to the workers. As a result ,they remember the instructions as long as possible.

On the other hand, these instructions easier for the illiterates to know the safety instructions at workplace. Work instructions might not follow in detail, whereas safety instructions which are in the form of paintings and drawings help them to know the instructions well.

Figure 5.28: Pictorial instructions signboards at SCCL

(23)	Te:	తాగుట, గుటక, పాన్ పరాగ్ ఆరోగ్యానికి హానికరం. ఇంతకుముందు కూడా నీకు రెండు మూడు సార్లు మిస్డ్ కాల్స్ ఇచ్చాను ...అయినా నీవు అర్థం చేసుకోలేదు ...త్రాగుడు గుటక పాన్ పరాగ్ తినడం మానలేదు!
		tāguṭa, guṭaka, pān parāg ārōgyāniki hānikaraṁ. intakumundu kūḍā nīku reṇḍu mūḍu sārlu misḍ kāls iccānu…ayinā nīvu arthaṁ cēsukōlēdu…trāguḍu guṭaka pān parāg tinaḍaṁ mānalēdu!
	En:	Drinking, Gutka, Pan Parag is injurious to health. Even earlier, I gave you two or three missed calls...but you didn't understand...Drunken Gutaka Pan Parag did not stop eating!

Observation: As shown in figure 5.28, instructions of health care are provided in pictorial form which depicts written instructions in Telugu. Here, pictorial instruction display the belief system of the workers on the work site. For instance, in Hindu mythology, there is a widespread belief that if anyone has any bad habits such as smoking, drinking the angels of Yamadharma Raju come down from heaven and take them up to punish them. Thus, it creates more impact on workforce who consumes alcohol and tobacco.

Figure 5.29: Pictorial instructions signboards at SCCL.

(24) Te: రక్షనే ప్రథమం

rakṣan-ē prathamaṁ

safety-EMPH first

En: Safety first

Observation: The instruction provided in figure 5.29 shows creative aspect of presenting safety in Telugu in the form of painting/picture. In this picture, an elephant is carrying a long on which a safety instruction is written – rakṣanē prathamaṁ which means safety first. Presenting key safety instruction in creative manner may give a long lasting effect on workforce.

Figure 5.30: Pictorial instructions signboards at SCCL.

Figure 5.31: Pictorial instructions signboards at SCCL.

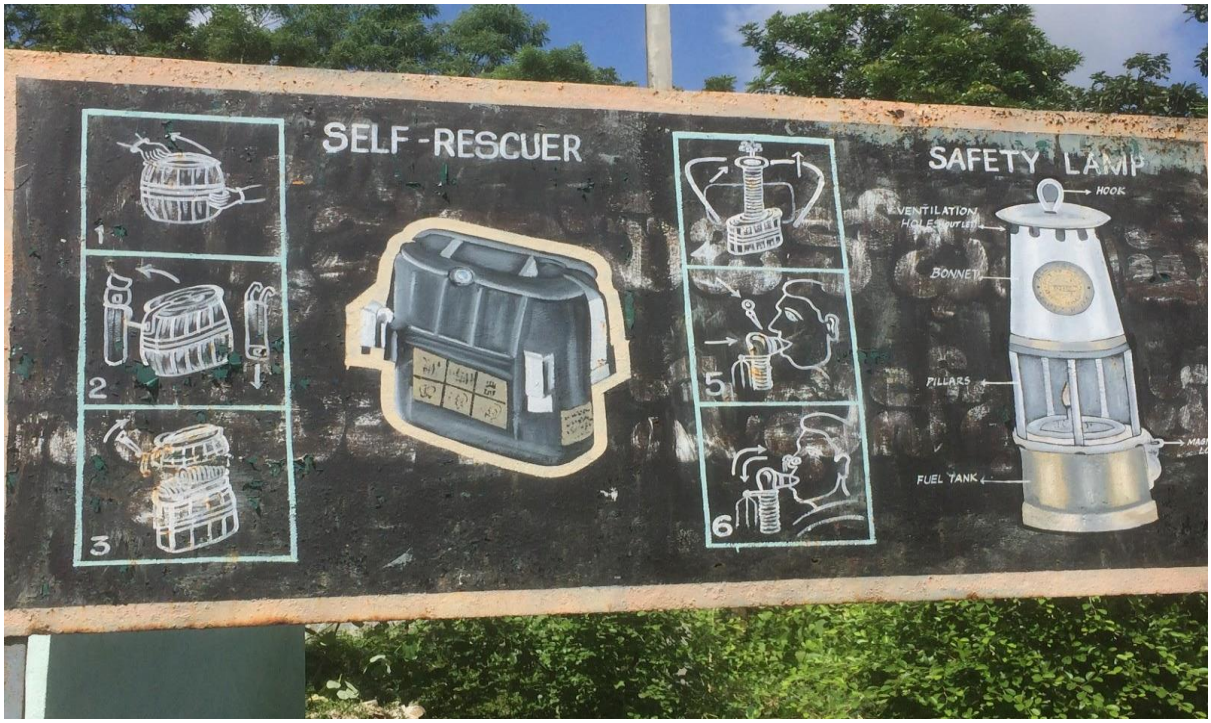


Figure 5.32: Pictorial instructions signboards at SCCL

Figure 5.33: Pictorial Instruction Signboards at SCCL.

Observation: In some pictorial instructions, a word or a phrase is used to make complete sense of the instruction board or to direct the worker on what they supposed to know about it. A few safety pictorial instructions as in figure 5.31 and 5.32 have English words or a phrase to indicate the message of it, whereas figure 5.33 shows images of safety wear which itself conveys importance of wearing them at work environment.

5.3.6 Name boards

Name boards categorize the workspaces into various blocks. Name boards help workers direct them to work in their respective blocks and avoid confusion in finding the places. Every workspace, especially the organized sector industry, follows name boards. In the unorganized sector, only the names of the industry board can be found if the workers have a place to work. A plethora of name boards exist if the industry is a large-scale industry since they have many branches.

Figure 5.34: Name Boards at Offices at SCCL.

Figure 5.35:Signboards of Name Boards at SCCL.

Figure 5.36:Signboards of Name Boards at SCCL.

(25) Te: సుస్వాగతం వెంకటేష్ ఖని

susvāgataM veṅkaṭēṣ khani

welcome! venkatesh-OBL mine

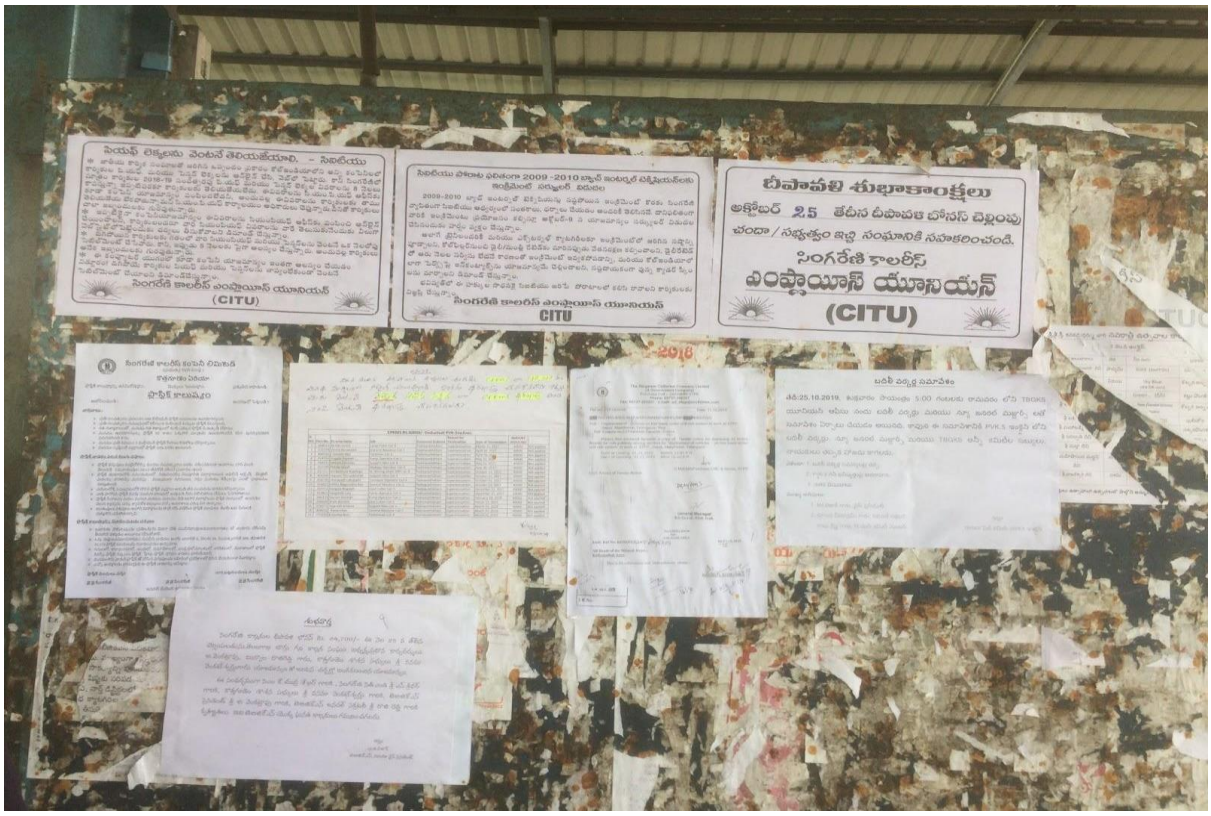
En: Welcome to Venkatesh mine

Observation: As show The office is the hub where many employees who work together in the office, and there is a need to divide them into smaller groups, name the group. Hence, name boards play a significant role in holding workers together or uniting workers in one name. Officials have designated places in the office, and each and every official's room has a name board on it. These name boards help workers or guests know who the official is and lead them to the right place. The language used in writing these boards is the point of the discussion here as shown in Figure 5.34, and 5.35. Because these boards are at use on a daily basis, language should be easier for the workers to find the name of the branch and the name of the official. In these selected workplaces, most the name boards are written in English, where as some name boards are provided in the local language Telugu as in figure 5.36.

5.3.7 Notifications

Notifications are used to notify official information to the workforce at workplaces. These instructions are found in the organised sector. Formal notifications by workplace include office orders, tenders, list of selected candidates, reports, circulars, meeting announcements, and rules and regulations etc. Apart from them, some informal notifications provided by workers unions to call for protest and meetings etc.

Figure 5.37: Notifications at SCCL.



(27)	Te:	దీపావళి		శుభాకాంక్షలు
		dīpāvaḷi		śubhākāṅkṣa-lu.
	gloss	Deepavali-OBL		greeting-PL
	En:	Happy Diwali		

(28)	Te:	సింగరేణి	కాలరీస్	ఎంప్లాయిస్	యూనియన్
		siṅgarēṇi	kālarīs	emplāyis	Yūniyan

		singareni	colliery	employee-POSS	union
	En:	Singareni Colliery Employees Union			

Observation: As they are displayed in the noticeboard figure 5.37 notifications, most of the official notifications use English to notify to the workforce. These notifications often found on the paper and paste them on notice boards. Only graduates and workers who know English read and follow the instructions mentioned in notifications. Workforce for not familiar with English ask others and would be informed of that information. Only some cases when native festivals happen then the officials paste festival wishes in native language of workforce in Telugu

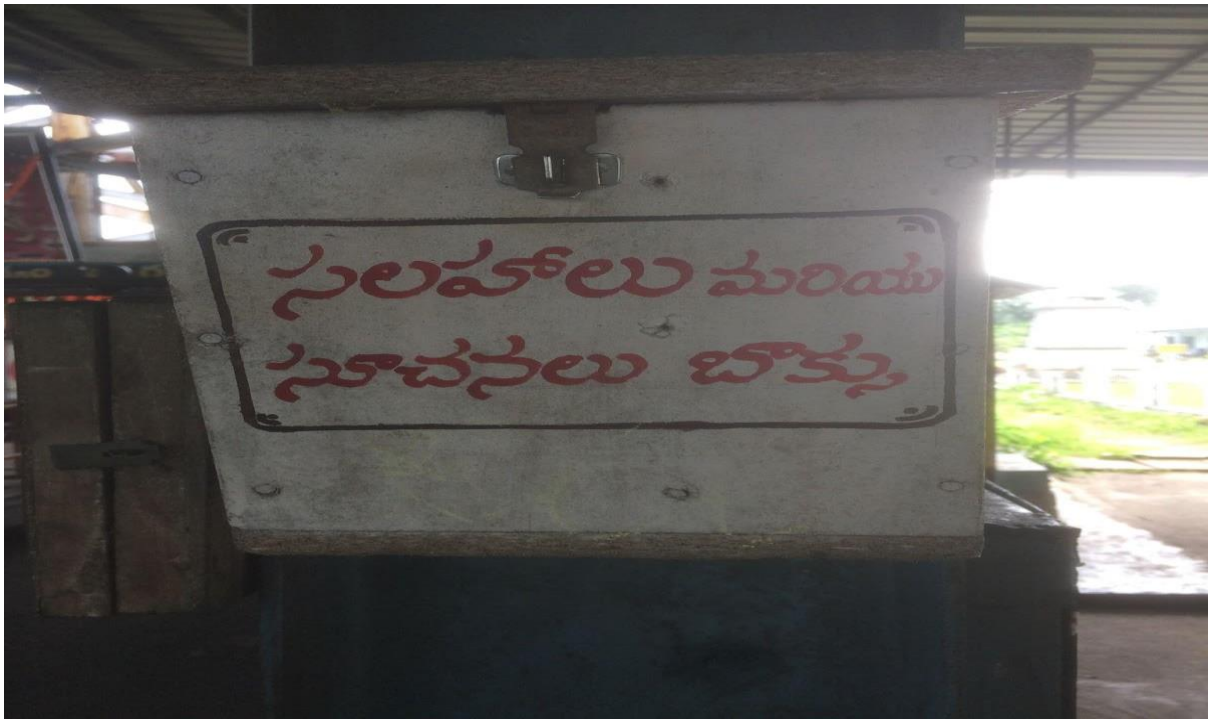
The union name of the employees is in Telugu script but the name workers' union transliterated from English to Telugu as shown in sentence 28.

5.3.8 General Instruction

Instruction related to safety, work, health, etc., is used on priority bases, while the instructions regarding the company and its aims, encouraging employees, details about machinery, etc., can be considered as general instructions. Though they are very less in number at workplaces, they too play an optimum role in economic activity. For employees, work instructions alone are important; they need a certain amount of encouragement before they begin the work or in-between. Some inspiring quotes and pictorial images do contribute to a certain extent at workplaces. Information about their industry and what they stand for is quite necessary for the employees to be aware of. For example, a general quote on the coal mines industry, i.e. "we produce black, but our views are green," as shown in figure 5.18 can be interpreted as though they produce coal but they have concern about the environment around them. Apart from them, the general instructions include monthly targets, number of employees list, welcome boards and history of the industry, etc.

Figure 5.38: General instruction signboards at SCCL.

Figure 5.39: General instruction signboards at SCCL



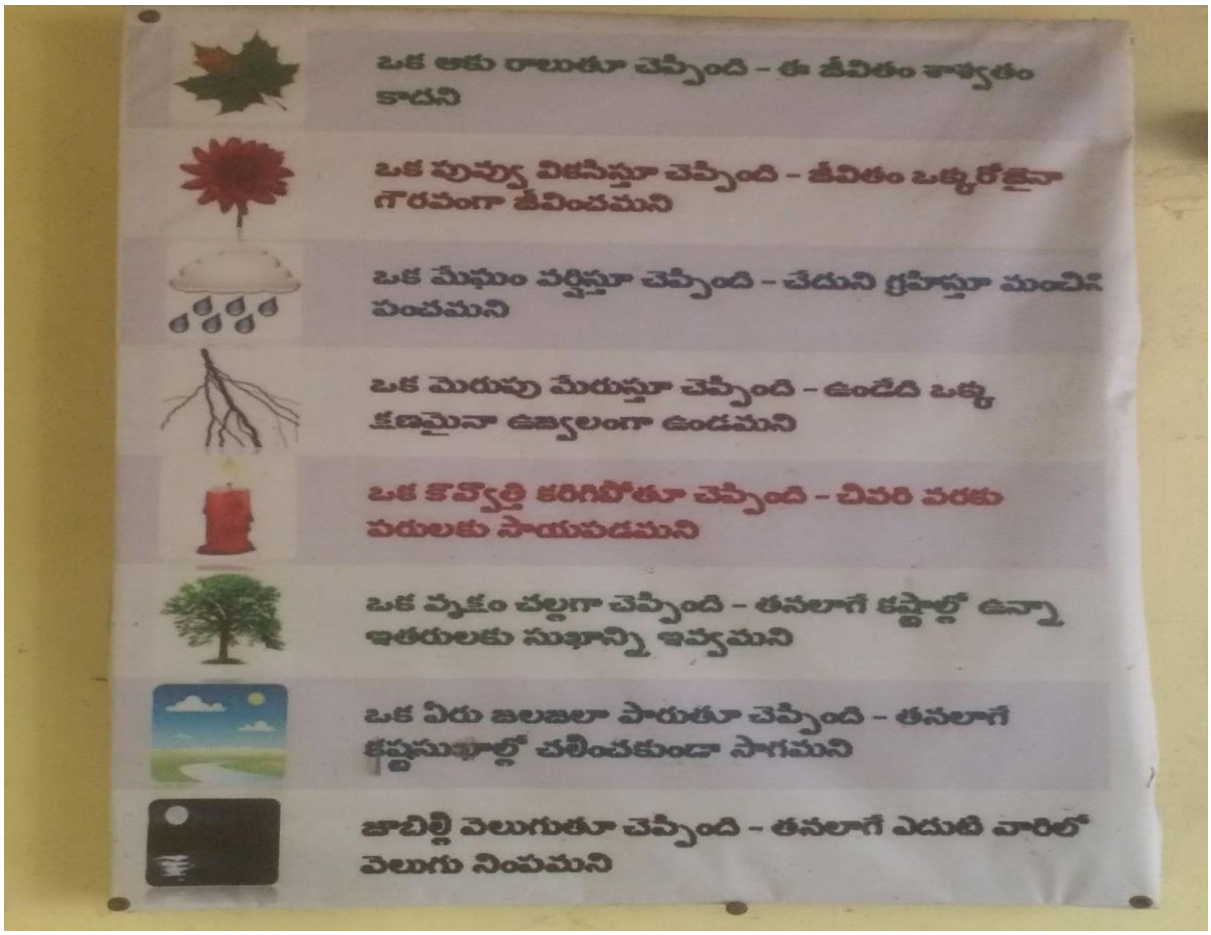
(29) Te: సలహాలు మరియు సూచనలు బాక్స్

salahā-lu mariyu sūcana-lu bāks

advice-PL and Suggestion-PL Box

En: Advice and suggestions box

Figure 5.40: General instruction signboards at SCCL.



30									
3	Te:	ఒక	ఆకు	రాలుతూ	చెప్పింది	ఈ	జీవితం	శాశ్వతం	కాదని
		oka	āku	rālu-tū	cepp-iM-di	ī	jīvitaṁ	śāśvataṁ	kād-ani
		one	leaf	fall-PROG	tell-PST-3.SG.N	this	life	permanent	be-not-COMPL

En : A falling leaf told that this life is not eternal

(31) Te: ఒక పువ్వు వికసిస్తూ చెప్పింది జీవితం ఒక్కరోజైనా గౌరవంగా జీవించమని

oka puvvu Vikasis-tū cepp-iM-di jīvitaṁ Okkarōj-ainā gauravaṅgā jīviñcamani

one flower Bloom-PROG tell-PST-3.SG.N life

En: A blooming flower says to live life with dignity

Figure 5.41: General instruction signboards at SCCL.

5.4 Use of language in Sign Boards at Workplaces

When people work together at a place, communication among them has great significance as it makes the work easier for the workforce. Often the workforce does oral communication with each other to exchange information for training to work or other forms of instructions. Apart from the communication at the work site, written forms of communication also play a significant role in the production as well as the safety of the workforce. Written forms of communication at workplaces are provided by the firms. Firms take greater care to improve production as well as the safety of the workforce. To improve the firms provide work instructions in various ways for the workforce to follow. And to make sure of the safety of the workforce, firms provide safety instructions of the work while they work at workplaces. Firms take earnest care of written instructions, henceforth they will be called sign boards, because when the sign boards go wrong it might result in a huge loss the production as well as the life of the workforce. Therefore the choice of language use in the same boards is very important. In monolingual countries sign boards are often written in their mother tongue, but in a multilingual country like India, the choice of language in sign boards is quite a challenging task when the workforce comes from different parts of India to work at the workplace. However, the majority of the workforce at the native people where the workplace is located. Only a considerable number of workforce migrate from neighbouring states and other states of India. The choice of language in signboard varies from one type of instruction to another type of instruction at workplaces. And the types of instructions are also depend on the size of the workforce and the type of the industry. The classification of the entire sign boards are provided in the previous section. In this section, the statistics of the choice of language used across all types of instructions are provided. However, the signboards of various forms of written instructions can be seen in organized sectors. The reason is the workforce comes to one place and work together. This is the very nature of organised sector work. In the unorganized sector, people work from various places and the group work is very less compared to organized sector. The data of the sign boards on the workplaces are gathered from the selected organized sector industries.

5.4.1 Language use in sign boards at SCCL

The selected branch of the SCCL mine is located at rudraram village kothagudem district, Telangana state in India. Since the workplace is located in Telangana, the majority of the

workforce has been employed at that workplace. However, a considerable number of people are from the North part of India. To set sign boards for all the workforce, the industry has been taken prime care, of because working in mines, especially underground mines is quite dangerous if the workforce doesn't follow safety instructions of the work. Hence the industry has set various types of instructions in the workplace. The language used in signboards has to be accurate and should be familiar to the workforce. The choice language for the sign boards is based on the force work at the workplace - if the workforce is monolingual, then the industry uses their native language. The workforce of this industry is native to Telangana Andhra Pradesh thus the Telugu language has been used in various types of sign boards. For non-Telugu people, namely Hindi and another South Indian language workforce Hindi and English have been used to provide the instructions. However, there are some illiterates in the workforce, to convey to them the safety instructions the industry has used some pictorial safety instructions to them.

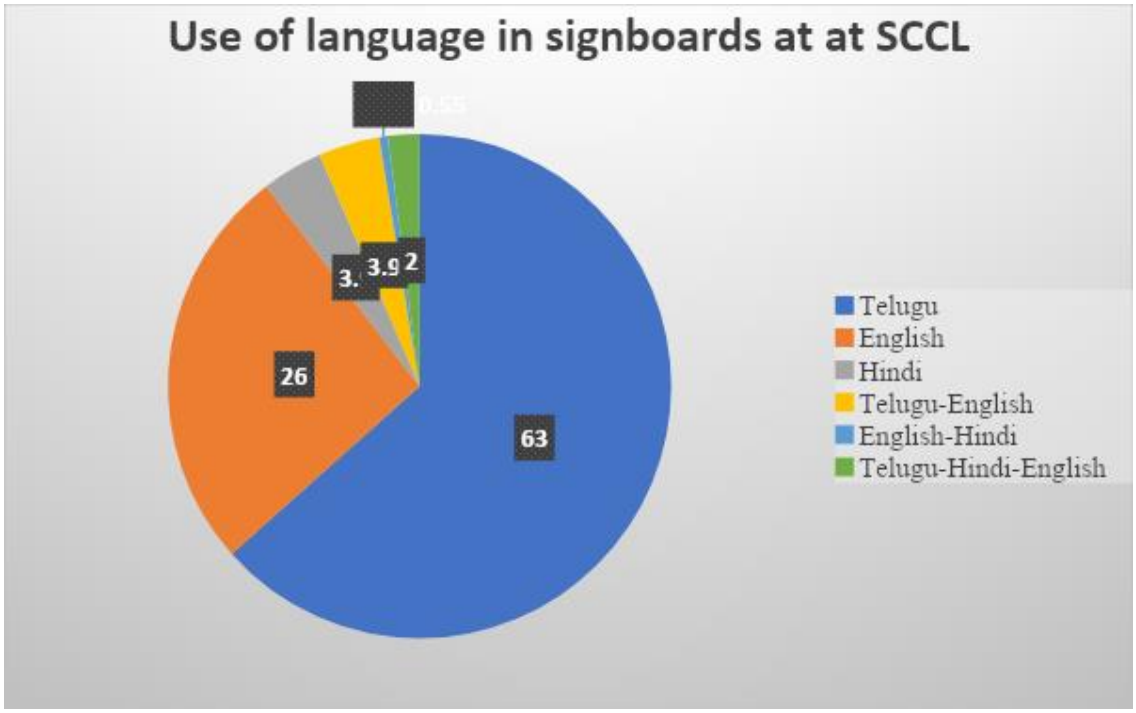
Table 5.1: Use of language in signboards at SCCL

S. No	Types of Signboards	Te	En	Hi	Te-En	En-Hi	Te-Hi-En	Total	%
1	Work Instructions	25	7	0	0	0	2	34	18.99441
2	Safety Instructions	40	12	3	0	0	0	55	30.72626
3	Pictorial Instructions	12	6	1	0	0	0	19	10.61453
4	Directions	0	4		5	0	0	9	5.027933
5	General Instruction	12	0	1	0	1	2	16	8.938547
6	Health Instructions	8	0		2	0	0	10	5.586592
7	Environmental Instructions	6	0	0	0	0	0	6	3.351955
8	Name Boards	0	15		0	0	0	15	8.379888
9	Quotes	10	3	2	0	0	0	15	8.379888

	Total	113	47	7	7	1	4	179	100
	Percentage	63	26	3.9	3.9	0.55	2	100	

The SCCL gave preference to the native language of the workforce, table 5.4.1 shows that 63 % of Telugu has been used across all types of signboards. The signboards of safety and work instructions cover a large part of the signboards with 49 %. The use of English in signboards is confined to 26 percent, they can be found in imported signboards, whereas locally made signboards and painting boards use the Telugu language. Safety instructions play a prominent role in this industry because many people lost their lives due to being unaware of safety instructions. This is why safety and work instruction in the local language help to bring awareness in the workforce. Multilingual and bilingual signboards are used for general instructions only. As a whole, the use of Telugu and its importance in SCCL is quite evident because native speakers of Telugu are more in number and it is the familiar language to them, hence, the industry provides instructions mostly in native languages.

Chart: 5.1



5.4.2 Language use in sign boards at KTPS

Kothagudem thermal power station is one of the leading thermal power stations in India. Though there are about 4000 employees, the majority of the workforce are graduates. For nontechnical work, works the industry non-graduates. As the work at this workplace is quite a technical mini of the sign boards or the et in the English language. To provide some safety instructions are some quotes they have chosen from the Telugu language. Compared to SCCL, the sign boards at KTPS are less in number. Native people are employed more in this workplace. Apart from Telugu and Hindi, a considerable number of Koya speakers are found at this workplace. Khoya speaking workforce force can understand Telugu instructions and they do follow Telugu sign boards at the workplace.

S.No	Signboards	Te	En	Total	Percentage
1	Safety Instructions	2	0	2	11.76471
2	General Instruction	0	4	4	35.29412
3	Name Boards	0	6	6	35.29412
4	Quotes	1	1	2	11.76471
5	Notifications	0	3	3	17.64706
	Total	3	14	17	100
	Percentage	17.6	82.3		100

Table 5.11.3: Use of Language in Signboards at KTPS

Table 5.4.2 shows that the use of English instructions is more than Telugu instruction. The use of Telugu is 17 % and English is 82 percent. The choice of language for the signboards is to do with the literacy rate of the workforce. Since generating thermal power requires a technical graduate workforce and instructions of the work provided in English. Though most of the workforce communicate in their native language, Telugu, the signboards ars use English in most cases. Telugu is used in some specific contexts like safety instructions and quotes, in the rest of the contexts, English has been used.

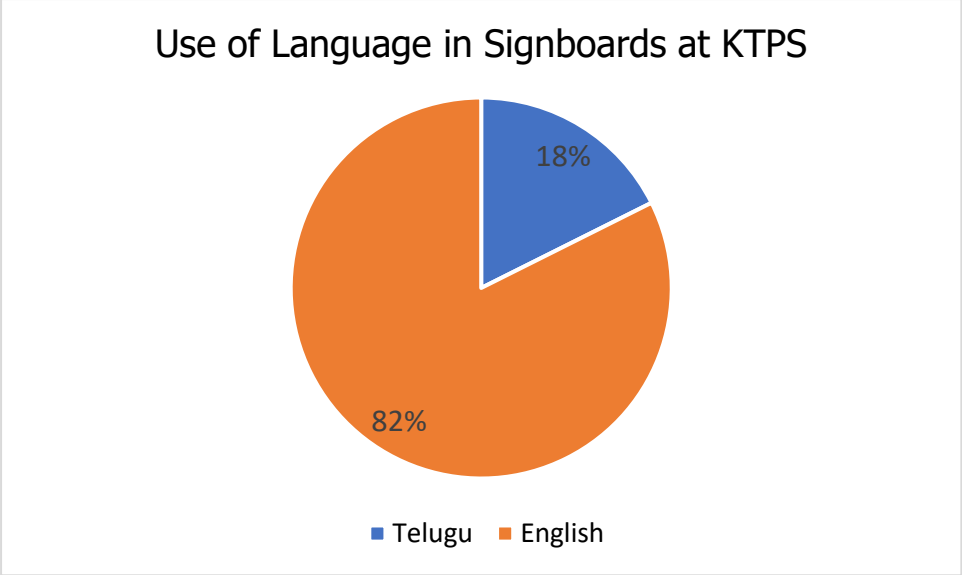


Chart 5.11.3: Use of language in signboards at KTPS

5.4.3 Language use in sign boards at NSL Sugar Factory

The NSL sugar factory is located in one apartment district Mahabubnagar Telangana state. It has a few signboards, some instructions are provided in Telugu, and a map of the workplace and some safety instructions. In this workplace also many of native people are employed hence the instructions provided in Telugu.

S.No	Signboards	Te	En	Total	Percentage
1	safety instructions	2	1	3	17.64706
2	general instruction	2	0	2	11.76471
3	notifications	0	8	8	47.05882
4	work instructions	1	1	2	11.76471
5	directions	0	2	2	11.76471
	Total	5	12	17	
	Percentage	29.41176	70.58824		100

Table 5.11.4: Use of Language in Signboards at NSL Sugar Factory

NSL Sugar factory is the one that uses very less signboards compared to SCCL and KTPS. The workforce communicates in Telugu except a few non-native workers. For

official notifications the industry uses English. Out of 12 signboards, 8 are notifications that cover the large part of signboards at this workplace. However, the safety and general instructions are provided in the Telugu language.

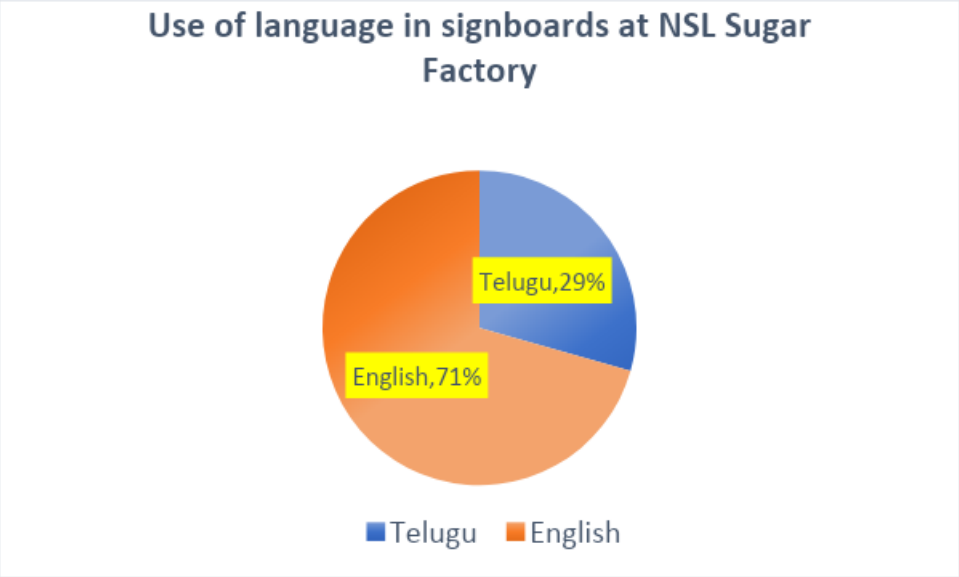


Chart: 5.11.4 Use of language in signboards at NSL Sugar Factory

5.4.4 Overall Language Use in Signboards at Organised Sector Workplaces

The data set comprises the use of language data in signboards at all three organized sector workplaces. The language used in signboards varies from one industry to another. When the size of the workforce is huge, and nontechnical work is involved then for the safety of the workforce and quality of production industries install more signboards at workplaces.

Table 5.11.5: Language distribution in Signboards at Organised Sector Workplaces

S. No	Types of Signboards	Te	En	Hi	Te-En	En-Hi	Te-Hi-En	Total	%
1	Work Instructions	26	8	0	0	0	2	36	18
2	Safety Instructions	44	13	3	0	0	0	60	30
3	Pictorial Instructions	12	6	1	0	0	0	19	9.5

4	Directions	0	6		5	0	0	11	5.5
5	General Instruction	14	4	1	0	1	2	22	11
6	Health Instructions	8	0	0	2	0	0	10	5
7	Environmental Instructions	6	0	0	0	0	0	6	3
8	Name Boards	0	21	0	0	0	0	21	10.6
9	Quotes	11		2	0	0	0	13	6.5
	Total	121	58	7	7	1	4	198	
	Percentage	61	29	3.5	3.5	0.5	2		100

As it is shown in table 5.4.4, industries prefer the native language of the workforce in signboards at workplaces. The use of Telugu in these workplaces is significantly great with 61 percent besides English with 29 percent and Hindi with 3.5 percent. Apart from monolingual signboards, bilingual and multilingual signboards are also found in these selected industries. Bilingual signboards are used chiefly in direction signboards, the interesting fact about bilingual direction signboards is that they use native language along with English. English is used at the top and translation of the same is provided in Telugu with big front. It shows that those direction signboards gives much importance to Telugu. The bilingual signboards with English and combination are used for general instruction signboards. In combination signboards English used first then Hindi equivalents are given parallelly. Telugu and English bilingual signboards comprises of 3.5 percent of total use and English and Hindi signboards are found with 0.5 percent. The multilingual signboards with the combination of Telugu, English and Hindi are used mostly for general instructions for contacts information for the workforce. The multilingual signboards are less compared to monolingual and bilingual signboards.

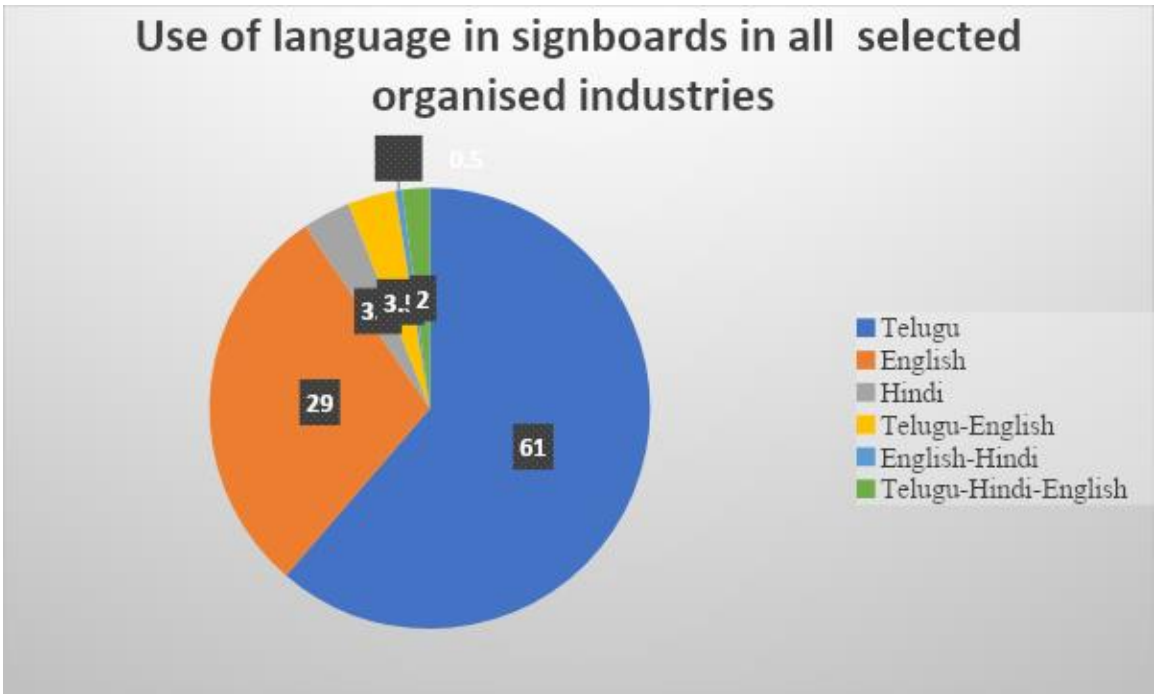


Chart: 5.11.5 Use of language in signboards in all selected organized industries

The above chart 5.4.4 presents the use of language in signboards in all selected organized industries. The Telugu language which is the native language of the workforce used by 61 % across all types of signboards at organized sector workplaces. which shows industries give more importance to the Telugu language, the native language of most of the workforce.

CHAPTER 6

DATA ANALYSIS AND DISCUSSION

6.1 Introduction

The focus of the current research is analysing the data collected on language use in workplaces where economic activity occurs. Economic activity in India can be broadly divided into two sectors. The first is the organized sector, and the second is the unorganized sector. More than 90% of economic activity happens in the unorganized sector. Although the income generated by this unorganized sector is less than that of the organized sector, most workforce depends on these unorganized economic activities for their livelihood. The workforces employed in unorganized sectors are mostly uneducated. However, most educated graduates select to work in the organized sector. A large part of the income of the country comes from the organization, which are organized sectors where working hours and salaries are regular and work-specific.

Though unorganized sectors are not regular with their working hours and salaries, the rural small-town workforces depend on agriculture or small cottage industries for their livelihood. They use their mother tongue to communicate with each other in economic activity; hence the knowledge acquisition for executing the work is provided in their mother tongue. Educated graduates do acquire work-related skills using their mother tongue or other languages. Empirical evidence is collected in this study to identify the language used both in organized and unorganized sectors by different levels of workforces at their workplace. This study reveals the relationship between language and economy by examining the role of Indian languages and their usage in the production of economic activities.

In this chapter, section 6.1 introduces the requirement of data analysis in the selected workplaces. Section 6.2 deals with the data collection. Section 6.3 shows the analyses of the organized sector metadata, i.e., gender, age, occupation, education levels, and mother tongue of the workforce, which are collected from five selected workplaces. Section 6.4 deals with the metadata of the unorganized sector. The analyses of the use of language in organized sector workplaces are presented in section 6.5.An understanding of language in organised sector discussed in section 6.6 Section 6.7 deals with the use of language in the unorganized sector. Language understanding in unorganised sector is

presented in 6.8. The use of language in at workplaces, both in organised and unorganised sectors analysed in 6.9. Section 6.10 presents the analysis of language understanding of both organised and unorganised sectors. Finally, the details of the hypotheses testing are provided in section 6.11.

6.2 Data Collection

A questionnaire is devised to collect data relating to language usage by workforces at their workplaces. This questionnaire is initially applied in a pilot study before collecting data from five selected workplaces. This questionnaire is then modified after making necessary changes by observing the results of the pilot study (for more details, see page 35 in chapter 3). The questionnaire is initially prepared in English however translated into Telugu and Hindi. As most of the data collection is aimed at Telangana, India. the questionnaire is translated into Telugu, assuming that many workforces are from Telangana. Similarly, it is also translated into Hindi, assuming the labourers who migrate to Telangana may understand Hindi in case they fail to understand English and Telugu.

The questionnaire consists of 20 questions. A brief introduction of the survey is provided in the preface. This questionnaire is divided into three sections. The first section deals with collecting the metadata. In this metadata, the general information of the workforce, including the name of the industry where the workforce is working, the name of the worker, gender, age, education, occupation, native place, mother tongue, and other known languages, are collected.

The second section of the questionnaire is designed to observe the details of the language chosen by the workforce when they converse orally with each other in the workplace. Here, questions are formulated to identify what language is spoken by each level of employee in the workplace.

The third section aims to collect the choice of written language used in workplaces. This section focuses on the language used in the documents demanded by the workforce to authorities, general notices issued by the management to the workforce, and the language used in different types of letters.

Stratified random sampling is employed to collect the data from the workforce. A 10 percent sample is collected from each workforce class from each selected workplace. The entire workforce is broadly classified into three classes or ranks. The first rank of the workforce are Super-ordinates who are superior in their position in the respective workplaces within the class of employees. They are very less in number and have more

power over other class employees. They are the decision-makers of the entire production of the workplace. The general managers, managers, and the industry owner come under this class of workforce. The second category or class, Sub-ordinates, provide the plan for the work to be executed at the workplace. Communicate with Super-ordinates to express the work plan, and they also communicate with Sub-subordinates lower in rank to execute the task in the workplace. Engineers, officers, and supervisors come under this class of workforce. The third class of the workforce is Sub-subordinates , who are the lowest of the entire class of the workforce. This class of work course consists of the skilled and unskilled labour force who are more in number and participate more in production. They communicate with Sub-ordinates to the Super-ordinates. They do not directly communicate with Super-ordinates. Because Sub-ordinates give the plan of the work. The Sub-subordinates communicate with super hits in their local language, whereas Super-ordinates, when they communicate with their higher authorities, Super-ordinates, most of the cases this switch to English. On the contrary, the Sub-ordinates switch to Indian languages to communicate with Sub-ordinates to assign the task or follow up on the task.

S.No	Sector	Workplaces	Data
1	Organized	Singareni Collieries (SCCL)	399
		Kothagudem Thermal Power Station (KTPS)	308
		NSL Krishnaveni Sugars	53
2	Unorganised	Handloom Industry	100
		Vasthad Beedi Factory	365
Total			1225

Table 6.1 Data Distribution Sector-wise

Empirical evidence for this study is collected from 1225 workforce from five workplaces selected from organized and unorganized sectors. Out of these five workplaces, three workplaces belong to the organized sector, and two of them belong to the unorganized sector, as mentioned in table 6.1. The main reason for selecting these two types of workplaces is to identify how language is used in these two sectors and what are language

choices in their economic activities. The five selected workplaces can be roughly divided as given in figure 6.1.

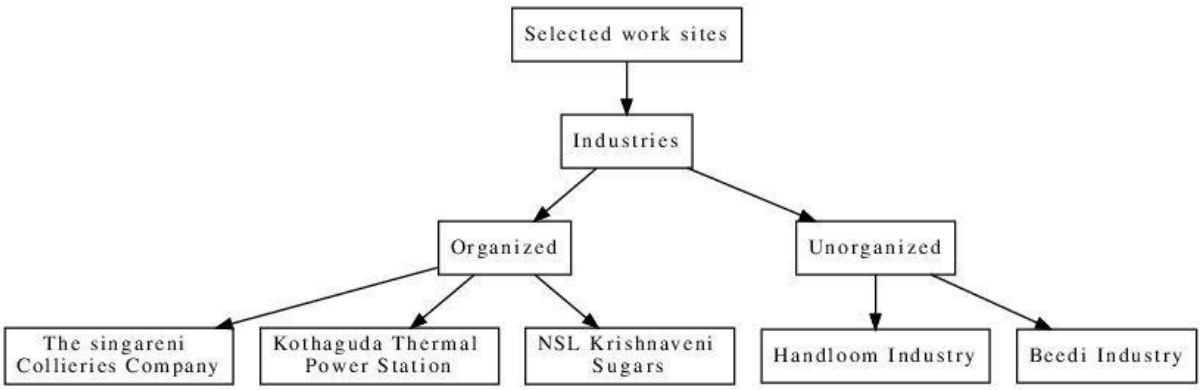


Figure 6.1: workplaces selected for this study.

Details of these workplaces and their role in the economy are given in detail on page 42 of Chapter 4.

6.3 Metadata Analyses of Organized Sector

The details of gender, age, occupation, education levels, and mother tongue of the workforce and analyses of workplaces from the organized sector presented here. Sections 6.3.1 to 6.3.3.7 deal with the metadata of the organized sectors.

6.3.1 Singareni Collieries Company Limited (SCCL)

Singareni Collieries has a large workforce. The complete information about the workforce can be seen on page 41 in chapter 4. From the total workforce, 399 workforces are selected based on stratified sampling.

6.3.1.1 Gender

Since SCCL is the coal mining industry, it contributes more physical labour. Going down into the mine and collecting coal requires much physical energy. Even in the open cast work system, the work is very tough; hence mostly men opt for this work. The women who work at this workplace work as administrative block staff, hence the number is less as seen in table 6.2

S.No	Gender	Number	Percentage
1	Female	10	2.5
2	Male	389	97.5
	Total	399	100.0

Table 6.2 Gender in SCCL

6.3.1.2 Age

The minimum age to work at SCCL starts from 20 years and a small number of the workforce above 60 years are also seen. As we have selected workforces based on the class of work, table 6.3 shows that our subjects range from 20 years till 60+ years, though a more significant number of workforce fall under the age group of 50-59.

S.No	Age Group	Number	Percentage
1	20-29	97	24.3
2	30-39	86	21.6
3	40-49	72	18.0
4	50-59	140	35.1
5	60+	4	1.0
	Total	399	100.0

Table 6.3: Age of the Workforce in SCCL

6.3.1.3 Education

Workforce at SCCL has different levels of education as shown in table 6.4.

The largest workforce in the collected data falls under the education levels of primary education, i.e., 53.9%; the least are illiterates (6.0%) and postgraduates (4.3%). It shows that post-graduates mostly occupy superordinate positions and subordinate positions.

S.No	Education Levels	Number	Percentage
1	Illiterates	24	6.0
2	Primary Education (I-X)	215	53.9
3	Secondary Education (XI-XII)	50	12.5
4	Graduates	93	23.3
5	Post Graduates	17	4.3
	Total	399	100.0

Table 6.4 Education Levels of the Workforce in SCCL

6.3.1.4 Class of Work

Based on their work, the workforce in Singareni Collieries can be broadly divided into three groups. The first group is Super-ordinates who are few and have control of the entire workforce. The Super-ordinates include the owner, general manager, chief executive officer, etc. The second group is called Sub-ordinates, and they mostly work as task makers

and task guides in workplaces holding positions such as engineers, managers, supervisors, etc. The production class is called Sub-subordinates who carry out the work using physical labour from the field level. Super-ordinates and Sub-ordinates are fewer in number than Sub-subordinates in the workplace.

S.No	Class of Workforce		Number	Percentage
1	Super-ordinates		16	4.0
2	Sub-ordinates		31	7.8
3	Sub-subordinates		352	88.2
	Total		399	100.0

Table 6.5: Class of Workforce at SCCL.

6.3.1.6. Native place

Most of the workforce at SCCL are locals, and the workplace is located near Rudraram in the Kothagudem district of Telangana state (TG). The other places are Andhra Pradesh (AP), Odisha (OD), Maharashtra (MH), Bihar (BR), and Uttar Pradesh (UP). The samples of native places are seen in table 6.6.

Native Place			
S.No	Place	Number	Percentage
1	TG	384	96.2
2	AP	10	2.5
3	BR	2	.5
4	OD	1	.3
5	MH	1	.3
6	UP	1	.3
	Total	399	100.0

Table 6.6: Native Places of the Workforce at SCCL

6.3.1.7 Mother Tongue

The mother tongue information of the workforce is collected to understand their home language. As most of them hail from TG AND AP as seen in table 6.7. Telugu speakers are seen mostly with a percentage of 91.0%. The next prominent mother tongues are Hindi (3.8%), Urdu (2.8%), and Lambadi (2.0%). A noticeable, i.e. (0.3%) of Marathi and Odia speakers are also found with the range of 1.

Mother Tongue of The Workforce			
S.No	Mother Tongue	Number	Percentage
1	Telugu	363	91.0
2	Hindi	15	3.8
3	Urdu	11	2.8
4	Lambadi	8	2.0
5	Marathi	1	.3
6	Odia	1	.3
	Total	399	100.0

Table 6.7:Mother Tongues of the Workforce at SCCL

6.3.2 Kothagudem Thermal Power Station (KTPS)

Kothagudem Thermal Power Station is located at Kothagudem Bhadradri. It plays a vital role in supplying electricity to the entire Telangana State. The total number of the workforce working in it is more than 4000 workforce. The data from the workforce of 308 among those working at different levels in different professions through a stratified random sample are collected. The metadata collected from this workspace for different social variables are discussed here.

6.3.2.1 Gender

The workforce in this workplace is predominantly male. As seen in SCCL most of the workforce in KTPS are men because most of the work requires physical labour. However, women mostly work as administrative staff in KTPS.

S.No	Gender	Number	Percentage
1	Female	36	11.7
2	Male	272	88.3
	Total	308	100.0

Table: 6.8 Gender at KTPS

6.3.2.2 Age

Table 6.9 shows that the workforce between 20 to 60 years of age are working in KTPS. Most of the workforce fall under the age group of 30-39 as seen in table 6.9.

S.No	Age group	Number	Percentage
1	20-29	79	25.6
2	30-39	117	38.0
3	40-49	94	30.5
4	50-59	18	5.8
	Total	308	100.0

Table 6.9: Age of the Workforce at KTPS

6.3.2.3 Education Levels

Understanding the levels of education play a significant role in KTPS as their education levels determine their class of work.. Table 6.10 illustrates that the graduate workforce is less in this workplace compared to non-graduates as a considerable number of jobs are related to hard labour; hence they are hired even with little education.

S.No	Education Levels	Number	Percentage
1	Illiterates	26	8.4
2	Primary Education (I-X)	52	16.9
3	Secondary Education (XI-XII)	117	38.0
4	Graduates	81	26.3
5	Post Graduates	32	10.4
	Total	308	100.0

Table 6.10: Education Levels of the Workforce at KTPS

6.3.2.4 Class of Work

The table 6.11 provides that information about the class of workforce at KTPS. The workforce class at the KTPS can be divided into different departments. Broadly, they are divided into Super-ordinates, Sub-ordinates, and Sub-subordinates . The percentage of Super-ordinates (6.2%) is much lower than the Sub-ordinates (14.9%) and Sub-subordinates (78.9%).

S.No	Class of Workforce	Number	Percentage
1	Super-ordinates	19	6.2
2	Sub-ordinates	46	14.9
3	Sub-subordinates	243	78.9
	Total	308	100.0

Table 6.11: The Class of Workforce at KTPS

6.3.2.5 Native Place

Table 6.3.2.5 describes the native place of the workforce from different states of India to work at Kothagudem Thermal Power Station. Especially those who come from Telangana (TG) and Andhra Pradesh(AP) are more in number. Nevertheless, the majority are the local workforce of Telangana with the highest number (94.2%) and the lowest (0.3%) from Tamil Nadu (TN), Karnataka (KA), Odisha (OD), and Bihar (BR).

S.No	Native Place	Number	Percentage
1	TG	290	94.2
2	AP	14	4.5
3	BR	1	.3
4	KA	1	.3
5	OD	1	.3
6	TN	1	.3
	Total	308	100.0

Table 6.12 Native Place of the Workforce at KTPS

6.3.2.6 Mother Tongue

Table 6.13 displays the data set of the mother tongue of the workforce at KTPS. This workplace can be declared as a multilingual workplace as there are nine mother tongues listed. In this workplace, we see that besides Telugu, which is the mother tongue of the majority, indigenous languages, such as Koya and Lambadi, are also the mother tongue of some workforce. Other language speakers are Hindi, Urdu, Tamil, Kannada, Odia, and Marathi.

S.No	Mother Tongue	Number	Percentage
1	Telugu	266	86.4
2	Lambadi	18	5.8
3	Urdu	9	2.9

4	Hindi	5	1.6
5	Marathi	4	1.3
6	Koya	2	.6
7	Odia	2	.6
8	Kannada	1	.3
9	Tamil	1	.3
	Total	308	100.0

Table 6.13: Mother Tongue of the Workforce at KTPS.

6.3.3 NSL Krishnaveni Sugar Factory

NSL Krishnaveni sugar factory is located in the Wanaparthy district, near Ramakrishnapur village. The data is collected from 53 workforce for this study.

6.3.3.1 Gender

The data set shows100% of the workforce in this industry are men from the data collected, as the process of turning sugarcane into sugar using machines contributes a large part of manual labour. Therefore, only men are in the selected sample collection.

S.No	Gender	Number	Percentage
1	Male	53	100.0

Table 6.14 Gender at NSL Krishnaveni Sugar Factory

6.3.3.2 Age

Most of the workforce are under the age group of 20-29 years of age in this workplace. The number of the workforce of the age group 40-49 is significantly less. The data set shows that a more young workforce is working in this workplace as seen in table 6.15.

S.No	Age Group	Number	Percentage
1	20-29	21	39.6
2	30-39	19	35.8
3	40-49	13	24.5
	Total	53	100.0

Table 6.15 Age at NSL Krishnaveni Sugar Factory

6.3.3.4 Education

The number of workforces who are educated in this sugar industry is significantly less, and the graduate workforce is mostly the executives. Table 6.16 shows that most of the non-graduates workforce is contributed in the manufacturing process of NSL Krishnaveni Sugar Factory.

S.No	Education Levels	Number	Percentage
1	Illiterates	6	11.3
2	Primary Education (I-X)	12	22.6
3	Secondary Education (XI-XII)	14	26.4
4	Graduates	14	26.4
5	Post Graduates	7	13.2
	Total	53	100.0

Table 6.16 Education Levels at NSL Krishnaveni Sugar Factory

6.3.3.5 Class of Work

Although the tasks of those working in this workplace are of different types, they are broadly divided into three types as seen in table 6.17 . Very few of those are Super-ordinates (2) and Sub-ordinates (13). The number of Sub-subordinates (38) whose role in work is remarkable.

S.No	Class of workforce	Number	Percentage
1	Super-ordinates	2	3.8
2	Sub-ordinates	13	24.5
3	Sub-subordinates	38	71.7
	Total	53	100.0

Table 6.17 Class of Work at NSL Krishnaveni Sugar Factory

6.3.3.6 Native place

Most of the labourers working for NSL Sugar Factory are locals i.e., workforce of Telangana state (TG). There are also few migrant workforces from other states such as Karnataka (KN), Andhra Pradesh (AP), Bihar (BR), Odia (OD), and Uttar Pradesh (UP).

S.No	Native Place	Number	Percentage
1	TG	42	79.2
2	KA	4	7.5
3	AP	3	5.7

4	BR	2	3.8
5	OD	1	1.9
6	UP	1	1.9
	Total	53	100.0

Table 6.18 Native Place at NSL Krishnaveni Sugar Factory

6.3.3.7 Mother Tongue

The data presents the mother tongues of the workforce at NSL Krishnaveni Sugar factory. There are six mother tongues listed with Telugu as the highest, i.e., 88.7% in the workplaces, which shows most of the workforce are locals of the Telangana State and other languages include Hindi, Kannada, Odia, Urdu, and Bhojpuri.

S.No	Mother Tongue	Number	Percentage
1	Telugu	47	88.7
2	Hindi	2	3.8
3	Kannada	1	1.9
4	Odia	1	1.9
5	Urdu	1	1.9
6	Bhojpuri	1	1.9
	Total	53	100.0

Table 6.19. Mother Tongue(s) at NSL Krishnaveni Sugar Factory

6.4 Metadata Analysis of Unorganized Sectors

This section deals with metadata analysis which is gathered from unorganized sectors. Two workplaces from the unorganized sector, namely, the Handloom industry and Vasthad Beedi Factory located in the Mahabubnagar and Gadwal districts of Telangana respectively are presented with their analysis in this section.

6.4.1 Handloom Industry

Around 500 families depend on the handloom industry in Amarchinta, Gadwal, district of Telangana. These industries are cottage industries. The work includes collecting and weaving threads on handloom machines to make sarees or other garments.

6.4.1.1 Gender

As the handloom industry is a cottage industry, more women tend to select this work. However, few men use the loom to weave sarees or other garments. It can be seen in table 6.20 that the number of women is slightly higher than the number of men.

S.No	Gender	Number	Percentage
1	Female	80	80.0
2	Male	20	20.0
	Total	100	100.0

Table 6.20 Gender in the Handloom Industry

6.4.1. 2 Age

The age groups of 30-39 and 40-49 are contributed more in handloom work than others in the workforce group as seen in table 6.21. Only 6 young workforces who all under the age group (20-29) are found in the workforce, which shows that young people are not into the handloom industry.

S.No	Age group	Number	Percentage
1	20-29	6	6.0
2	30-39	25	25.0
3	40-49	30	30.0
4	50-59	16	16.0
4	60-69	16	16.0
5	70+	7	7.0
	Total	100	100.0

Table 6.21 Age at Handloom Industry

6.4.1.3 Education

From the table 6.22, we find that the five educational levels of the workforce contributed in the handloom industry. It has been observed that not only the school-educated workforce who are doing this job, even the people who are graduates and postgraduates doing this work for their livelihood.

S.No	Education Levels	Number	Percentage
1	Illiterates	75	75.0

2	Primary Education (I-X)	6	6.0
3	Secondary Education (XI-XII)	11	11.0
4	Graduates	5	5.0
5	Post Graduates	3	3.0
	Total	100	100.0

Table 6.22 Education Levels at Handloom Industry

6.4.1.4 Class of Work

Although the tasks in handloom work are of different types, the focus of the workforce is mostly on the weavers, hence it is not possible to divide the work into different classes. From the wholistic picture of handloom work, that is from weaving to marketing, all these weavers fall under Sub-subordinates. Mostly the family members work together in executing the task.

S.No	Class of workforce	Number	Percentage
1	Sub-subordinates	100	100.0

Table 6.23 Class of the Work at Handloom Industry

6.4.1.5 Native place

As this industry is a home-based industry, most of the locals are working from home, so there is no workforce coming from different areas. All the labourers belong to the same village, Amarachinta village, the Wanaparthi district of Telangana.

S.No	Native Place	Number	Percentage
1	TG	100	100.0

Table 6.24 Native Place of the Workforce at Handloom Industry

6.4.1.6 Mother Tongue

The weavers working at home belong to the same village and all of their mother tongue is Telugu as shown in table 6.25

S.No	Mother Tongue	Number	Percentage

1	Telugu	100	100.0

Table 6.25 Mother Tongue of the Workforce at Handloom Industry

6.4.2 Vastad Beedi Factory

The data was collected from the Vastad Beedi Factory (VBF) in Kurumurthy village of Mahbubnagar district in Telangana state. For more details see page 51 in chapter 4.

6.4.2.1 Gender

Since the beedi industry is a cottage industry, many of women tend to work at home in rural areas. There is a small branch of industry related to the industry located in the rural village, of Kurumurthy. From there, the raw materials are brought, and the women make beedis at home and bundle them and return them to the industry. As the metadata shows, few men also contribute in this work.

S.No	Gender	Number	Percentage
1	Female	280	76.7
2	Male	85	23.3
	Total	365	100.0

Table 6.26 Gender at VBF

6.4.2.2 Age

The data shows that those who work full-time in the beedi industry range from 20 years to 70+ years. Based on the data shown in table 6.27, it has been observed that the age group of 20-29 shows little interest in doing this work.

S.No	Age	Number	Percentage
1	20-29	4	1.1
2	30-39	130	35.6
3	40-49	113	31.0
4	50-59	88	24.1
5	60-69	26	7.1
7	70+	4	1.1
	Total	365	100.0

Table 6.27 Age at VBF

6.4.2.3 Education

The data shows that there are near, 57 percent of the workforce in the beedi industry are uneducated with only primary education (43%). The study found no link between beedi-making skills and education. The table 6.4.2.3 have no account of graduates working in beedi factory.

S.No	Education Qualification	Number	Percentage
1	Illiterates	206	56.4
2	Primary Education (I-X)	155	42.5
3	Secondary Education (XI-XII)	4	1.1
	Total	365	100.0

Table 6.28 Education Levels at VBF

6.4.2.4 Class of Work

Although beedi industries are contributed works such as leaf-cutting, beedi rolling, beedi tying, etc. all workers do all kinds of work. Therefore, there are no work differences in this work. The beedi work is done at home, and it is shared equally by all. While men do leaf cutting, most of the women roll beedis.

S.No	Class of Work	Number	Percentage
1	Middle-Level Employees	1	0.3
2	Low-Level Employees	364	99.7
	Total	365	100.0

Table 6.29 Class of Work at VBF

6.4.2.5 Native place

All those working in the beedi industry are native to one village Kurumurthy village of Mahabubnagar district. Hence, table 6.30 shows all workforce from Telangana.

S.No	Native Place	Number	Percentage
1	TG	365	100.0

Table 6.30 Native Place of the Workforce at VBF

6.4.2.6 Mother Tongue

Telugu is the mother tongue of most of the locals working in the beedi industry. Although all are locals, the mother tongue of the workforce has its link with religion. Since some of the workers are Muslims, Some have identified themselves with the mother tongue of Urdu as seen in table 6.31.

S.No	Mother Tongue	Number	Percentage
1	Telugu	314	86.0
2	Urdu	51	14.0
	Total	365	100.0

Table 6. 31 Mother Tongue(s) of the Workforce at Vathad Beedi Factory

6.5 Choice of Language the Organized Sector

The second part of the questionnaire deals with collecting data on choice of language use at workplaces with different work classes. Communication between the workforce plays a vital role in work-related activities. This information is used from the upper management to the lower level workforce using language(s). The choice of language has significance in any workplace as it relatable to the understanding of work-related activities. An analysis of language use in the organized sectors is presented from section 6.5.1, and analyses of language use in unorganized sectors are discussed from section 6.6.1.

This section deals with the use of language/s at workplaces that come under the organized sector. The work is divided into several departments and the workforce also varies from one department to another, hence it has a link with the choice of language of the workforce to perform certain economic activities. This section provides an analysis of the language choices of workforces and how social variables such as gender, age, class of workforce, education levels, native place, and mother tongue of the workforce are correlated.

6.5.1 Gender and Language Use

The three organized sectors of workplaces' gender distribution and their correlation is provided in table 6.32.

Gender and Use of Language in organized Sector

S.No	Gender	Use of Language		Total
		English	Indian Languages	
1	Female	14	32	46
		30.4%	69.6%	100.0%
2	Male	64	650	714
		9.0%	91.0%	100.0%
	Total	78	682	760
		10.3%	89.7%	100.0%
[6]Pearson Chi-Square Significance: .001		[7]Degrees of Freedom: 1		[8]Value: 21.632

Table 6.32: Gender and use of Language in organized Sector

[6] Pearson chi-square significance value is a calculated value by SPSS. If the value is greater than the chi-square critical value i.e, P- value 0.05 then there is no significance between categorical variables, if the significance is less than 0.05 then there is a significant association between categorical variables.

[7] The number of degrees of freedom for chi-sqaure is (number of rows - 1) times (number of columns - 1)in this case, that's 1 times 1, or 1.

[8] The result of chi-square formula **χ2 = ∑(Oi – Ei)2/Ei**, where Oi = observed value (actual value) and Ei = expected value.

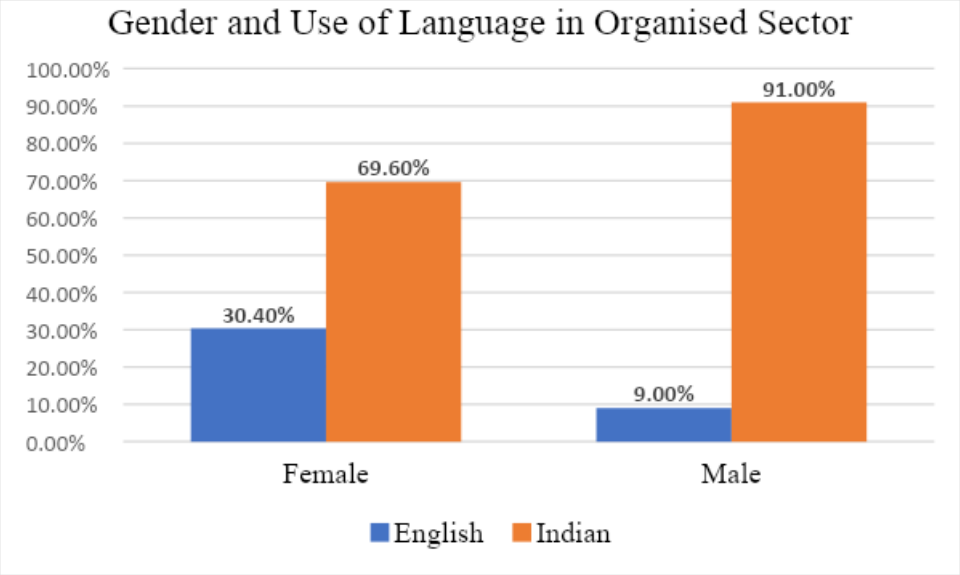


Chart 6.2: Gender and Use of Language in organized Sector

Table 6.32 and chart 6.2 present a data set of language distribution between gender, i.e, male and female in the organized sector. In the organized sector workplaces, two types of genders are found though in the questionnaire three options such as male, female, and others are given gender is presented in rows, and the use of languages is present in columns

Observations

- The significant percentage of workforce use of Indian languages in the organized sector.
- The data shows male workforce tend to use Indian languages more than female.
- 91 % of the male workforce uses Indian languages while only 9% of males use English.
- Females, 69.9% use Indian languages, and 30.4% use English which means two third of the females use Indian languages.
- The Pearson Chi-square significance is 0.001, which is less than the p-value of 0.05, hence, there is a significant association between gender and the use of language in an organized sector workplace.

6.5.2 Age and Use of Language

This section aims to find the link between age and the use of language in organized sector workplaces with a chi-square test. Here, we trying to find whether the choice of language is dependent on age or not.

Age and Use of Language in organized Sector				
S.No	Age	Use of Language		Total
		English	Indian Languages	
1	20-29	19	178	197
		9.6%	90.4%	100.0%
2	30-39	23	199	222
		10.4%	89.6%	100.0%
3	40-49	22	157	179
		12.3%	87.7%	100.0%
4	50-59	14	144	158
		8.9%	91.1%	100.0%
5	60+	0	4	4
		0.0%	100.0%	100.0%
	Total	78	682	760
		10.3%	89.7%	100.0%
Pearson Chi-Square Significance: .795		Degrees of Freedom: 4		Value : 1.678

Table 6.33: Age and use of language in organized sector

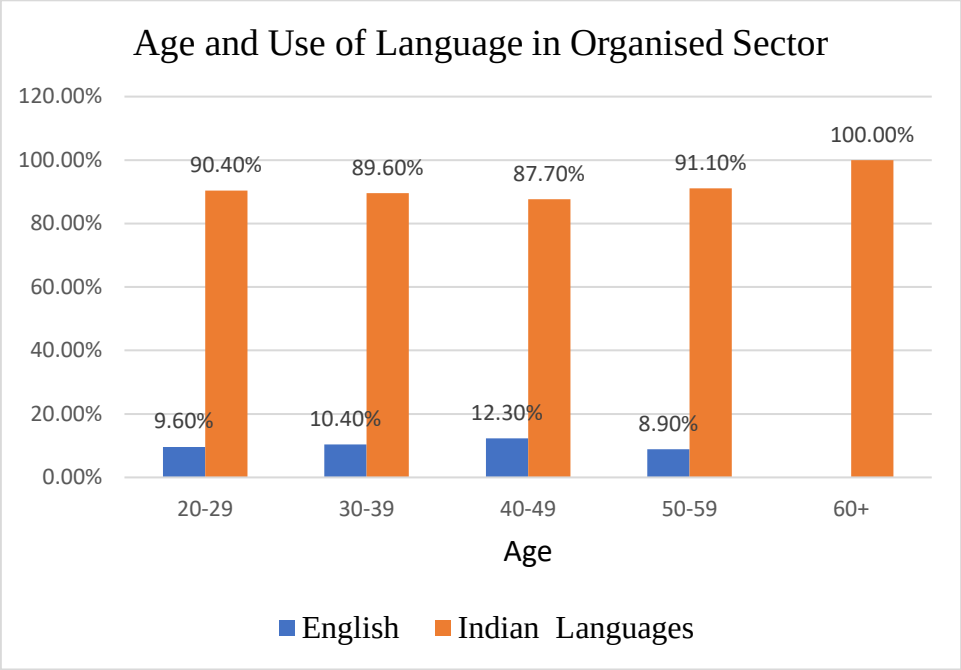


Chart 6.3: Age and Use of Language in organized Sector

Table 6.33 brings forth the details of age and use of language in the organized sector. The age of the workforce in the organized sector was categorized into 5 groups. Starting from the age of 20 to 60 + the workforce was presented in the rows in the table.

Observations

- The data demonstrates that 89.7% of the entire workforce uses Indian languages whereas 10.3% of the workforce uses English as the medium of communication in the workplace.
- The sample data set implies that the organized sector has a considerable workforce uses Indian languages excessively, despite of age group.

- The use of English is recorded at 12.3%, which is the highest percentage of English use in the age group of 40 to 49, and next to 10.4% of English use is found in the 30 to 39 age group.
- The Pearson chi-square significance shows that the significant association is 0.7955, which means the probability value is more than 0.05, which reports that there is no significant association between age and the use of language in the organized sector.

6.5.3 Native Place and Use of Language in Organized Sector

Here, the data is presented to show whether there is an association between the native place of the workforce and the use of language at organized workplaces. The analysis of the gender and use of language with chi-square results are provided in this section.

Native Place and Use of Language in organized Sector				
S.No	Native Place	Use of Language		Total
		English	Indian Languages	
1	TG	70	646	716
		9.8%	90.2%	100.0%
2	AP	5	22	27
		18.5%	81.5%	100.0%
3	KA	0	5	5
		0.0%	100.0%	100.0%
4	TN	0	1	1
		0.0%	100.0%	100.0%
5	OD	2	1	3

		66.7%	33.3%	100.0%
6	MH	0	1	1
		0.0%	100.0%	100.0%
7	BR	1	4	5
		20.0%	80.0%	100.0%
8	UP	0	2	2
		0.0%	100.0%	100.0%
	Total	78	682	760
		10.3%	89.7%	100.0%
Pearson Chi-Square Significance: .05		Degree of Freedom: 7		Value: 14.089

Table 6.34: Native Place and Use of Language in Organized Sector

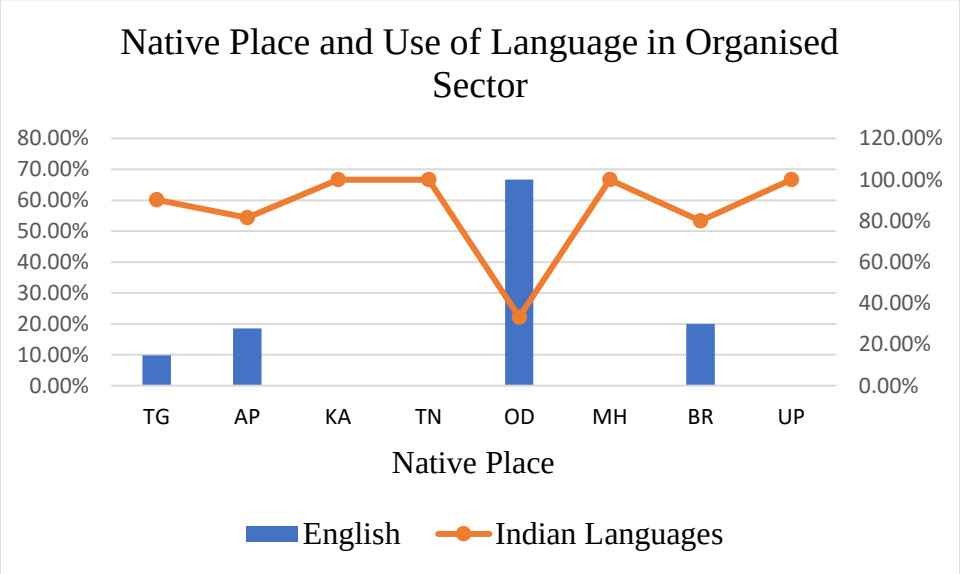


Chart 6.4: Table: Native Place and Use of Language in Organized Sector

Table 6.34 provides details of native place of the workforce and the choice of language used in the organized sector workplaces during their work. The workforce who work in the organized sector has diversity in it.

Observations

- ➢ Since the selected organized sectors are located in Telangana (TG) the majority of the workforce i.e.716 are from Telangana, a small number (27) of the workforce are from Andhra Pradesh (AP), and the other workforce hail from 7 States of India, such as Karnataka (KA), Tamil Nadu (TN), Odisha (OD), Maharashtra (MH), Bihar (BR) to work in Telangana-organized sector workplaces.
- ➢ In total, the use of Indian languages from 8 states of India is shown at 89.7% and English use in production is limited to 10.3%.
- ➢ the Chi-Squar significance is 0.05, which means there is some significant association between native place and their choice of language at organized sector workplaces.

6.5.4 Class of Workforce and Use of Language in Organized Sector

This section provides analyses of a class of workforce and use of language, and tries to show whether there is a correlation between the said variables.

Class of Workforce and Use of Language in organized Sector				
S.No	Class of Workforce	Use of Language		Total
		English	Indian Languages	
1	Super-ordinates	29	8	37
		78.4%	21.6%	100.0%
2	Sub-ordinates	12	78	90
		13.3%	86.7%	100.0%
3	Sub-subordinates	37	596	633

		5.8%	94.2%	100.0%
	Total	78	682	760
		10.3%	89.7%	100.0%
Pearson Chi-Square Significance: .000		Degree of Freedom: 2		Value : 200.733

Table 6.35: Class of Workforce and Use of Language in Organized Sector

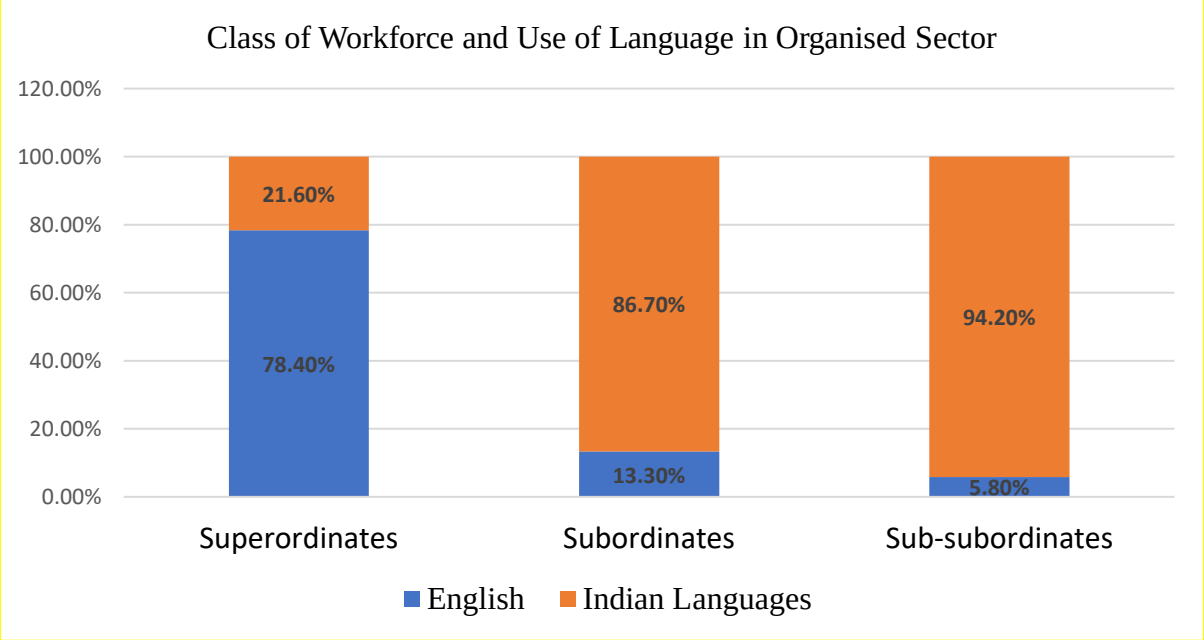


Chart 6.5: Class of Workforce and Use of Language in Organized Sector

Table 6.35 demonstrates the classification of the workforce and their choice of language in the organized sector workplaces. The entire class workforce has been class 5 into 3 groups which can be seen in rows in table 6.35.

Observations

- The data shows that the Sub-subordinates use 94.2% of Indian languages, and 86.7% of the Sub-ordinates communicate in Indian languages

- ➢ It is found that Super-ordinates communicate in English predominantly, at 78.4 percent, to the Sub-ordinates. However, it is observed that when the Super-ordinates communicate with Sub-ordinates and among colleagues they switch to Indian languages (21.6%) as seen in table 6.35.
- ➢ The use of English is confined to 10.3%.
- ➢ The analysis of the sample data shows that the majority of the workforce carries out their economic activity in their native languages.
- ➢ The Pearson chi-square result shows that there is a strong association between the class of force and the choice of languages in organized sector workplaces.

6.5.5 Levels of Education and Use of Language in Organized Sector

The section deals with the analyses of the levels of education and its relevance to the use of language in the organized sectors.

Levels of Education and Use of Language in organized Sector				
S.No	Levels of Education	Use of Language		Total
		English	Indian Languages	
1	Illiterates	0	56	56
		0.0%	100.0%	100.0%
2	Primary Education (I-X)	1	278	279
		0.4%	99.6%	100.0%
3	Secondary Education (XI-XII)	12	169	181
		6.6%	93.4%	100.0%
4	Graduates	24	164	188
		12.8%	87.2%	100.0%

5	Post Graduates	41	15	56
		73.2%	26.8%	100.0%
	Total	78	682	760
		10.3%	89.7%	100.0%
Pearson Chi-Square Significance: .001		Degree of Freedom: 4		Value : 280.956

Table 6.36: Levels of Education and Use of Language in Organized Sector

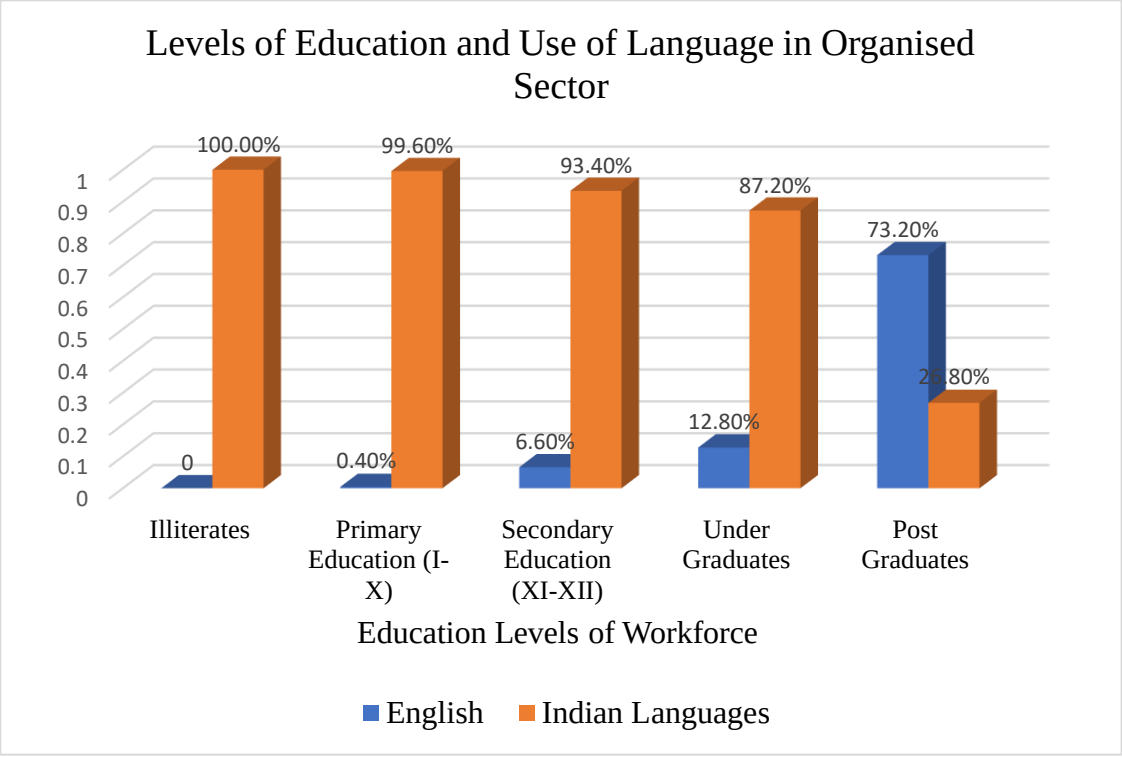


Chart 6.6: Levels of Education and Use of Language in organized Sector

Table 6.36 presents the levels of education of the workforce and their association with the choice of language they use at organized sector workplaces. The education levels of the workforce have been classified into five levels. The first level of the workforce's education is illiterates, who did not take formal education but might have working skills. The second level is primary education from classes 1 to 10. The third level is secondary education who

completed their intermediate education which is class 11 to class 12; this level also includes the employees who have completed their diploma in a specific field. 4th level is undergraduate who completed the technical and nontechnical undergraduate degree in the respected fields and work in the workplaces. The fifth and final group is postgraduates which include the Ph.D. candidates as well. All these education levels have been arranged in the order in rows of table 6.36. The choice of language they use at the workplaces has been listed in the columns accordingly.

Observations

- ➢ Increase in the level of education increase the use of English.
- ➢ Decrease in levels of education increases the use of Indian languages
- ➢ The use of English in production is limited to graduates. Out of the total use of language, the workforce use 89.7% Indian languages and 10.3% English at organized sector workplaces as seen in table 6.36..
- ➢ The Pearson chi-square significance is 0.001 which is less than the p-value of 0.5, which shows that the levels of education and use of language are highly significant.

6.5.6 Mother Tongue of the Workforce and Use of Language in Organized Sector

Section 6.5.6 deals with analyses of the mother tongue of the workforce and the use of language in organized sector.

Mother Tongue of the Workforce and Use of Language in Organized Sector				
S.No	Mother Tongue	Use of Language		Total
		English	Indian Languages	
1	Telugu	72	604	676
		9.47 %	79.4 %	88.87%
2	Hindi	1	21	22
		0.01%	2.76 %	2.77%

3	Tamil	0	1	1
		0.0%	0.1%	0.1%
4	Kannada	1	1	2
		0.1%	0.1%	0.2%
5	Koya	0	2	2
		0.0%	0.2%	0.2%
6	Lambadi	1	25	26
		0.1%	3.28 %	3.29%
7	Marathi	0	5	5
		0.0%	0.65 %	0.65 %
8	Odia	2	2	4
		0.2%	0.2%	0.4%
9	Urdu	1	20	21
		0.1%	2.63 %	2.63 %
10	Bhojpuri	0	1	1
		0.0%	0.1%	0.1%
	Total	78	682	760
		10.3%	89.7%	100.0%
Pearson Chi-Square Significance: .120		Degree of Freedom: 9		Value: 14.060

Table 6.37: Mother Tongue of the Workforce and Use of Language in Organized Sector

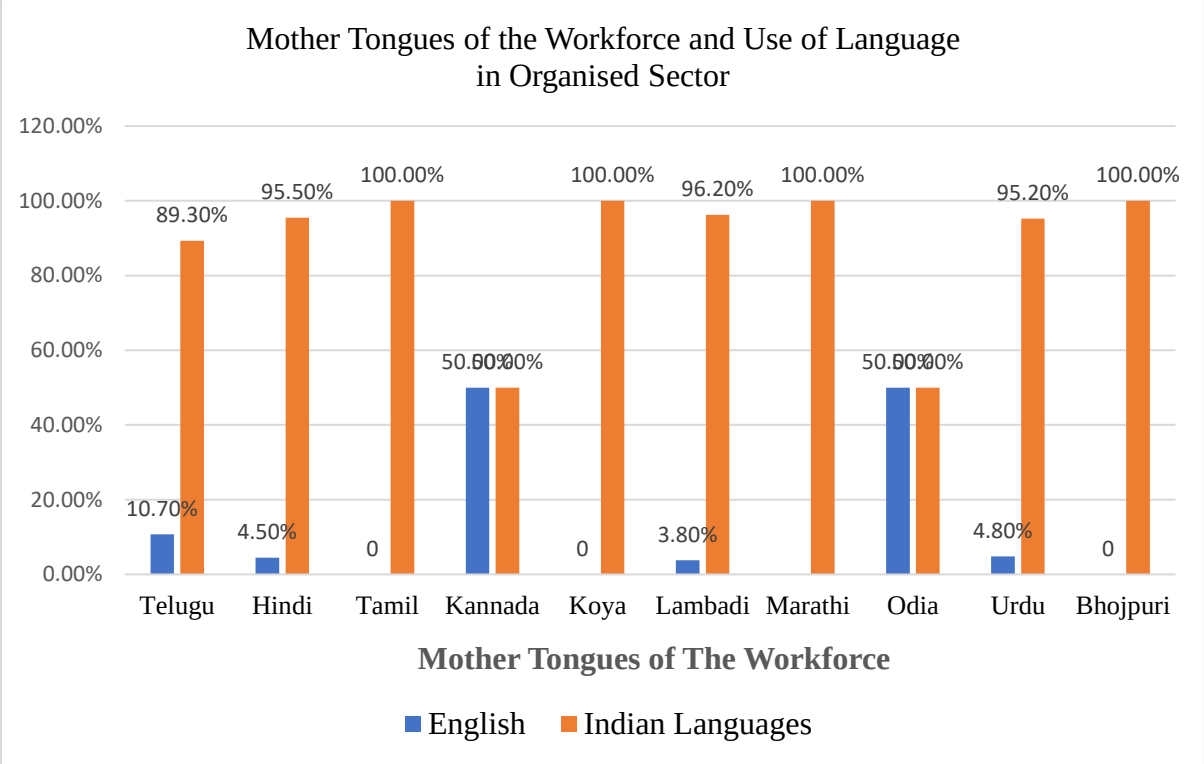


Chart 6.7: Mother Tongue of the Workforce and Use of Language in Organized Sector

In the organized sector, the workforce hail from various parts of India to work in industries located in Telangana state. Various languages have been recorded as mother tongues of the workforce in the organized sector listed in table 6.37. As most of the workforce belongs to Telangana and Andhra Pradesh, they have Telugu as their mother tongue. Besides Telugu, Hindi, Tamil, Kannada, Koya, Lambadi, Marathi, Odia, Urdu, and Bhojpuri languages

Observations

- Since the majority of the workforce 676 the workforce are native to Telugu-speaking states that is Telugu and Andhra Pradesh hands their percentage of use of Indian languages is high at 78%.
- it is observed that the workforce who occupied higher positions use English.
- Most of the workforce use Indian languages in economic activity.
- The Pearson chi-square significance is 0.12 which is greater than the p-value 0.5, which means there is no significance between the mother tongue and the use of language in economic activity at workplaces. This could be due to the association between the class of workforce and language use, where there is high significance.

6.6 Language Understanding in Organised Sector

In the first section of the questionnaire, a question is used aiming to collect the language understanding provided by 'yes' or 'no' options for speaking, reading, and writing of the language/s they know. Here, we analyses and discusses language understanding in the organized sector.

6.6.1 Understanding English in the Organized Sector

Section 6.6.1 aims to identify whether there is a link between English understanding and the class of the workforce in the organized sectors.

Understanding English in organized Sector							
S.No	Class of Workforce	English-speaking		English Reading		English Writing	
		No	Yes	No	Yes	No	Yes
1	Super-ordinates	0	37	0	37	0	37
		00.0%	100.0%	00.0%	100.0%	00.0%	100.0%
2	Sub-ordinates	38	52	22	68	24	66
		42.2%	57.8%	24.4%	75.6%	26.7%	73.3%
3	Sub-subordinates	571	62	561	72	561	72
		90.3%	9.7%	88.7%	11.3%	88.7%	11.3%
	Total	609	151	583	177	585	175
		80.14%	19.86%	77.0%	23.0%	77.0%	23.0%
Pearson Chi-Square Significance: .001				Degrees of Freedom: 2			

Table 6.38: Understanding English in the Organized Sectors.

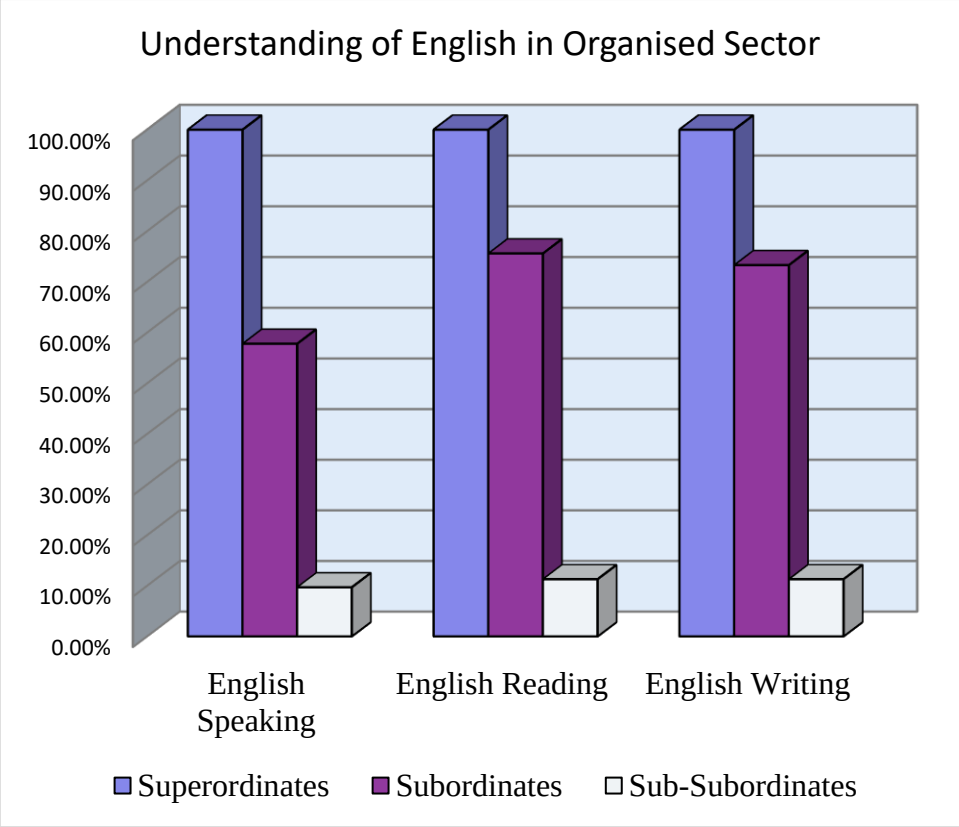


Chart 6.8: Understanding of English in organized Sector

Table 19 provides the details of understanding English in the organized sector workplaces. The total workforce is classified into 3 classes, namely Super-ordinates, Sub-ordinates, and subs- Sub-ordinates.

Observations

- Increase in class of workforce increases the English speaking ability in organized sector.
- English- ability decreases as class of workforce decreases.
- Similarly, English writing ability decrease as the class of workforce lowers.
- The Pearson chi-square significance shows that there is a highly significant association between English understanding and the class of the workforce.

6.6.2 Understanding Telugu in Organized Sector

Section 6.6.2 provides information on understanding Telugu in the organized sector. Analyses of the same try to find the correlation between Understanding Telugu and the class of the workforce.

Understanding of Telugu in organized Sector							
S.No	Class of Workforce	Telugu-speaking		Telugu Reading		Telugu Writing	
		No	Yes	No	Yes	No	Yes
1	Super-ordinates	1	36	2	35	2	35
		2.7%	97.3%	5.4%	94.6%	5.4 %	94.6%
2	Sub-ordinates	12	78	13	77	13	77
		13.3%	86.7%	14.4%	85.6%	14.4 %	85.6%
3	Sub-subordinates	150	483	221	412	221	412
		23.7%	76.3%	34.9%	65.1%	34.9 %	65.1%
	Total	163	597	236	524	236	524
		21.4%	78.6%	31.1%	68.9%	31.1 %	68.9%
Pearson Chi-Square Significance: .001				Degree of Freedom: 2			

Table 6.39: Understanding of Telugu in organized Sector:

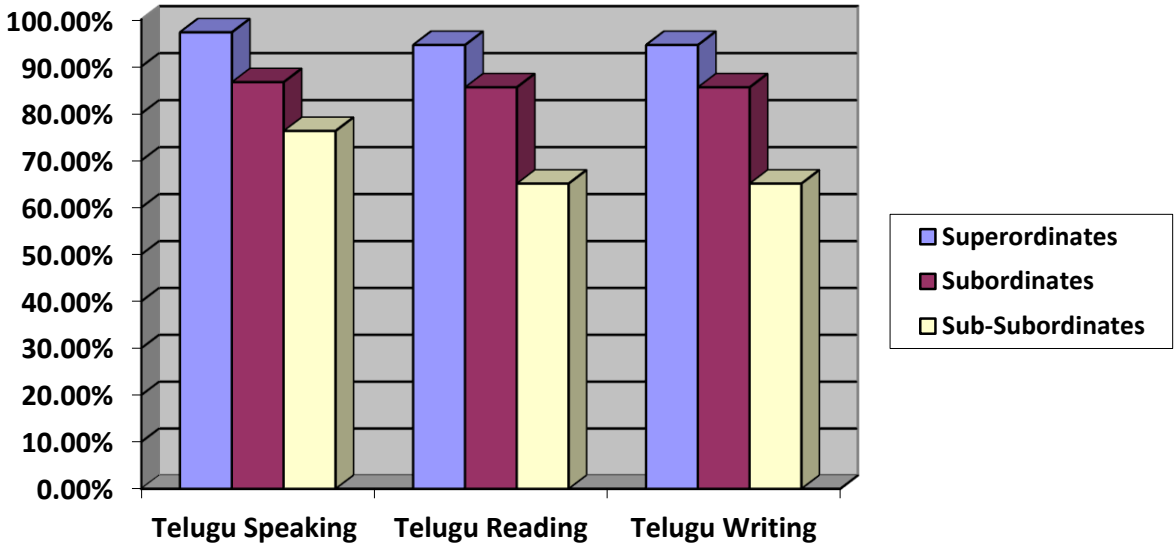


Chart 6.9: Understanding of Telugu in organized Sector

Table 6.5.8 provides the details of the speaking, reading, and writing abilities of Telugu among the workforce of the organized sector. These abilities have been compared with the various classes of the workforce.

Observations

- ➢ Telugu-speaking skill is higher in all class of workforc in comparison with reading and writing skills.
- ➢ Speaking, reading and writing skills decrease as class of workforce decrease
- ➢ The pearson chi-square significance shows significant assosciation between Telugu understanding and class of workforce.

6.6.3 Understanding Hindi in Organized Sector

Section 6.6.3 tries to find out whether there is an association between understanding Hindi and the class of workforce.

Understanding of Hindi in organized Sector

S.No	Class of Workforce	Hindi-speaking		Hindi Reading		Hindi Writing	
		No	Yes	No	Yes	No	Yes
1	Super-ordinates	12	25	14	23	14	23
		32.4%	67.6%	37.8%	62.2%	37.8%	62.2%
2	Sub-ordinates	42	48	53	37	59	31
		46.7%	53.3%	58.9%	41.1%	65.6%	34.4%
3	Sub-subordinates	395	238	439	194	461	172
		62.4%	37.6%	69.4%	30.6%	72.8%	27.2%
	Total	449	311	506	254	534	226
		59.1%	40.9%	66.6%	33.4%	70.3%	29.7%
Pearson Chi-Square Significance: .001				Degree of Freedom: 2			

Table 6.40: Understanding of Hindi in Organized Sector

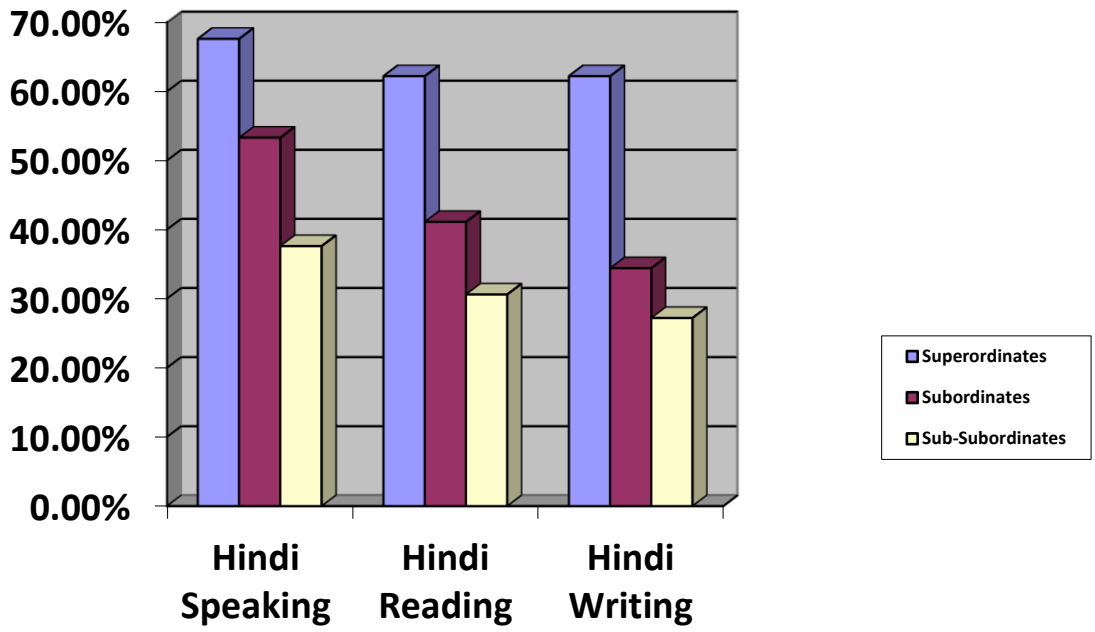


Chart 6.10: Understanding of Hindi in Organized Sector

The table 6.40 shows the link between a class of workforce and speaking, reading , writing abilities of Hindi in the organized sector.

Observations

- Data shows that Sub-ordinates have lower levels of Hindi skills as compared to Super-ordinates and Sub-ordinates.
- There is a significant association between the understanding Hindi and the class of the workforce in the organized sector.

6.6.4 Speaking Ability of Other Languages in Organized Sector

Section 6.6.4 demonstrates speaking abilities of other language known to the workforce. Here, we try to identify whether speaking abilities of languages mentioned below have any link with the class of workforce.

Speaking Ability of Other Languages in organized Sector															
S. No	Class of Workforce	Speaking Other Languages													Total
		No	Yes												
			Ta	Ka	Ml	Ko	La	Mr	Od	Ur	Ab	Bn	BJ	TK	
1	Super-ordinates	28	1	0	0	1	2	0	0	1	0	2	1	1	37
		75.7%	2.7%	0%	0.0%	2.7%	5.4%	0.0%	0.0%	2.7%	0.0%	5.4%	2.7%	2.7%	100.0%
2	Sub-ordinates	77	1	1	0	0	3	1	2	2	1	0	1	1	90
		85.6%	1.1%	1.1%	0.0%	0.0%	3.3%	1.1%	2.2%	2.2%	1.1%	0.0%	1.1%	1.1%	100.0%
3	Sub-subordinates	577	5	3	1	6	23	7	2	8	0	1	0	0	633
		91.2%	0.8%	0.5%	0.2%	0.9%	3.6%	1.1%	0.3%	1.3%	0.0%	0.2%	0.0%	0.0%	100.0%
	Total	682	7	4	1	7	28	8	4	11	1	3	2	2	760
		89.7%	0.9%	0.5%	0.1%	0.9%	3.7%	1.1%	0.5%	1.4%	0.1%	0.4%	0.3%	0.3%	100.0%
Pearson Chi-Square Significance: .001									Degree of Freedom: 24						

Table 6.41: Speaking Ability of Other Languages in Organized Sector

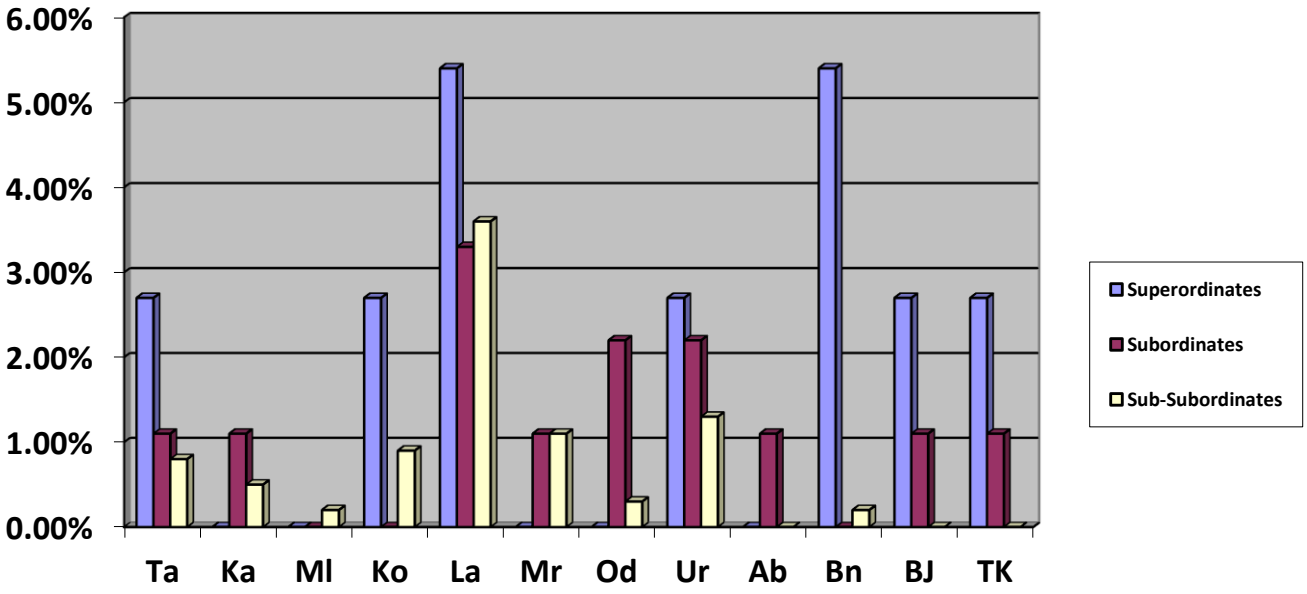


Chart 6.11: Speaking Ability of Other Languages in Organized Sector

Table 6.41 illustrates the speaking ability of other languages by the class of workforce in the organization sector. Besides English, Telugu, and Hindi, there are a considerable number of languages, Tamil, Kannada, Malayalam, Koya, Lambadi, Marathi, Odia, Urdu, Arab, Bengali, Bhojpuri, Tamil, and Kannada together which can be spoken by the workforce.

Observations

- The table shows that the organized sector workplaces are multilingual in nature. Diversity of the languages can be found in these industries. Of 37 Sub-ordinates, 9 members can speak various languages. Among Sub-ordinates one speaker of Tamil, Koya, Urdu and Bhojpuri, and two each speakers of Lambadi, Bengali are found. One person in a bilingual who speak who speaks both Tamil and Kannada.
- Similarly, 13 members out of 90 workforces speak 9 languages. About Sub-subordinates , 51 members speak 9 languages out of 633.
- Super-ordinates speak multiple languages with a high percentage, and the diversity and the percentage of the speaking ability of various languages relatively decrease as the class of work goes down.

➢ The Pearson chi-square shows that there is significant relation between the class of workforce and speaking ability of various languages. Probably this could be because of the migrated workforce occupies into subordinate positions in the organized sectors.

6.6.5. Reading Ability of Other Languages in the Organized Sector

In this section 6.6.5, the correlation between reading ability of other languages and class of workforce is attempted.

Reading Ability of Other Languages in organized Sector									
S.No	Class of Workforce	Other Languages Reading							Total
		No	Yes						
			Ta	ka	Mr	Od	Ur	Ar	Bn	
1	Super-ordinates	35	1	0	0	0	0	0	1	37
		94.6%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	100.0%
2	Sub-ordinates	84	2	0	1	1	1	1	0	90
		93.3%	2.2%	0.0%	1.1%	1.1%	1.1%	1.1%	0.0%	100.0%
3	Sub-subordinates	622	2	3	5	1	0	0	0	633
		98.3%	0.3%	0.5%	0.8%	0.2%	0.0%	0.0%	0.0%	100.0%
	Total	741	5	3	6	2	1	1	1	760
		97.5%	0.7%	0.4%	0.8%	0.3%	0.1%	0.1%	0.1%	100.0%
Pearson Chi-Square Significance: .001						Degree of Freedom: 14				

Table 6.42: Reading Ability of Other Languages in the Organized Sector

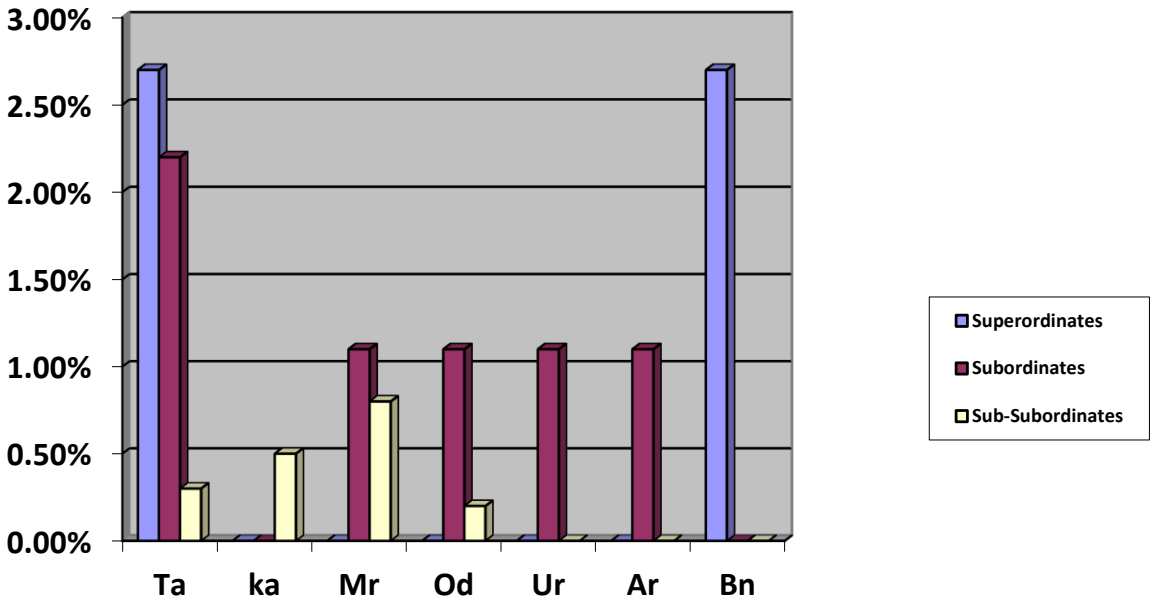


Chart 6.12: Reading Ability of Other Languages in organized Sector

Table 6.42 provides information about the reading ability of various languages according to the class of workforce in the organized sector.

Observations

- ➢ Reading ability of various languages increase as the class of workforce decline.
- ➢ The Pearson chi-square significance value 0.001 shows there is high significance between class of workforce and reading abilities of languages other than, Telugu, Hindi and English.

6.6.6 Reading Ability of Other Languages in the Organized Sector

Table 6.6.6: Writing Ability of Other Languages in Organized Sector

Writing Ability of Other Languages in organized Sector										
S.No	Class of Workforce	Other Languages Writing								Total
		No	Yes							
			Ta	ka	Mr	Od	Ur	Ar	Bn	
1		35	1	0	0	0	0	0	1	37

	Super-ordinates	94.6 %	2.7 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	2.7 %	100.0 %
2	Sub-ordinates	84	1	0	1	2	1	1	0	90
		93.3 %	1.1 %	0.0 %	1.1 %	2.2 %	1.1 %	1.1 %	0.0 %	100.0 %
3	Sub-subordinates	622	2	3	5	1	0	0	0	633
		98.3 %	0.3 %	0.5 %	0.8 %	0.2 %	0.0 %	0.0 %	0.0 %	100.0 %
	Total	741	4	3	6	3	1	1	1	760
		97.5 %	0.5 %	0.4 %	0.8 %	0.4 %	0.1 %	0.1 %	0.1 %	100.0 %
Pearson Chi-Square Significance: .001						Degree of Freedom: 14				

Table 6.43: Writing Ability of Other Languages in Organized Sector

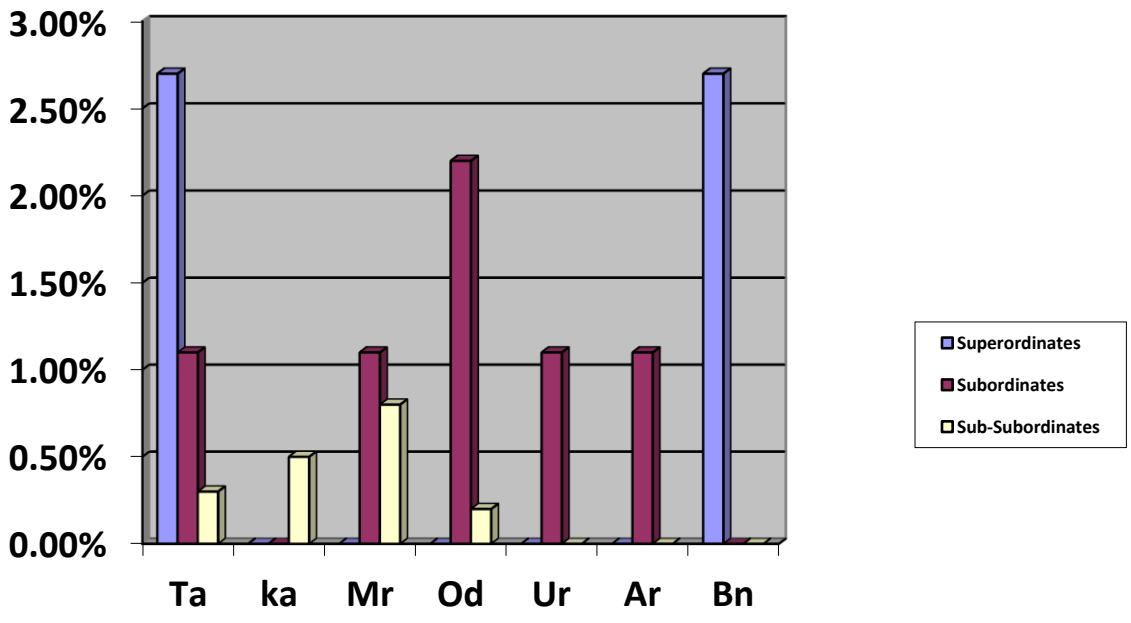


Chart 6.13: Writing Ability of Other Languages in Organized Sector

Table 6.43 provides the beta set off writing ability of other languages in the organized sector based on the class of workforce. Apart from Telugu, English and Hindi. There are a

considerable number of workforce who can write Tamil, Karnataka, Marathi, Odia, Urdu, Arabic, and Bengali.

Observations

- ➢ The diversity of languages has been reduced in reading and writing compared to the speaking ability of other languages in the organized sector
- ➢ Percentage of writing abilities of various languages varies from one class of the workforce to another class of workforce. As listed in the chart 28 Sub-ordinates speak five languages but their percentage is relatively lower than the super-ordinates.
- ➢ Pearson chi-square result is 0.001 which less than 0.5, hence there is a correlation between the class of the workforce and their ability to write in other languages

6.6.7 Language Use in Written Form of Communication in Organized Sector

Apart from the spoken form of communication, there is a written form of communication that takes place in the workplaces. A spoken form of communication among the workforce is used to communicate with one another directly and to learn things from one another whereas, the written form of communication is used largely by the higher authorities in the workplace. Besides that, the workforce also uses a written form of communication to communicate with the higher officials and vice versa. Table 6.44 aims to find whether there is correlation between various forms of writings and choice of language use in the organised sector.

Language Use in Writing in Organized Sector					
S.No	Writing Forms	Indian Languages	English	Degree of Freedom	Pearson Chi-Square Significance
1	Demand Letters	657	103	1	.001
		86.4%	13.6%		
2	Leave Letters	469	291	2	.001
		61.7%	38.3%		

3	Drafting Mails	331	429	2	.001
		43.6%	56.4%		
4	Order Letters	2	708	2	.001
		0.01%	99.9%		
5	Request Letters	397	296	2	.001
		57.3%	42.7%		
6	Complaint Letters	445	266	2	.001
		62.6%	37.4%		

Table 6.44: Language Use in Written Form of Communication in Organized Sector

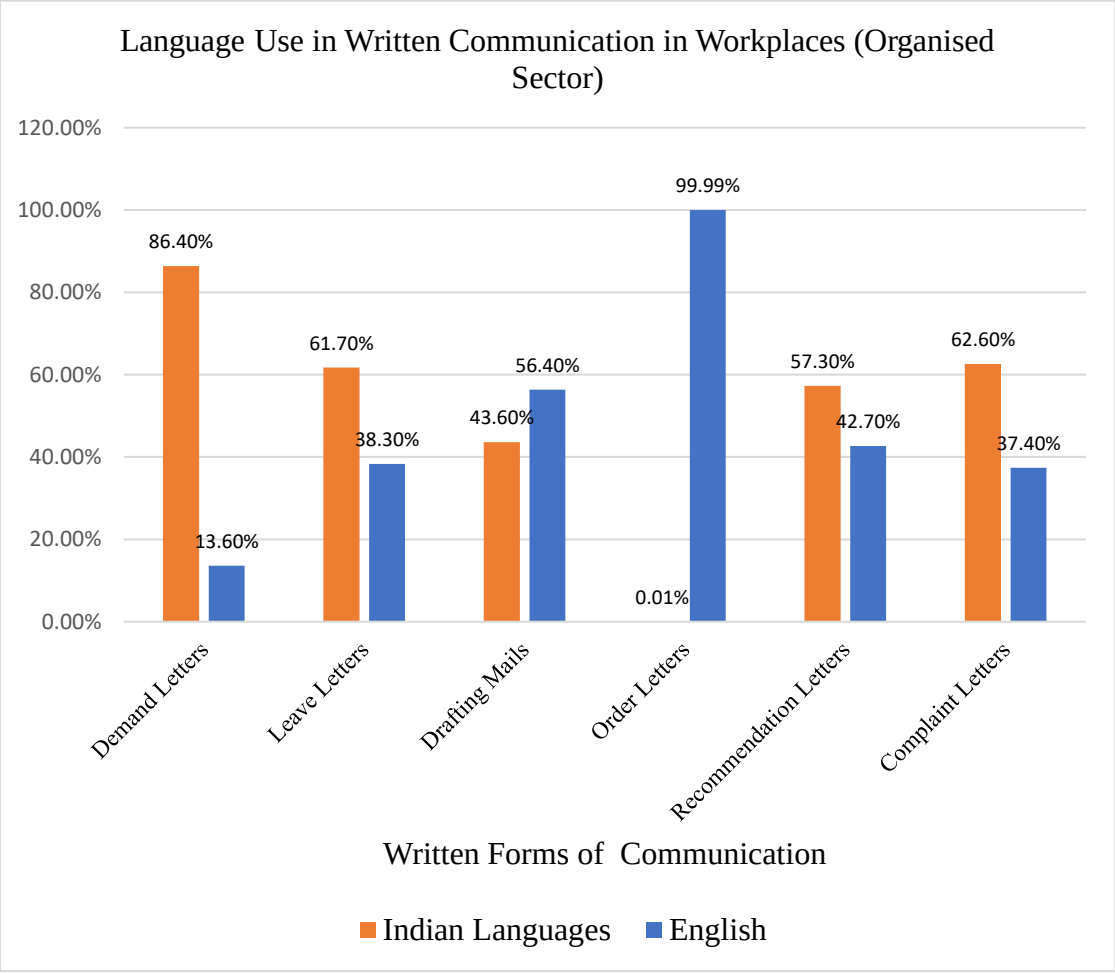


Chart 6.14: Language Use in Writing in Organized Sector

The table 6.44 describes the language used in written form of communication in the organized sector. Written forms of communication have been divided into 6 forms. The first one is demand letters, the second one has leave letters which the workforce write to the higher officials, drafting emails is also done by higher authorities as well as Sub-ordinates to report things of work, order letters which are issued by officials, request letters which can be given to officials, and finally complaint letters which can be written by the workforce of any class.

Observations:

- A significant number of workforce, i.e., 657 members use demand letters in their native languages i.e. any Indian languages, only 103 workforces use
- The choice Indian languages (61.7%) for writing leave letters is higher than English (38.3%)
- The workforce who are in the higher position and do the technical job use emails to show their work to communicate with co-workforce or officials. Therefore more than half of the workforce uses English over Indian languages.
- The order letters issued by workplaces use English at 99.9 % as they are used for official communication.
- Complaint letters are mostly written in Indian languages with 62.6% while complaining in English (37.4%).
- In most cases Indian languages are preferred while official communication happen in English
- In all forms of writings in the organized sector, there is a significant relationship between the various forms of writing and choice of language.

6.7 Use of Language in Unorganized Sector

This section deals with the use of language/s at workplaces that come under the unorganized sector. Compared to the organised sector, the nature and organisation of the work in unorganised sectors vary in innumerable ways. This section observe whether choice of language of the workforce has any correlation with economic activities. This section provides an analysis of the language choices of workforces and how social variables such as gender, age, class of workforce, education levels, native place, and mother tongue of the workforce are correlated in the unorganized sectors.

6.7.1 Gender and Use of Language in Unorganized Sector

Here, we try to find whether a correlation exists between gender and the use of language in unorganized sectors.

Gender and Use of Language in Unorganized Sector				
S.No	Gender	Use of Language		Total
		English	Indian Languages	
1	Female	1	299	300
		0.3%	99.7%	100.0%
2	Male	0	165	165
		0.0%	100.0%	100.0%
	Total	1	464	465
		0.2%	99.8%	100.0%
Pearson Chi-Square Significance: .458		Degree of Freedom: 1		Value : .551

Table 6.45: Gender and Use of Language in Unorganized Sector

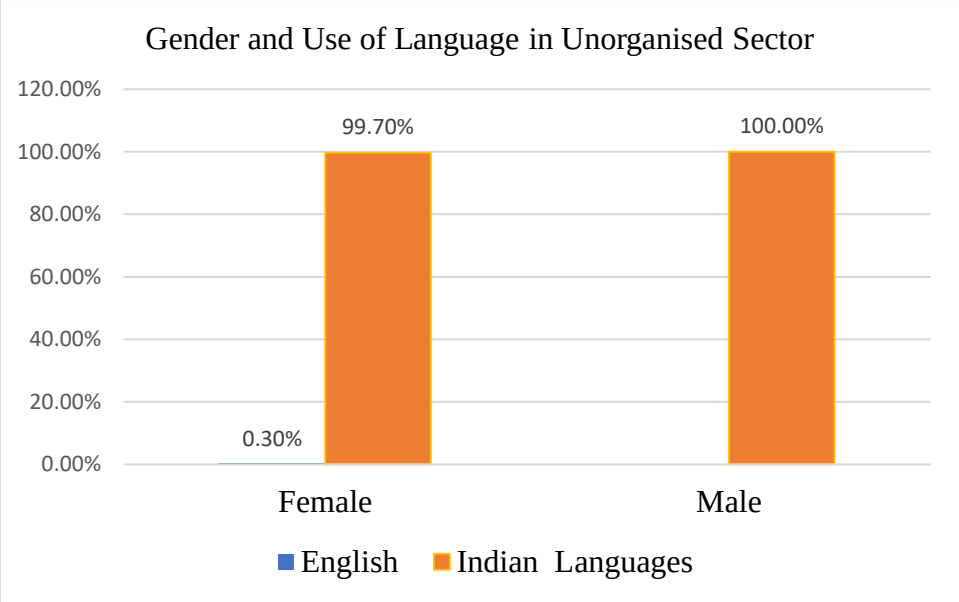


Chart 6.15: Gender and Use of Language in Unorganized Sector

The data provided in table 6.45 represents the language distribution among gender. The data consists of 465 workforces from the unorganized sector.

Observations

- As opposed to the organized sector, the unorganized sector consists of more female workforce (300) than males (165).
- The selected workplaces of the unorganized sector consist of less labour and home-based industries hence the data shows male workforce are less in number and females tend to work in home-based industries.
- The data set shows that the entire male workforce use Indian languages alone while communicating with one another in work whereas only one female worker of the is likely to use English at work. And the rest of the male workforce also uses Indian languages in the workplaces.
- However, 99.8% of the workforce uses Indian languages and the use of English in an organized sector consists of only 0.2%.
- The Pearson chi-square significance is 0.458 which more than the p-value 0.5 which means there is greater significance between gender and use of language in unorganised sector workplaces.

6.7.2 Age and Use of Language in Unorganized Sector

In this section, we try to identify whether there is a correlation that exits between age and use of language in unorganised sector.

Age and Use of Language in Unorganized Sector				
S.No	Age	Use of Language		Total
		English	Indian Languages	
1	>20	0	4	4
		0.0%	100.0%	100.0%
2	20-29	0	6	6
		0.0%	100.0%	100.0%
3	30-39	1	154	155
		0.6%	99.4%	100.0%
4	40-49	0	143	143
		0.0%	100.0%	100.0%
5	50-59	0	104	104
		0.0%	100.0%	100.0%
6	60-70	0	42	42
		0.0%	100.0%	100.0%
7	70+	0	11	11
		0.0%	100.0%	100.0%
	Total	1	464	465
		0.2%	99.8%	100.0%

Pearson Chi-Square Significance: .919	Degree of Freedom: 6	Value: 2.004

Table 6.46: Age and Use of Language in Unorganized Sector

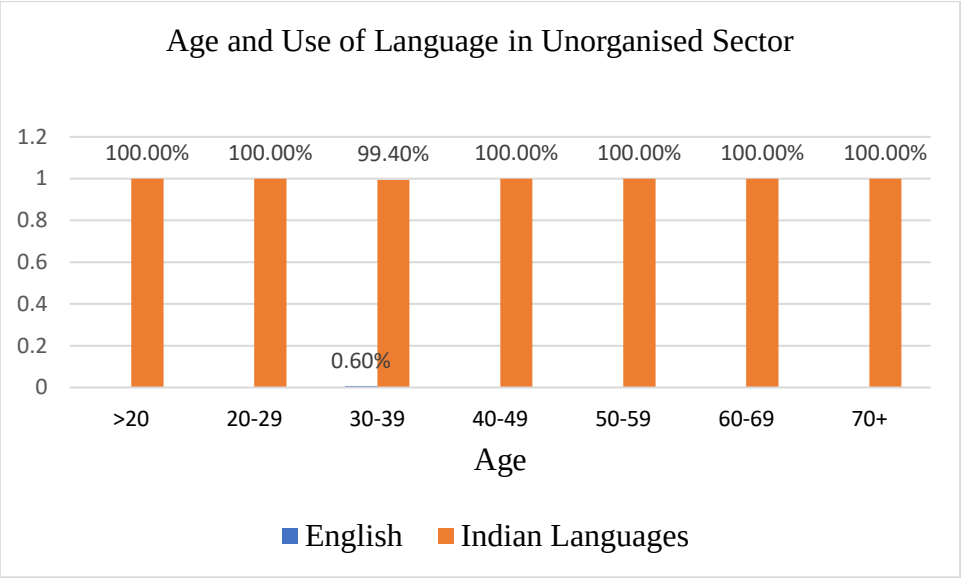


Chart 6.17: Age and Use of Language in Unorganized Sector

Table 6.46 consists of the surveyed data of age and use of language in the unorganized sector. In this dataset 7 groups of age, and workforce are found. A workforce below the 20 age to 70 + can be seen in this data set.

Observations

- The highest number of the workforce falls into the age group of 30 to 39, age group of 40 to 49 has the second highest number of workforce in the unorganized sector. The lowest number of workforce is recorded with the age group of below 20.
- The use of Indian languages is recorded as 99.8 %, with all age groups in unorganized sector workplaces. Use of English is confined to 0.2%.
- Since there is in class division in unorganised sector, the workforce tend to speak in their mother tongue entirely while executing their tasks as shown in the data set in table 6.46.

➢ For this reason the Pearson chi-square found (0.919) to be insignificant in association with the age groups and use of language in an organized sector.

6.7.3 Native place and Use of Language in Unorganized Sector

In this section, we present the correlation between the data of native place of the workforce and their use of language in the unorganised sector.

Native place and Use of Language in Unorganized Sector				
S.No	Native Place	Use of Language		Total
		English	Indian Languages	
1	TG	1	464	465
		0.2%	99.8%	100.0%
	Total	1	464	465
		0.2%	99.8%	100.0%

Table 6.47: Native place and Use of Language in Unorganized Sector

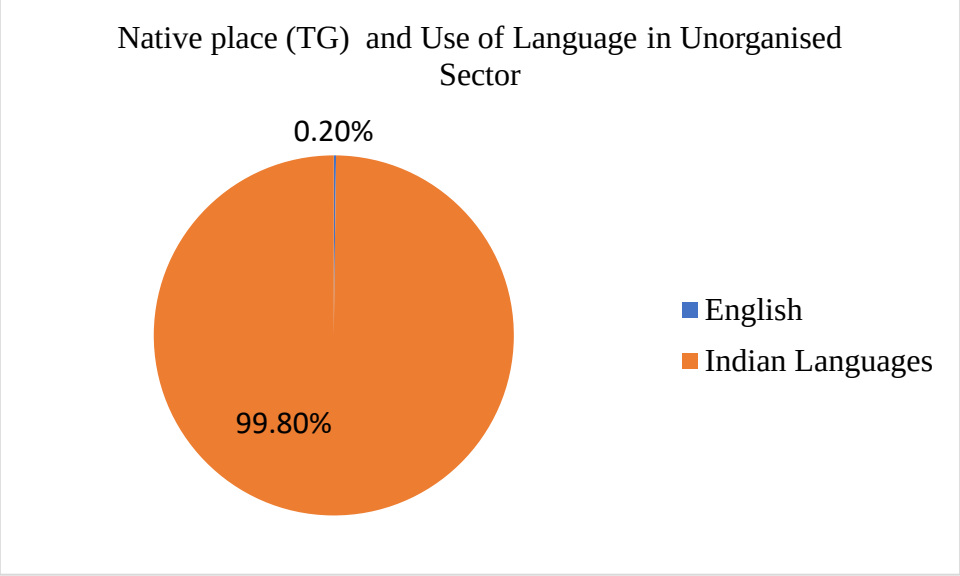


Chart 6.18: Native place (TG) and Use of Language in Unorganized Sector

The table 6.47 shows the unorganised sector in Telangana is home-based industries as these industries are found in semi-towns and villages in India. The handloom industry and beedi-making industry are located in Kurumurthy and Amarachinta villages. The total number of

the workforce working in the unorganised sector is 465, out of which 462 workforce use Indian languages during their production.

Observations

- ➢ Since there is no diversity of native places of the workforce most of them tend to use their native language for work. Only 0.2% of the workforce uses English in communication and in very rare circumstances they use it.
- ➢ Here, the Pearson chi-square is insignificant.

6.7.4 Class of Workforce and Use of Language in Unorganized Sector

Class of Workforce and Use of Language in Unorganized Sector				
S.No	Class of Workforce	Use of Language		Total
		English	Indian Languages	
1	Sub-ordinates	1	0	1
		100.0%	0.0%	100.0%
2	Sub-subordinates	0	464	464
		0.0%	100.0%	100.0%
	Total	1	464	465
		0.2%	99.8%	100.0%
Pearson Chi-Square Significance: .001		Degree of Freedom: 1		Value: 465.000

Table 6.48: Class of Workforce and Use of Language in Unorganized Sector

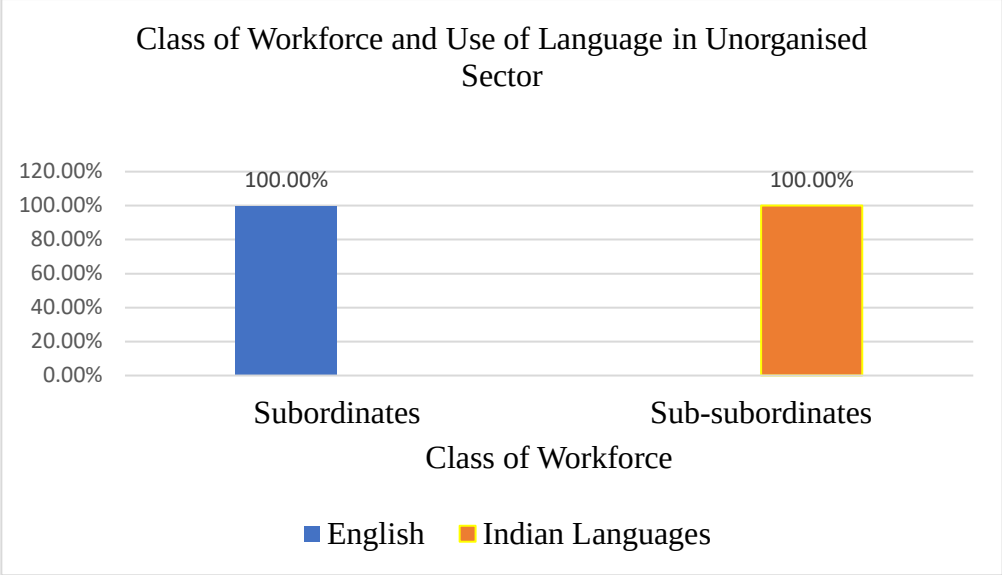


Chart 6.19: Class of Workforce and Use of Language in Unorganized Sector

Table 6.48 consists of the data of the class of workforce and the choice of language in unorganized sector workplaces. Compare to the organized sector, the unorganized sector workplaces have only two classes of the workforce, namely, Sub-ordinates and subs- Sub-ordinates. The unorganized sector work is largely home-based industries related. They take work from the industry and work at home and they submit their work two are Sub-ordinates wages from the industry. The one Sub-ordinates collects the work from Sub-subordinates and handovers to industry.

Observations

- The contributement of Super-ordinates is null hence the research has not taken the account of Super-ordinates in the data. The Super-ordinates are highly distant from the rest of the work classes and they hardly communicate each other, which is why we have drawn the sample from Sub-ordinates and Sub-subordinates for the survey.
- One subordinate use English whereas 99.8% of the entire workforce in the unorganized sector workplaces use their native languages predominantly.
- The use of English in the unorganized sector is only limited to 0.2%. the Chi-square significance test shows a significant association between the use of language and the class of workforce in an organized sector.

6.7.5 Levels of Education and Use of Language in Unorganized Sector

The section presents analyses of levels of education and use of language in unorganized sector. Here, we try to show whether this is a correlation between education levels and the use of language in unorganized sector.

Levels of Education and Use of Language in Unorganized Sector				
S.No	Levels of Education	Use of Language		Total
		English	Indian Languages	
1	Illiterates	0	281	281
		0.0%	100.0%	100.0%
2	Primary Education (I-X)	1	160	161
		0.6%	99.4%	100.0%
3	Secondary Education (XI-XII)	0	15	15
		0.0%	100.0%	100.0%
4	Graduates	0	5	5
		0.0%	100.0%	100.0%
5	Post Graduates	0	3	3
		0.0%	100.0%	100.0%
	Total	1	464	465
		0.2%	99.8%	100.0%
Pearson Chi-Square Significance: .756		Degree of Freedom: 4		Value:1.892

Table 6.49: Levels of Education and Use of Language in Unorganized Sector

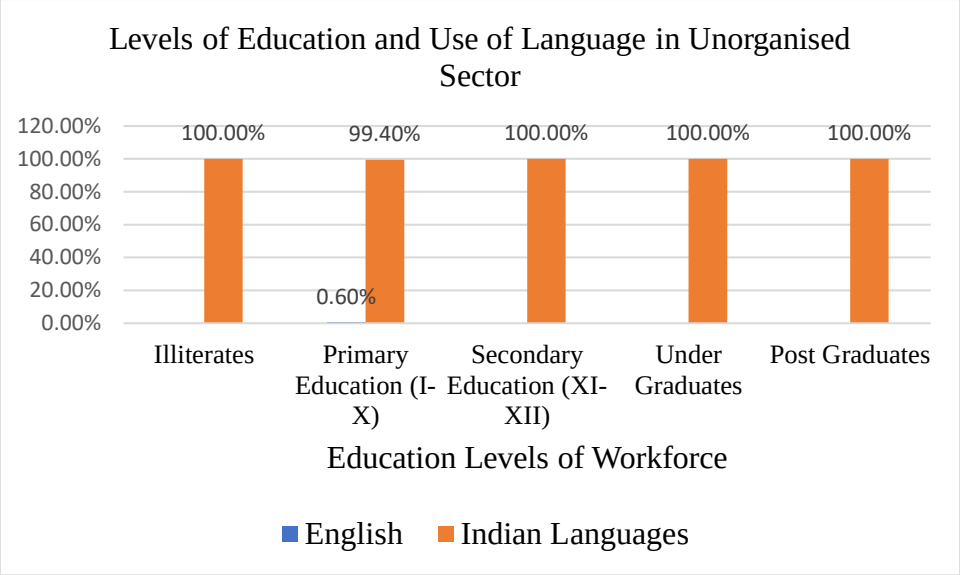


Chart 6.20: Levels of Education and Use of Language in Unorganized Sector

Unorganized sectors data shows that the workforce have five levels of education. The use of language according to the levels of education has been provided in table 6.49. The total number of workforce in the unorganized sector is 465.

Observations

- The number of Illiterates is more than other levels of employees in the unorganized sector. The use of Indian languages by illiterates is 100% which is the highest percentage.
- The number of workforce decreases as education levels increase in the unorganized sector.
- The data analysis shows that the majority of the non-graduates work in the unorganized sector. The undergraduates work for unorganized sector workplaces, but they tend to use Indian languages alone.
- In sum, 99.8% of the entire workforce in the organized sector uses Indian languages in economic activity. It is quite evident that the unorganized sectors which are located in the rural and semi-urban areas in India use their native languages and produce all types of goods for our country.
- the Pearson chi-square value is 0.756 which is more than the p-value of 0.5, which shows there is no correlation between education levels and the use of language in unorganized sectors.

6.7.6 Mother Tongue of the Workforce and Use of Language in Unorganized Sector

Section 6.6.6 discusses the analysis of mother tongue of the workforce and the use of language in unorganized sectors and try to find a correlation if it exists between the mother tongue and use of language.

Mother Tongue of the Workforce and Use of Language in Unorganized Sector				
S.No	Mother Tongue	Use of Language		Total
		English	Indian Languages	
1	Telugu	1	413	414
		0.2%	88.81 %	88.83
2	Urdu	0	51	51
		0.0%	10.96 %	10.96 %
	Total	1	464	465
		0.2%	99.8%	100.0%
Pearson Chi-Square Significance: .725		Degree of Freedom: 1		Value: .123

Table 6.50: Mother Tongue of the Workforce and Use of Language in

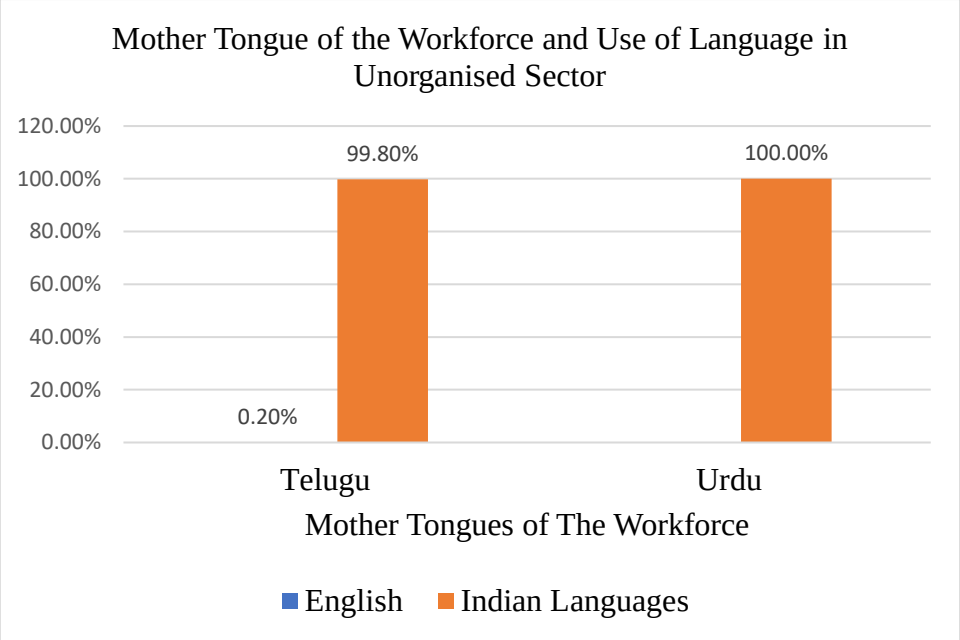


Chart 6.21: Mother Tongue of the Workforce and Use of Language in Unorganized Sector

As it is seen in table 6.50, in the unorganized sector, the mother tongues of the workforce are very few. There are only two mother tongues recorded in an organized sector. Because the unorganized sector workplaces are mostly home-based industries.

Observations

- ➢ According to the data analyses presented in table 6.5, it is observed that the workforce does not work in groups in the selected unorganized sector workplaces. The work is confined to homes.
- ➢ Therefore, only the native workforce produces goods in the home by using their mother tongue during their work. Here, the workforce speak mostly Telugu and Urdu.
- ➢ So the p-value of these two variables is more than 0.05, which means there is no significance between these two variable.

6.8 Language Understanding in Unorganised Sector:

In this section 6.8 and sub sections provide the analysis of language understanding in unorganised sector. In the first section of the questionnaire, a question is used aiming to collect the language understanding provided by ‘yes’ or ‘no’ options for speaking, reading,

and writing of the language/s they know. Here, we analyses and discusses language understanding in the organized sector.

6.8.1 Understanding English in Unorganized Sector

we show the analysis of the English understanding of the workforce in unorganized sectors. Here, we find understanding English and its correlation levels with the class of workforce.

Understanding of English in Unorganized Sector							
S.No	Class of Workforce	English-speaking		English Reading		English Writing	
		No	Yes	No	Yes	No	Yes
2	Sub-ordinates	0	1	0	1	0	1
		0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
3	Sub-subordinates	464	1	451	13	451	13
		99.8%	0.2%	97.2%	2.8%	97.2%	2.8%
	Total	464	2	452	13	452	13
		99.6%	0.4%	97.2%	2.8%	97.2%	2.8%
Pearson Chi-Square Significance: .865				Degree of Freedom: 1			

Table 6.51: Understanding of English in Unorganized Sector:

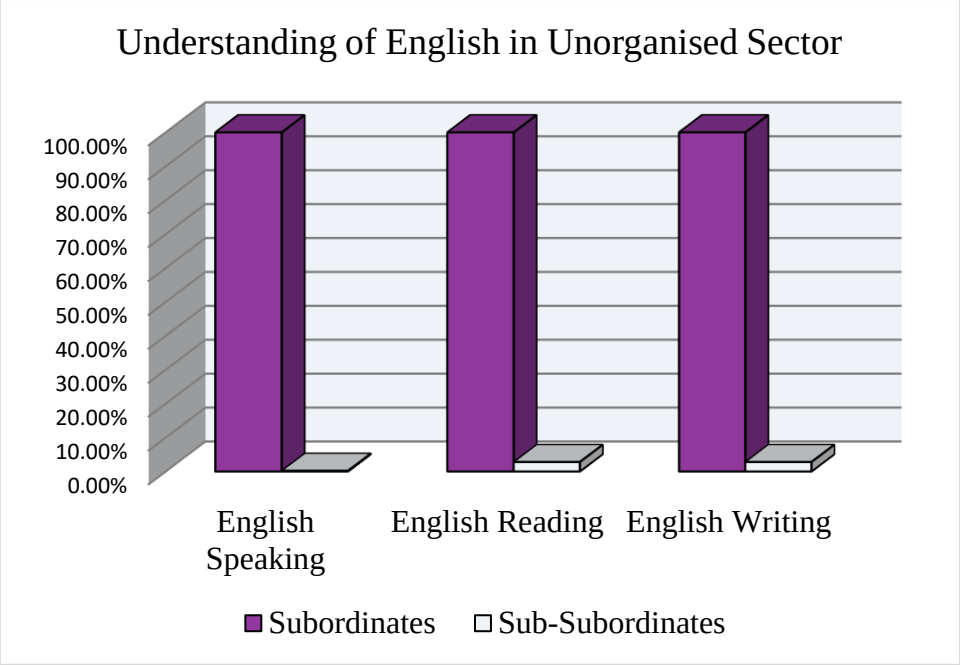


Chart 6.22: Understanding of English in Unorganized Sector

The above-mentioned table 6.51 provides information about the speaking, reading , writing ability of English among the workforce in the unorganized sector. Unlike the organized sector, the unorganized sector has only two classes of the workforce, i.e, Sub-ordinates and Sub-subordinates .

Observations

- Data analyses shows that there is only one person found in the class of Sub-ordinates in the unorganized sector. That one person can speak, read and write English.
- Similarly only one person among the Sub-subordinates can speak English, and 13 of them can read and write English.
- English skills declines as the class of the workforce lowers.
- There is a huge insignificant difference found in this organized sector with regard to speaking, reading and writing English among the class of workforce.

6.8.2 Understanding of Telugu in Unorganized Sector

The correlation between understanding Telugu and class of workforce is discussed here.

Understanding of Telugu in Unorganized Sector							
S.No	Class of Workforce	Telugu-speaking		Telugu Reading		Telugu Writing	
		No	Yes	Yes	No	No	Yes
2	Sub-ordinates	0	1	0	1	0	1
		0	100.0%	0.0%	100.0%	0.0%	100.0%
3	Sub-subordinates	0	464	325	139	325	139
		0	100.0%	70.0%	30.0%	70.0%	30.0%
	Total	0	465	325	140	325	140
		0	100.0%	69.9%	30.1%	69.9%	30.1%
Pearson Chi-Square Significance: .001				Degree of Freedom: 2			

Table 6.52: Understanding of Telugu in Unorganized Sectors.

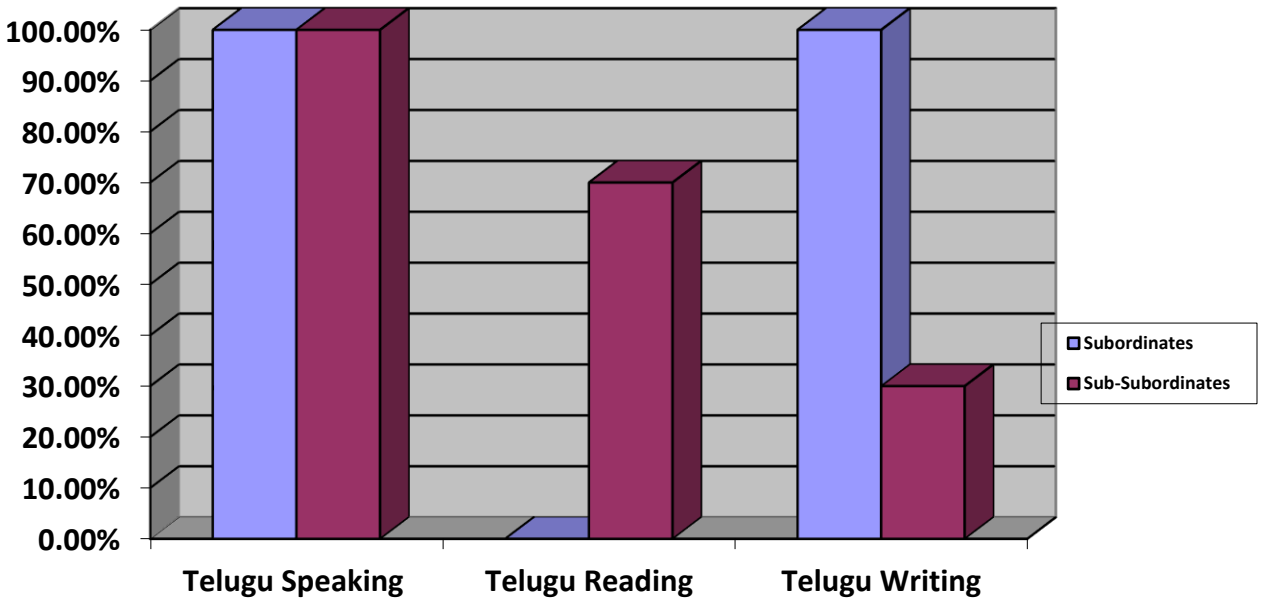


Chart 6.23: Understanding of Telugu in Unorganized Sector

The table 6.52 displays the details of various abilities of Telugu in the unorganized sector by class of workforce.

Observations

- ➢ Since there is only one person found in the subordinate in the unorganized sector, the ability of one person is considered to be 100%.
- ➢ With regard to the Sub-subordinates , 464 members of them can speak Telugu hence it is considered 100%,
- ➢ The percentage of reading and writing Telugu in Sub-ordinates have a sharp fall as most of them are illiterates and have just primary education. Thus, they can speak but cannot write and read.
- ➢ The Pearson chi-square significance shows that there is a significant association between understanding Telugu and the class of the workforce.

6.8.3 Understanding of Hindi in Unorganized Sector

This section shows the analyses of the understanding Hindi and the class of workforce in unorganized sectors.

Understanding of Hindi in Unorganized Sector							
S.No	Class of Workforce	Hindi-speaking		Hindi Reading		Hindi Writing	
		No	Yes	Yes	No	No	Yes
2	Sub-ordinates	1	0	1	0	1	0
		100.0%	0.0%	100.0%	0.0%	100.0%	0.0%
3	Sub-subordinates	417	47	446	18	445	19
		89.9%	10.1%	96.1%	3.9%	95.9%	4.1%
	Total	418	47	447	18	446	19
		89.9%	10.1%	96.1%	3.9%	95.9%	4.1%
Pearson Chi-Square Significance: .737				Degree of Freedom: 1			

Table 6.53: Understanding of Hindi in Unorganized Sector

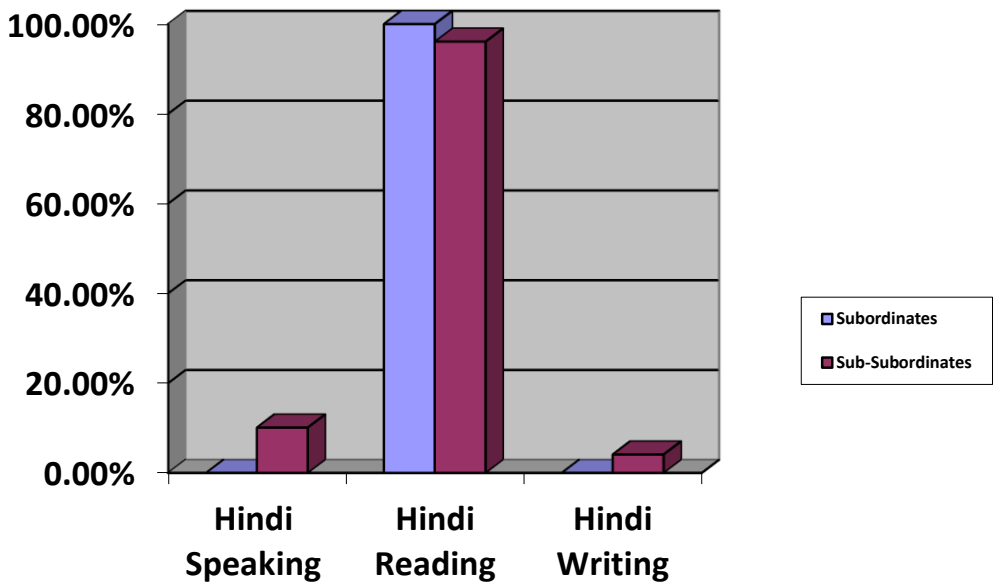


Chart 6.24: Understanding of Hindi in the Unorganized Sector above table 6.53 presents the Hindi-speaking, reading, and writing abilities of the workforce who work in the unorganized sector.

Observations

- ➢ Sub-ordinates, as shown in the analysis table 6.53, cannot speak, read, and write Hindi. On the contrary Sub-subordinates , 10% of them can speak Hindi, 3.9% of them can read, and 4.1% of them can write Hindi.
- ➢ The speaking and writing abilities are considerably low compared to reading ability in Sub-ordinates and Sub-subordinates in the unorganized sector.
- ➢ Since only one class of the workforce has the abilities of Hindi, there is no association between the abilities of Hindi and the class of the workforce in the organized sector.

6.9 Use of Language at Workplaces: Organized and Unorganized Sectors

In the previous sections 6.5 to 6.8, we have seen the analyses of the use of language and their correlation with the social variables sector-wise, here we provide the analyses of use of language in relation with social variables such as gender, age, class of work, education levels, native place and mother tongue of the workforce from both organized and unorganized sectors.

6.9.1 Gender and Use of Language in Workplaces

Here we present the analyses of age and use of language in both organized and unorganized sectors. Here, we try to find if there is an association between these variables.

Gender and Use of Language in Workplaces				
S.No	Gender	Use of Language		Total
		English	Indian Languages	
1	Female	15	331	346
		4.3%	95.7%	100.0%
2	Male	64	815	879
		7.3%	92.7%	100.0%
	Total	79	1146	1225
		6.4%	93.6%	100.0%
Pearson Chi-Square Significance: .069		Degree of Freedom: 1		Value : 3.571

Table 6.54: Gender and Use of Language in Workplaces

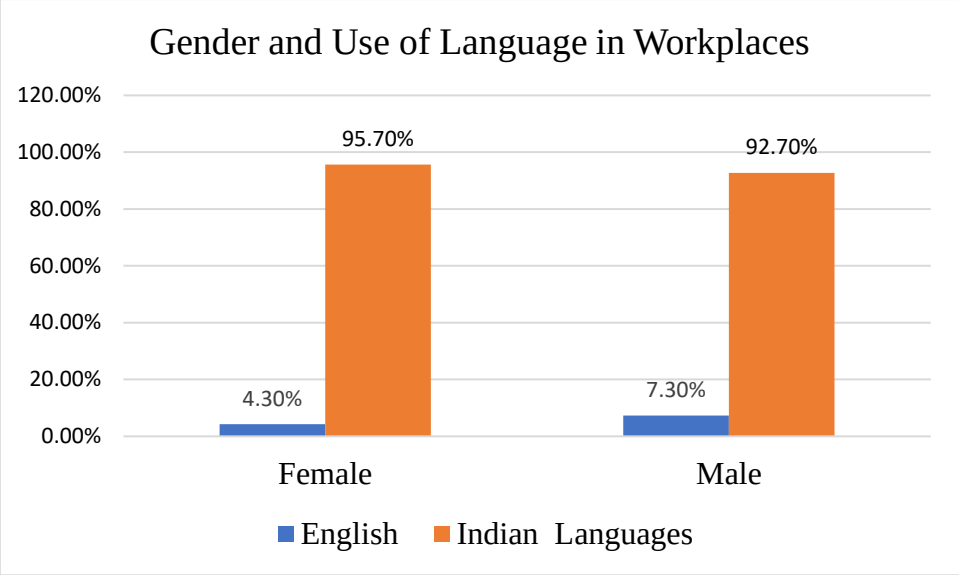


Chart 6.25: Gender and Use of Language in Workplaces

The table 6.54 presents the data analyses of the selected workplaces which means the combination of organized and unorganized survey data set. The total sample of workforce from five selected workplaces is 1225.

Observations

- Both the female and male workforce use more Indian language than English in their workplaces.
- The use of Indian languages altogether is 92.0% whereas the use of English is confined to 8.0%
- The Pearson chi-square significance is 0.069, this result is greater the p-value, i.e 0.05, hence there is no association between gender and use of language in workplaces.

6.9.2 Age and Use of Language in Workplaces

An analyses of age and use of language in workplaces is provided in this section. Here, we try to find whether there is an association between age use of language.

Age and Use of Language in Workplaces				
S.No	Age	Use of Language		Total
		English	Indian Languages	

1	>20	0	4	4
		0.0%	100.0%	100.0%
2	20-29	19	184	203
		9.4%	90.6%	100.0%
3	30-39	24	353	377
		6.4%	93.6%	100.0%
4	40-49	22	300	322
		6.8%	93.2%	100.0%
5	50-59	14	248	262
		5.3%	94.7%	100.0%
6	60-69	0	46	46
		0.0%	100.0%	100.0%
7	70+	0	11	11
		0.0%	100.0%	100.0%
	Total	79	1146	1225
		6.4%	93.6%	100.0%
Pearson Chi-Square Significance: .263		Degree of Freedom: 6		Value: 7.669

Table 6.55: Age and Use of Language in Workplaces

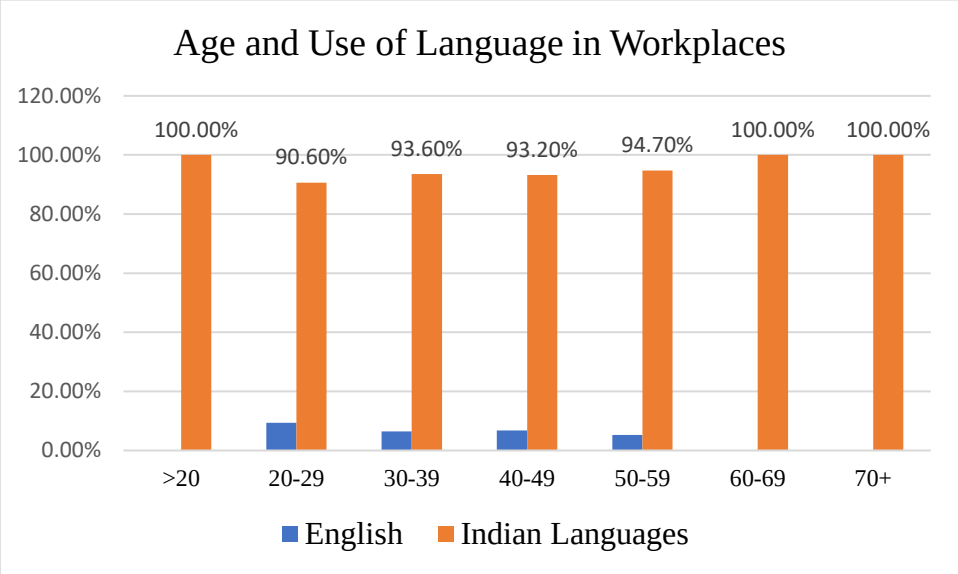


Chart 6.26: Age and Use of Language in Workplaces

The analyzed data presented in table 6.55, which brings forth the combination of all age groups from both organized and unorganized sector workplaces.

Observations

- ➢ The lowest number of the workforce come under the age group of below 20 and the highest number of the workforce fall under the age group of 30 - 39.
- ➢ Workforce of all age groups, use Indian languages with 93.6% in their workplace communication. The use of English is confined to 6.4%.
- ➢ Empirical evidence shows that irrespective of age groups most of the workforce tend to use Indian languages than English
- ➢ The Pearson chi-square significance is 0.263 which is greater than the p-value, i.e, 0.05, which shows there is no correlation between the age and the choice of language use at the workplace.

6.9.3 Native place and Use of Language in Workplaces

The workforce hail from different places in India to work at workplaces that are selected for this study

Native place and Use of Language in Workplaces				
S.No	Native Place	Use of Language		Total
		English	Indian Languages	
1	TG	71	1110	1181
		6.0%	94.0%	100.0%
2	AP	5	22	27
		18.5%	81.5%	100.0%
3	KA	0	5	5
		0.0%	100.0%	100.0%
4	TN	0	1	1
		0.0%	100.0%	100.0%

5	OD	2	1	3
		66.7%	33.3%	100.0%
6	MH	0	1	1
		0.0%	100.0%	100.0%
7	BR	1	4	5
		20.0%	80.0%	100.0%
8	UP	0	2	2
		0.0%	100.0%	100.0%
	Total	79	1146	1225
		6.4%	93.6%	100.0%
Pearson Chi-Square Significance: .01		Degree of Freedom: 7		Value: 27.067

Table 6.56: Native place and Use of Language in Workplaces

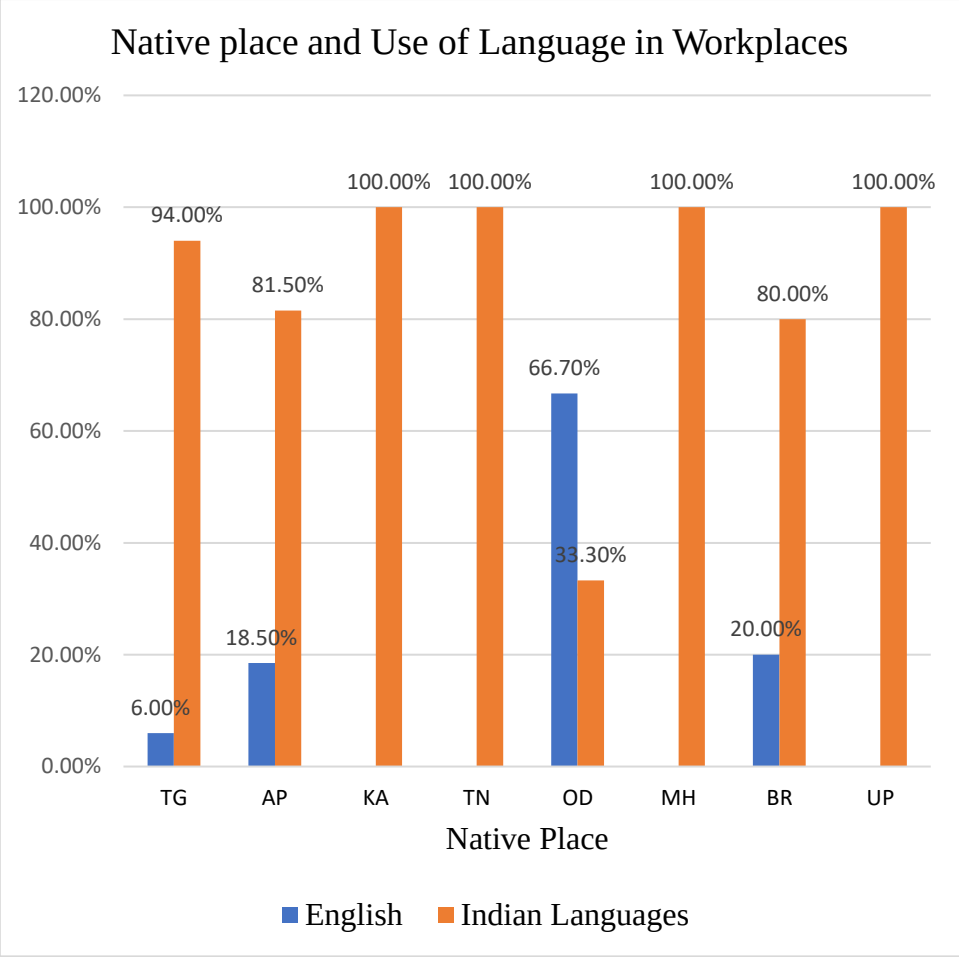


Chart 6.27: Native place and Use of Language in Workplaces

The nativity of the workforce and the choice of language in both organized and organized sector workplaces have been presented in table6.7.3. 8 States are participating in economic activity in selected workplaces such as Telangana (TG), Andhra Pradesh (AP), Karnataka (KN), Tamil Nadu (TN) , Odisha (OD), Maharashtra (MH), Bihar (BR) and Utter Pradesh (UP).

Observations

- ➢ It is observed that the workforce who come from non-Telugu States tend to use English more than native Telugu speakers. The majority of the English speakers are from Telangana State and Andhra Pradesh the percentage of English use is less than the use of Indian languages compared to the workforce who come from non-Telugu States.
- ➢ Altogether 93.6% of the workforce use the Indian language whereas English use is 6.4%.

- ➢ The analysis of the data shows that the workforce irrespective of the native places tends to use native languages in the workforce more than English.
- ➢ It was found that there is a strong significance between the nativity of the workforce and the choice of language in the workplaces. The Chi-square significance is less than 0.01, Hence, there is a strong association between the nativity of the workforce and the choice of language used in workplaces.

6.9.4 Class of Workforce and Use of Language in Workplaces

This section deals with analyses of the class of workforce and use of language in workplaces. we also try to find whether there is a correlation between the class of the workforce and the use of language.

Class of Workforce and Use of Language in Workplaces				
S.No	Class of Workforce	Use of Language		Total
		English	Indian Languages	
1	Super-ordinates	29	8	37
		78.4%	21.6%	100.0%
2	Sub-ordinates	13	78	91
		14.3%	85.7%	100.0%
3	Sub-subordinates	37	1060	1097
		3.4%	96.6%	100.0%
	Total	79	1146	1225
		6.4%	93.6%	100.0%
Pearson Chi-Square Significance: .001		Degree of Freedom: 2		Value : 343.773

Table 6.57: Class of Workforce and Use of Language in Workplaces

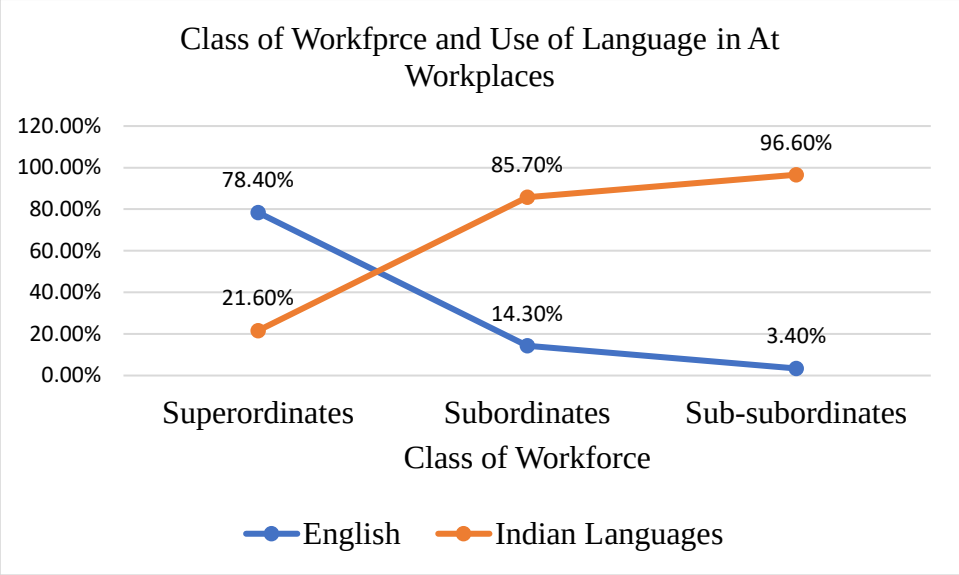


Chart 6.28: Class of Workforce and Use of Language in Workplaces

Table 6.57 lists the class of workforce and the choice of language in the organized sector and unorganized sector workplaces. The class of workforce has been divided into 3 classes which are presented in rows. And the choice of language of each class of workforce has been presented in columns.

Observations

- ➢ Decrease in class of workforce increases the use of Indian languages in the workplaces
- ➢ Increase in class of workforce increases the use of English.
- ➢ The use of Indian languages is more in Sub-subordinates , this could be due to most of them being Graduates and having good knowledge of work in their native language hence most of them (85.0%) use it in the workplaces .
- ➢ The choice of language used in the workplaces and the class of work has shown a significant association with 0.001

6.9.5 Levels of Education and Use of Language in Workplaces

Uma Maheshwar Rao (2017:58) draws the correspondence between levels of education and their use of language in economic activity in India, the results show that the participation of graduates 14.83%, illiterates with 25.50% and the rest 59.63% workforce has their primary and secondary education the Indian GDP 2010-11. He showed that majority of the non-graduates and illiterates participate in economic activity.

Here, in this we find the analyses of levels of education and use of language in selected workplaces. we also try to find if there is a correlation between levels of education and the use of languages.

Levels of Education and Use of Language in Workplaces				
S.No	Levels of Education	Use of Language		Total
		English	Indian Languages	
1	Illiterates	0	337	337
		0.0%	100.0%	100.0%
2	Primary Education (I-X)	2	438.	440
		0.5%	99.5%	100.0%
3	Secondary Education (XI-XII)	12	184	196
		6.1%	93.9%	100.0%
4	Graduates	24	169	193
		12.4%	87.6%	100.0%
5	Post Graduates	41	18	59
		69.5%	30.5%	100.0%
	Total	79	1146	1225
		6.4%	93.6%	100.0%
Pearson Chi-Square Significance: .001		Degree of Freedom: 4		Value : 449.605

Table 6.58: Levels of Education and Use of Language in Workplaces

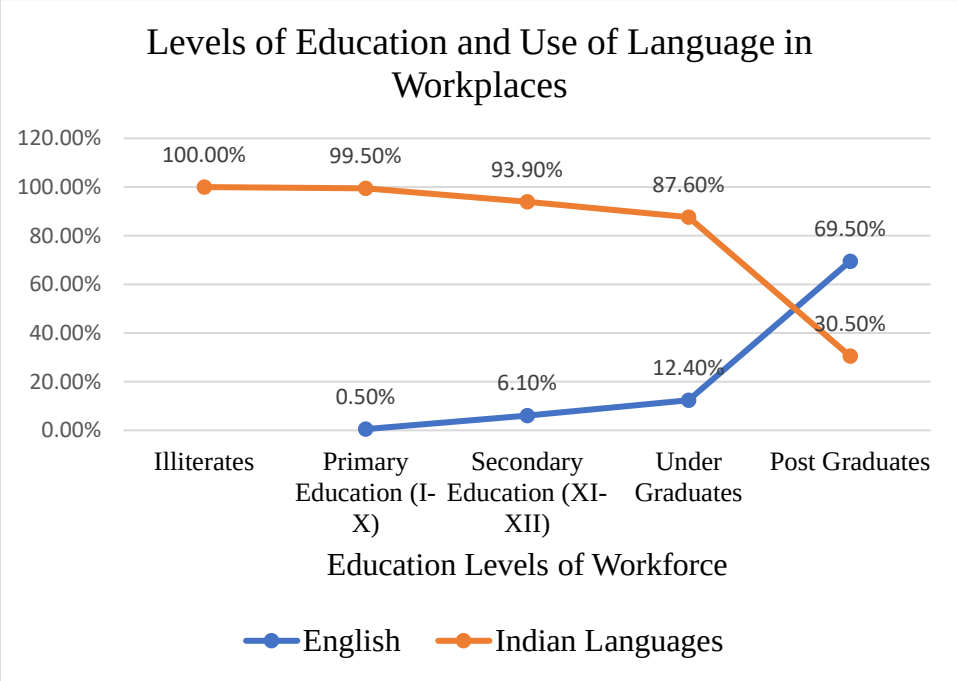


Chart 6.29: Levels of Education and Use of Language in Workplaces

The above table 6.58 provides the data set and analyses the levels of education and use of language in the workplaces. As it is described in the previous tables the levels of education in the workplaces has been classified into five groups namely illiterates, primary education level, secondary education level, undergraduates, and post graduates.

Observations

- The majority of the workforce, 440 members, have just completed their primary education, which is from classes 1 to 10. After primary education, most of the workforce are illiterates, with 337 members, the second highest number of the total workforce. Following that the workforce who completed the secondary education that is class 11 to 12 and the diploma are 196.
- These numbers show that a significant part of economic activity is carried out by the non-graduates and illiterates. They tend to use Indian languages as most of them or monolinguals and carry out their economic activity in their native languages
- However undergraduates and postgaduates also use their native language in economic activity, only a small number of the workforce tend to use English as means of production in the workplaces.
- In total 93.6% of the workforce use native languages and 6.4% of the entire workforce, especially graduates, use English in economic activity.
- The chi-square significance of two variables shows that there is a strong association between levels of education and choice of language. The results show that Indian languages are widely used as means of production by illiterates and non-graduates.

6.9.6 Mother Tongue of the Workforce and Use of Language in Workplaces

This section 6.7.6 presents the analyses of the mother tongue of the workforce and the use of the language of organized and unorganized sectors. Here, we try to show whether there is a significant association or not.

Mother Tongue of the Workforce and Use of Language in Workplaces				
S.No	Mother Tongue	Use of Language		Total
		English	Indian Languages	
1	Telugu	73	1017	1090

		5.95 %	83.02%	100.0%
2	Hindi	1	21	22
		0.08 %	1.71 %	1.79%
3	Tamil	0	1	1
		0.0%	0.08%	0.08%
4	Kannada	1	1	2
		0.08 %	0.08 %	0.16%
5	Koya	0	2	2
		0.0%	0.16 %	0.16%
6	Lambadi	1	25	26
		0.08 %	2.04 %	100.0%
7	Marathi	0	5	5
		0.0%	0.40 %	0.40 %
8	Odia	2	2	4
		0.16 %	0.16 %	0.32%
9	Urdu	1	71	72
		0.08 %	5.79 %	5.87%
10	Bhojpuri	0	1	1
		0.0%	0.08%	0.08%
	Total	79	1146	1225
		6.4%	93.6%	100.0%
Pearson Chi-Square Significance : .006		Degree of Freedom: 9		Value :23.074

Table 6.59: Mother Tongue of the Workforce and Use of Language in Workplaces:

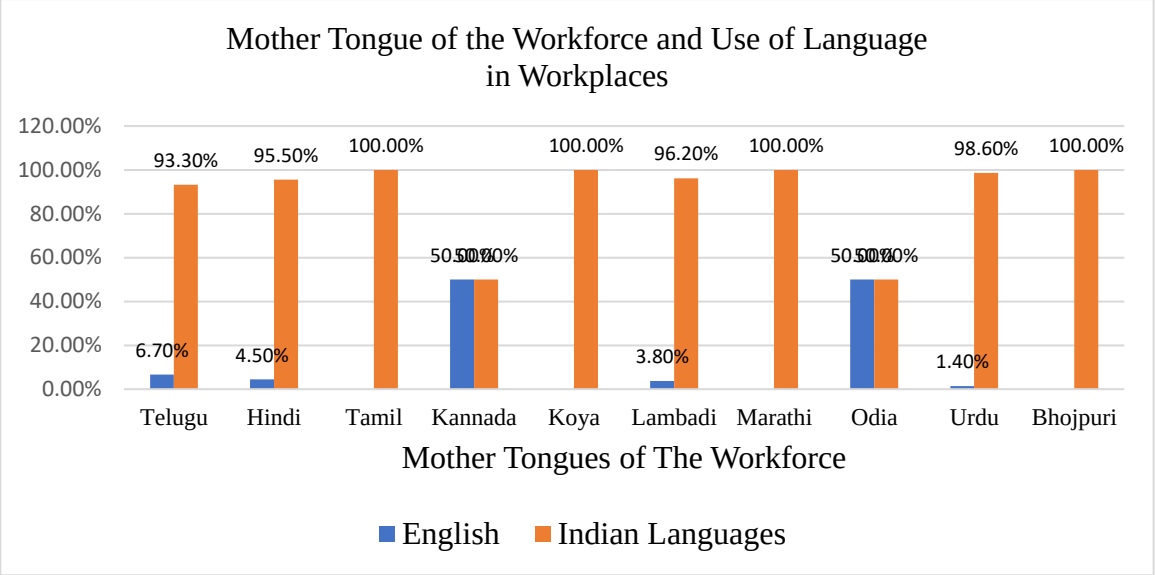


Chart 6.30 Mother Tongue of the Workforce and Use of Language in Workplaces

The above table 6.59 consists of the data set and analysis of the mother tongue of the workforce and use of language in all selected workplaces which include organized and unorganized sector workplaces.

Observations

- The highest number of workforce, 1090 members, have Telugu as their mother tongue. 22 workforce have Hindi as thie mother tongue, there is only one Tamilian, two are from Kannada speaking language as their mother tongue, two Khoya mother tongue workforce, 22 members have Lambadi as their mother tongue, 5 workmen have Marathi as a mother tongue, 4 Odia mother tongue speakers, 72 Urdu mother tongue speakers, and one Bhojpuri mother tongue speakers are found in workplaces.
- The table shows that non-natives of Telugu tend to use English besides their mother tongue in the workplaces.
- Telugu mother tongue-speaking workforce use less English. However, from the total use of language, the Telugu speakers use more language if we take percentage of the column.
- The Pearson chi-square significance shows that there is some significance between the mother tongue-speaking workforce and their choice of language in the selected workplaces.

6.10 Language Understanding of Workplaces: Organised and Unorganised Sectors

Here, the following sections 6.10.1 to 6.10.7 provide the analyses of language understanding organised and unorganised sector workplaces.

6.10.1 Understanding English in Workplaces

This section deals with the analyses of speaking, reading and writing abilities of English and their correlation with class of workforce. The data analysis consists of both organised and unorganised sectors.

Understanding of English in Workplaces							
S.No	Class of Workforce	English Speaking		English Reading		English Writing	
		No	Yes	No	Yes	No	Yes
1	Super-ordinates	0	37	0	37	0	37
		00.0%	100.0%	00.0%	100.0%	00.0%	100.0%
2	Sub-ordinates	37	53	21	69	23	67
		42.2%	57.8%	24.4%	75.6%	26.7%	73.3%
3	Sub-subordinates	1035	63	1013	85	1013	85
		94.2%	5.8%	92.2%	7.8%	92.2%	7.8%
	Total	1072	153	1034	191	1036	189
		87.6%	12.4%	84.6%	15..4%	84.7%	15.3%
Pearson Chi-Square Significance: .001			Degree of Freedom: 2				

Table 6.60 : Understanding of English in Workplaces:

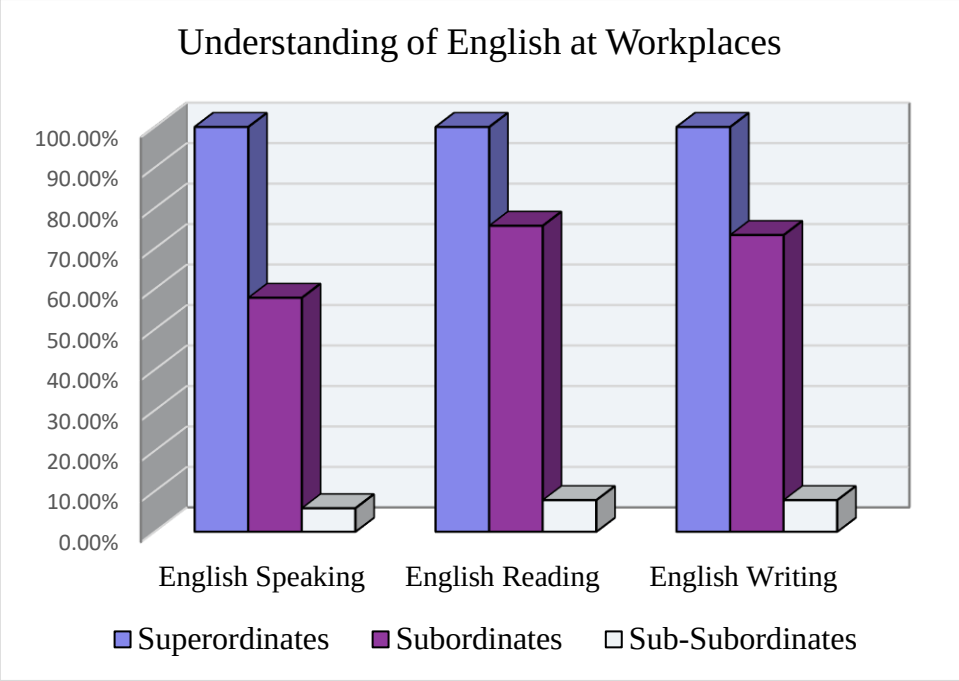


Chart 6.31: Understanding of English in Workplaces

The table 6.60 illustrates the speaking, reading , writing abilities of English of the workforce according to its class who work in the organized and unorganized sector workplaces. It allows us to find the difference among the three classes' workforce in terms of speaking, reading , and reading abilities of English.

Observations

- The data set shows that 100% of the super-ordinates can speak, read and write English. On the other hand, Sub-ordinates' abilities to speak,read and write decline compared to Super-ordinates. Roughly quarter percentage in each ability drops as shown in the data set.
- Similarly, in terms of sub-subordinate, the abilities of speaking, reading , and writing have a short fall. The highest percentage of these abilities of English, remain steadily with the super-ordinates with 100%. On the contrary, Sub-subordinates are found with the lowest percentage of above-mentioned abilities in the data set.

- ➢ The graph 6.7.7 shows that the abilities of speaking, reading and writing English increases as the class of workforce increases. This could be because of the education background the super ordinance Sub-ordinates come from.
- ➢ The table shows just the abilities of speaking, reading and writing English but this doesn't mean they are speaking English or reading and writing English with the same percentage of use in the workplaces. They might have the knowledge of English in all mentioned abilities but might not use it in reality in the workfaces.
- ➢ The pearson chi-square test result 0.001 shows that there is significant association between understanding English and class of workforce.

6.10.2 Understanding Telugu in Workplaces

Section 6.7.8 discusses the analyses of speaking, reading and writing abilities of Telugu according to the workplaces. To identify the correlation, the chi-square test is used here.

Understanding of Telugu in Workplaces							
S.No	Class of Workforce	Telugu-speaking		Telugu Reading		Telugu Writing	
		No	Yes	No	Yes	No	Yes
1	Super-ordinates	1	36	2	35	2	35
		2.7%	97.3%	5.4%	94.6%	5.4%	94.6%
2	Sub-ordinates	12	79	13	78	13	78
		13.2%	86.8%	14.3%	85.7%	14.3%	85.7%
3	Sub-subordinates	150	947	546	551	546	551
		13.7%	86.3%	49.8%	50.2%	49.8%	50.2%
	Total	163	1062	561	664	561	664
		13.3%	86.7%	45.8%	54.2%	45.8%	54.2%
Pearson Chi-Square Significance: .001				Degree of Freedom: 2			

Table 6.61: Understanding Telugu in Workplaces

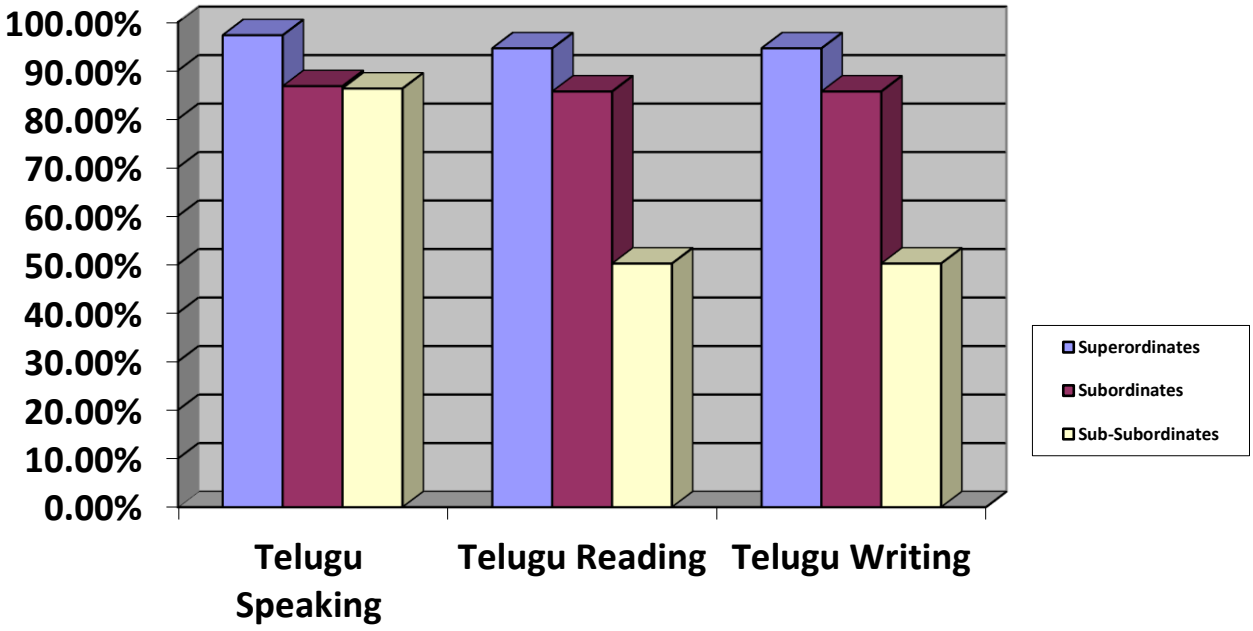


Chart 6.32: Understanding Telugu in Workplaces

The table 6.61 presents the Telugu speaking, reading , writing abilities of the workforce by the classes of workforce in organized and unorganized sector workplaces.

Observations

- Super-ordinates among the workforce have the highest percentage of ability of speaking, reading and writing compared to Sub-ordinates and Sub-subordinates . Among the Super-ordinates 97.3% can speak Telugu 94.6% can read Telugu and 94.6% of them can write Telugu. That shows around 6 percent of Super-ordinates cannot read and write as they are non Telugu workforce.
- The percentage of speaking, reading and writing abilities of Sub-ordinates slightly decreases when compared to Sub-ordinates.
- Among Sub-ordinates, 86.8% can speak, 85.7% can read and 85.7% can write Telugu. This percentage is slightly lower than the super-ordinates.
- The Sub-subordinates , the speaking ability of Telugu is 86.3% which is slightly decreased as compared to the Super-ordinates and Sub-ordinates. But reading and

writing abilities of Telugu among Sub-ordinates is drastically dropped as majority of the workforce are illiterates and have primary education.

- ➢ The data shows that there seems to be education level influence in the ability of Telugu among the class of workforces.
- ➢ In total 86.7% of the workforce can speak Telugu, 54.2% of them can read Telugu and 54.2% of the workforce can write in Telugu.
- ➢ The Pearson chi-square result 0.001 shows that there is significant correlation between Telugu language abilities of workforce and their class of workforce.

6.10.3 Understanding Hindi in Workplaces

Section 6.7.9 aims to show whether there is any correlation between understanding Hindi and class of workforce using the chi-square test.

Understanding Hindi in Workplaces							
S.No	Class of Workforce	Hindi-speaking		Hindi Reading		Hindi Writing	
		No	Yes	No	Yes	No	Yes
1	Super-ordinates	12	25	14	23	14	23
		32.4%	67.6%	37.8%	62.2%	37.8%	62.2%
2	Sub-ordinates	43	48	54	37	60	31
		47.3%	52.7%	59.3%	40.7%	65.9%	34.1%
3	Sub-subordinates	812	285	885	212	906	191
		74.0%	26.0%	80.7%	19.3%	82.6%	17.4%
	Total	867	358	953	272	980	245
		70.8%	29.2%	77.8%	22.2%	80.0%	20.0%
Pearson Chi-Square Significance: .001				Degree of Freedom: 2			

Table 6.62: Understanding of Hindi in Workplaces:

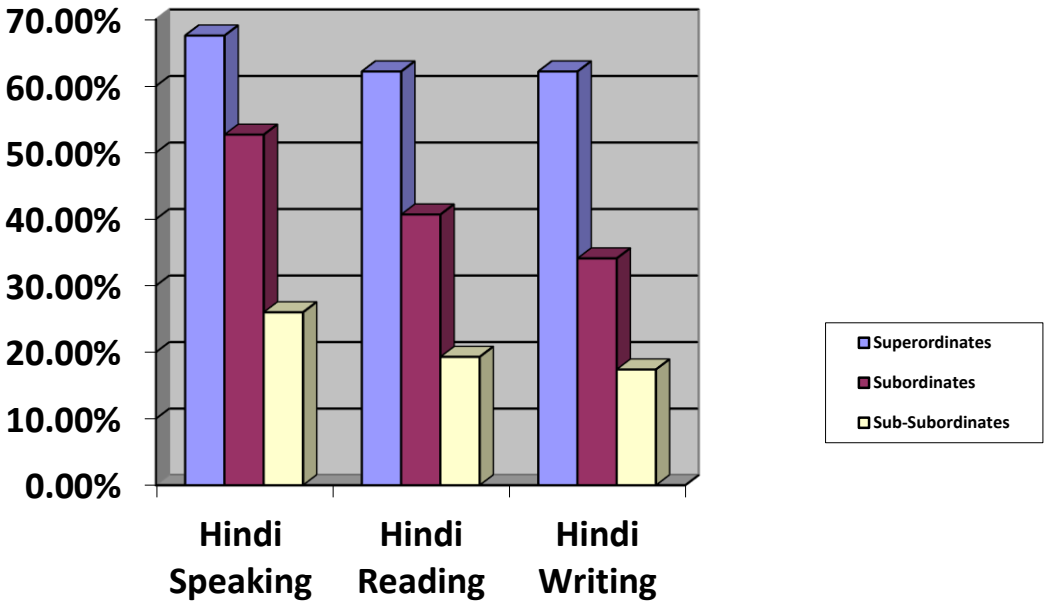


Chart 6.33: Understanding of Hindi in Workplaces

According to table 6.62 which presents the information about the speaking, reading and writing abilities of the workforce by its class, the data consists of organized and unorganized sector workplaces.

Observations

- Super-ordinates have by far the highest abilities of speaking, reading and writing Hindi then the subordinate and Sub-subordinates .
- 67.6% of Super-ordinates can speak Hindi 37.8% can read Hindi and only 62.2% of them can write Hindi. This percentage shows that the highest percent of them can speak Hindi but the percentage decreases slightly with reading and riding abilities of Hindi among Super-ordinates.
- The same can be found with subordinate and sub subordinate when it comes to reading and writing compared to speaking ability. Nearly half of the percentage dropped the ability of writing in Hindi of Sub-ordinates compared to super ordinance. The same trend followed in speaking and reading of Hindi abilities.
- Sub-subordinates ' abilities of speaking, reading and writing falls drastically in all abilities than Super-ordinates and Sub-ordinates.

- ➢ In sum, 29.2% of the entire workforce can speak Hindi 22.2% can read Hindi only 20% can write Hindi. Compared to Telugu abilities, Hindi abilities of the workforce have considerably decreased.
- ➢ The result of pearson chi-square significance i.e, 0.001 shows that there is significant association between telugu language abilities and class of workforce.

6.10.4 Speaking ability of other languages in Workplaces

Here, we try to find if there is any association between speaking ability of languages other than Telugu, English and Hindi, and class of workforce by using Chi-square test.

Speaking Ability of Other Languages in workplaces														
S.No	Class of Workforce	Speaking Other Languages												Total
		No	Yes											
			Ta	Ka	Ml	Ko	La	Mr	Od	Ur	Ab	Bn	BJ	TK	
1	Super-ordinates	28	1	0	0	1	2	0	0	1	0	2	1	1	37
		75.7 %	2.7 %	0%	0.0 %	2.7 %	5.4 %	0.0 %	0.0 %	2.7 %	0.0 %	5.4 %	2.7 %	2.7 %	100.0 %
2	Sub-ordinates	77	1	1	0	0	3	1	2	2	1	0	1	1	90
		85.6 %	1.1 %	1.1 %	0.0 %	0.0 %	3.3 %	1.1 %	2.2 %	2.2 %	1.1 %	0.0 %	1.1 %	1.1 %	100.0 %
3	Sub-subordinates	577	5	3	1	6	23	7	2	8	0	1	0	0	633
		91.2 %	0.8 %	0.5 %	0.2 %	0.9 %	3.6 %	1.1 %	0.3 %	1.3 %	0.0 %	0.2 %	0.0 %	0.0 %	100.0 %
	Total	682	7	4	1	7	28	8	4	11	1	3	2	2	760
		89.7 %	0.9 %	0.5 %	0.1 %	0.9 %	3.7 %	1.1 %	0.5 %	1.4 %	0.1 %	0.4 %	0.3 %	0.3 %	100.0 %
Pearson Chi-Square Significance: .001								Degree of Freedom: 24						

Table 6.63: Speaking ability of other languages in the organized sector:

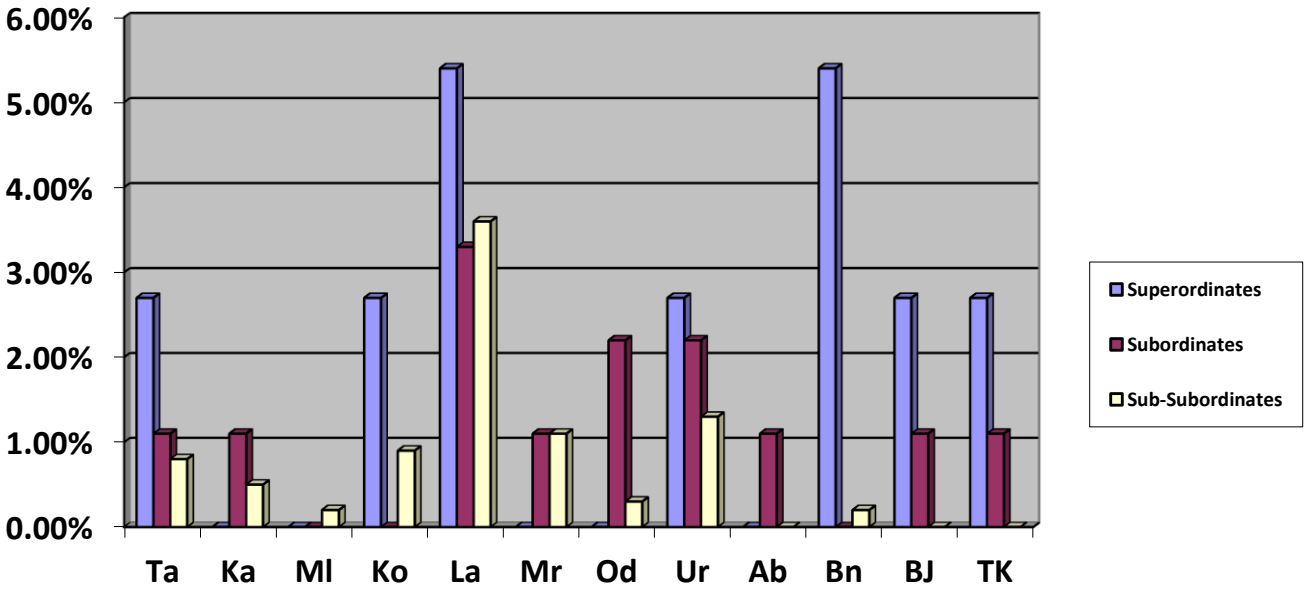


Chart 6.34: Speaking Ability of Other Languages in organized Sector

Table 6.63 illustrates the speaking ability of other languages by the class of workforce in the organisation sector.

Observations :

- Besides English, Telugu, and Hindi, there are a considerable number of languages, Tamil, Kannada, Malayalam, Koya, Lambadi, Marathi, Odia, Urdu, Arab, Bengali, Bhojpuri, Tamil and Kannada together which can be spoken by the workforce.
- The table shows that the organized sector workplaces are multilingual in nature. Diversity of the languages can be found in these industries.
- Of 37 Sub-ordinates, 9 members can speak various languages. Among Sub-ordinates one speaks Tamil, one speaks Koya, two members speak Lambadi, one person speaks Urdu, two persons speak Bengali, one person speaks Bhojpuri, and one person speaks Tamil and Kannada. Similarly, 13 members out of 90 workforce speaks 9 languages. With regard to Sub-subordinates , 51 members speak 9 languages out of 633.
- If we take a close look at the percentage of each workforce, Super-ordinates speak multiple languages with a high percentage and the diversity and the percentage of

speaking ability of various languages relatively decreases as class of work goes down.

- ➢ The data shows that the higher class of the workforce are great in number in speaking ability of diverse languages. Probably this could be because of the migrated workforce into the subordinate positions in the organized sectors.
- ➢ The Pearson chi-square result is 0.001 which shows there is great significant association between class of workforce and speaking ability of other languages.

6.10.5 Reading Ability of Other Languages in the organized sector

Workforce' ability of reading languages other than Telugu, English and Hindi are provided here. Chi-square test of SPSS is employed to find the correlation between these two variables.

Reading Ability of Other Languages in organized Sector									
S.No	Class of Workforce	Other Languages Reading							Total
		No	Yes						
			Ta	ka	Mr	Od	Ur	Ar	Bn	
1	Super-ordinates	35	1	0	0	0	0	0	1	37
		94.6%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	100.0%
2	Sub-ordinates	84	2	0	1	1	1	1	0	90
		93.3%	2.2%	0.0%	1.1%	1.1%	1.1%	1.1%	0.0%	100.0%
3	Sub-subordinates	622	2	3	5	1	0	0	0	633
		98.3%	0.3%	0.5%	0.8%	0.2%	0.0%	0.0%	0.0%	100.0%
	Total	741	5	3	6	2	1	1	1	760
		97.5%	0.7%	0.4%	0.8%	0.3%	0.1%	0.1%	0.1%	100.0%
Pearson Chi-Square Significance: .001						Degree of Freedom: 14				

Table 6.64: Reading Ability of Other Languages in the organized sector

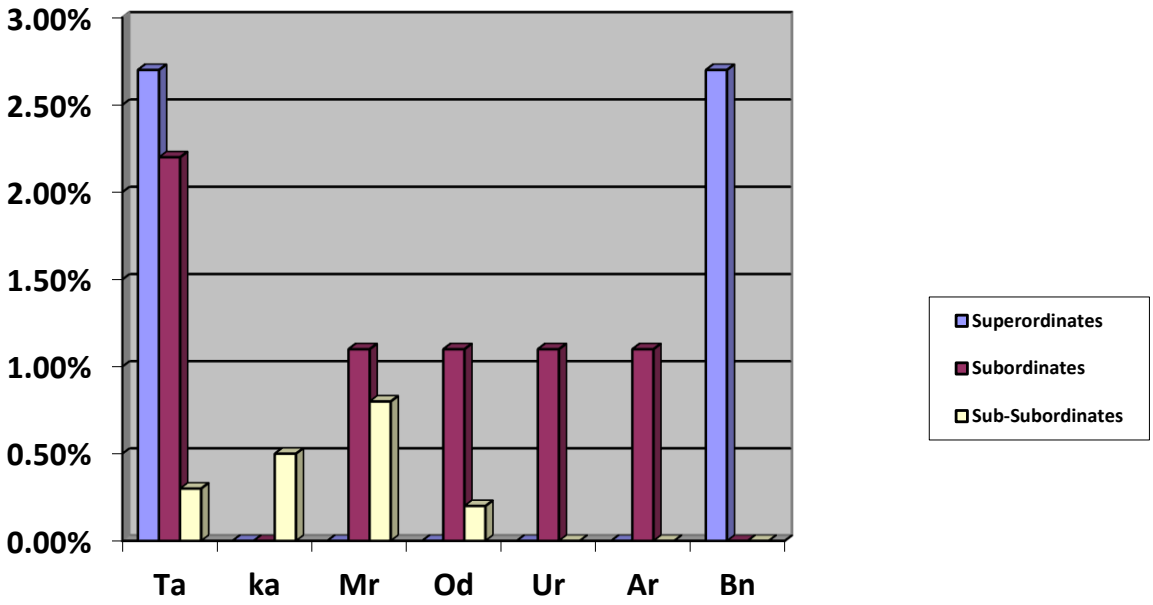


Chart 6.35: Reading Ability of Other Languages in organized Sector

Table 6.64 provides information about the reading ability of various languages according to the class of workforce in the organized sector.

Observations

- Increase in the class of workforce decreases the ability of multiple languages. Among Sub-ordinates, only two workers can read Tamil and Bengali.
- Interestingly, the ability of reading multiple languages increases as the class of workforce decreases, Sub-ordinates and especially Sub-subordinates read more languages than Super-ordinates.
- Pearson chi-square test significance is 0.001, which shows there is significant association between reading ability of other languages and class of workforce.

6.10.6 Writing Ability of Other Languages in Workplaces

This section deals with analyses of writing ability of other languages and class of workforce especially on organised sector workplaces, because unorganised sectors do not show use of multiple languages. To identify the correlation between writing ability of other languages and class of workforce, chi-square test is used.

Writing Ability of Other Languages in Workplaces									
S.No	Class of Workforce	Other Languages Writing							Total
		No	Yes						
			Ta	ka	Mr	Od	Ur	Ar	Bn	
1	Super-ordinates	35	1	0	0	0	0	0	1	37
		94.6%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	100.0%
2	Sub-ordinates	84	1	0	1	2	1	1	0	90
		93.3%	1.1%	0.0%	1.1%	2.2%	1.1%	1.1%	0.0%	100.0%
3	Sub-subordinates	622	2	3	5	1	0	0	0	633
		98.3%	0.3%	0.5%	0.8%	0.2%	0.0%	0.0%	0.0%	100.0%
	Total	741	4	3	6	3	1	1	1	760
		97.5%	0.5%	0.4%	0.8%	0.4%	0.1%	0.1%	0.1%	100.0%
Pearson Chi-Square Significance: .001						Degree of Freedom: 14				

Table 6.65: Writing Ability of Other Languages in organized Sector:

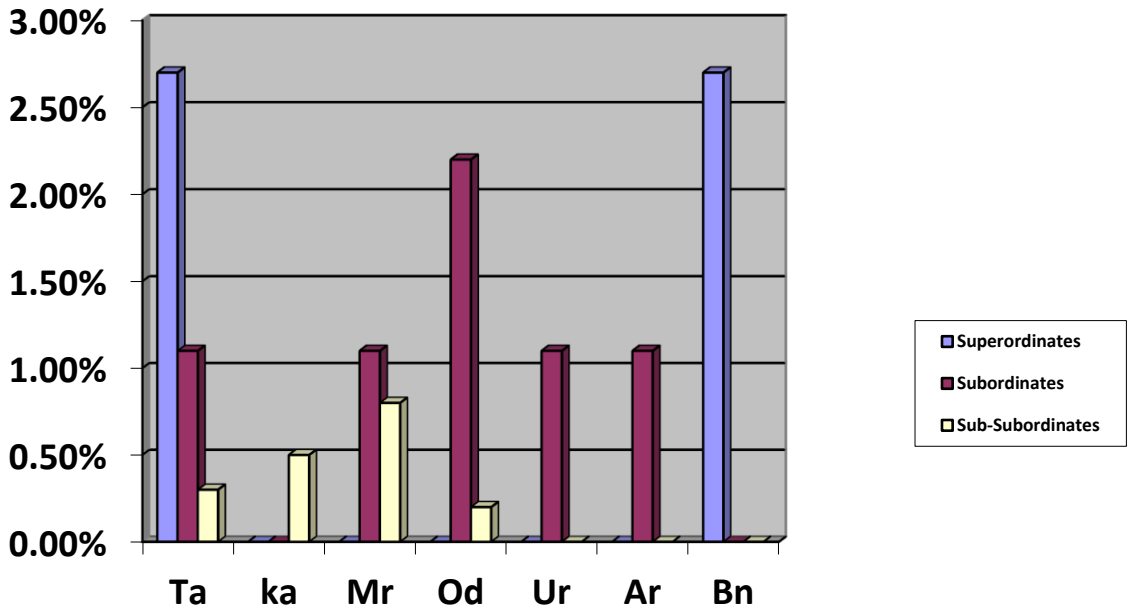


Chart 6.36: Writing Ability of Other Languages in organized Sector

The table 6.65 provides the data analyses of writing ability of other languages in the organized sector based on the class of workforce. Apart from Telugu, English and Hindi. There are a considerable number of workforce who can write Tamil, Karnataka, Marathi, Odia, Urdu, Arabic and Bengali.

Observations

- The diversity of languages has been reduced in reading and writing compared to the speaking ability of other languages in the organized sector.

- ➢ The reading ability of multiple languages increases as the class of workforce decreases.
- ➢ That there is correlation between the class of workforce and their ability to write in other languages as demonstrated by Pearson chi-square result, i.e, 0.001.

6.10.7 Language Use in Written Form of Communication in Workplaces

Writing used in various forms such as demand letters, leave letters, drafting mails, order letters, requesting letters, and complaint letters. Each form of writing has its own significance at workplaces. Unorganised sectors do not seem to use writing except on rare occasions such as requesting letters for provident funds and for other welfare schemes. Hence, the data from unorganised sectors is not included here. Chi-square test is employed to show the correlation between writing forms and use of language in each writing form.

Language Use in Writing in Workplaces					
S.No	Writing Forms	Indian Languages	English	Degree of Freedom	Pearson Chi-Square Significance
1	Demand Letters	657	103	1	.001
		86.4%	13.6%		
2	Leave Letters	469	291	2	.001
		61.7%	38.3%		
3	Drafting Mails	331	429	2	.001
		43.6%	56.4%		
4	Order Letters	2	708	2	.001
		0.01%	99.9%		
5	Recommendation Letters	397	296	2	.001
		57.3%	42.7%		
6	Complaint Letters	445	266	2	.001
		62.6%	37.4%		

Table 6.66 Language Use in Written Form of Communication in Workplaces:

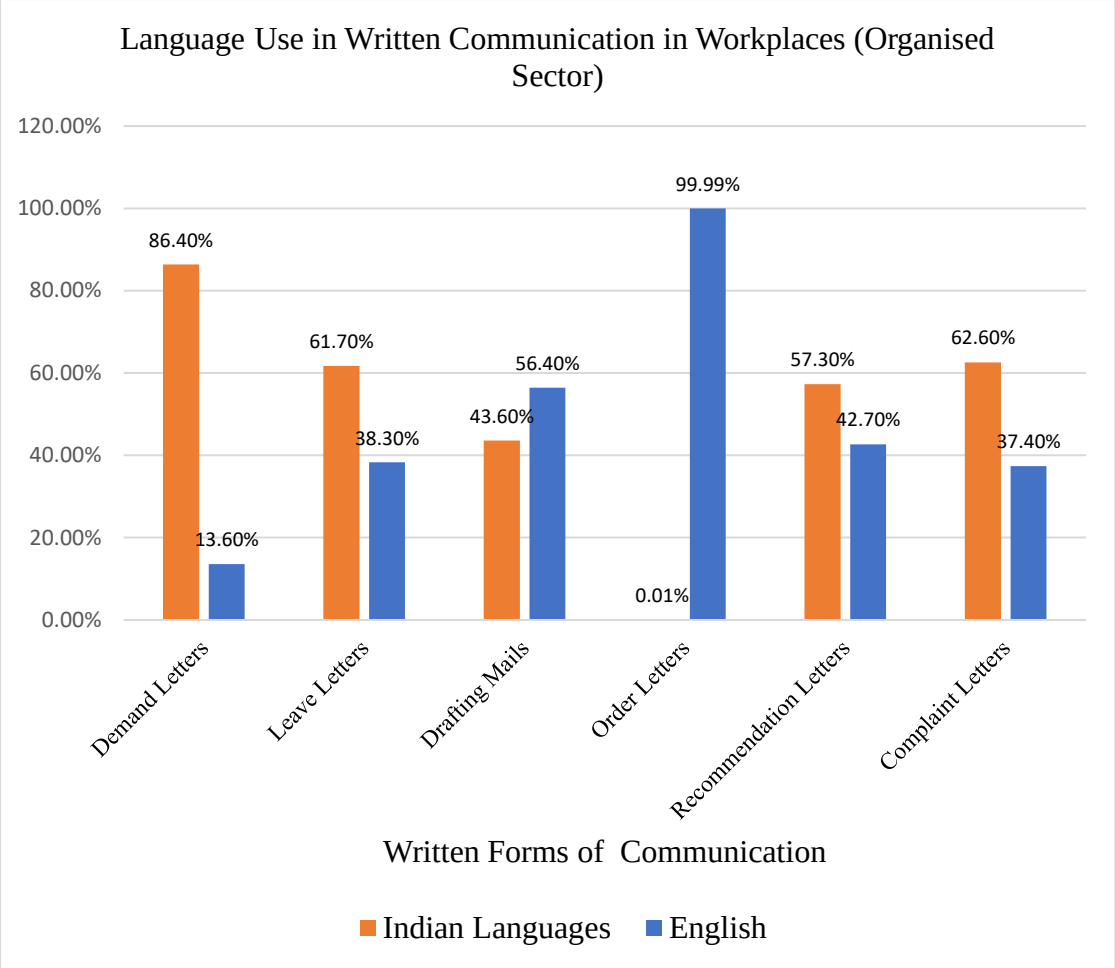


Chart 6.37: Language Use in Writing in organized Sector

Table 6.66 describes the language used in the written form of communication in the organized sector. Apart from the spoken form of communication there is a written form of communication that takes place in the workplaces. A spoken form of communication among the workforce is used to communicate with one another indirectly and to learn things from one another whereas, the written form of communication is used largely by the higher authorities in the workplaces. Besides that, the workforce also uses a written form of communication to communicate with the higher officials and vice versa. Written forms of communication have been divided into 6 forms. The first one is demand letters, the second one has leave letters which the workforce write to the higher officials, drafting emails is also done by the higher authorities as well as Sub-ordinates to report things of work, order letters which the officials issue, request letters which can be given to the officials, and finally complaint letters which the workforce can write of any class. Writing forms are arranged in rows of the table; the language used for these letters has been given in the 3rd

and 4th columns of the table. The degrees of freedom and the significance level is provided in the 4th and fifth column provided by the SPSS.

- 657 workforce use demand letters in their native languages Indian languages only 103 workforces use English demand letters to the higher authorities. So demand letters are used with 86.4% and have a significance with use of Indian languages. The percentage of Indian languages in demand letters has by far the highest compared to English use.
- The use of Indian languages for leave letters used nearly double then English with 61.7%.
- The workforce who are in the higher position and do the technical job use emails to show their work to communicate with co-workforce or officials. Therefore more than half of the workforce uses English over native languages.
- In the order letters issued by the officials or the firms, almost all of them used English with 99.9 %.
- In order to request authorities for requirements in workplaces, especially in the organized receptor, employees use request letters, for that nearly 57.3% of employees use Indian languages, and 42.7% of employees use English.
- Complaint letters are used across all workplaces in the organized sector, and Indian languages used almost double that of English.
- In all forms of writing in the organized sector, there is a significant relationship between the various forms of writing and choice of language.

6.11 Hypotheses Testing

We discussed the association between the choice of language and economic activity according to various variables with empirical evidence through the data analysis. This section focuses on testing the hypotheses that are mentioned in the chapter 1 (page no 7). To determine the statistical significance between the choice of language and economic activity in the workplaces, the empirical evidence was gathered from five workplaces located in Telangana state, India. Further, these workplaces have been divided based on their nature as organized sector and unorganized sector. The analysis of each sector has been provided and showed their significant association in the previous section.

The three hypotheses are tested against the empirical evidence and its analysis of both sectors, namely, organized and organized sectors. The three hypotheses that are mentioned in the introduction chapter are reiterated:

General Hypotheses

(i) The use of Indian Languages contributes more to economic activity at workplaces than the use of English

(ii) Native language-speaking illiterates and non-graduate literates contribute more towards production than English-speaking graduates in workplaces.

(iii) The choice of language changes according to the class of the workforce.

Null Hypothesis

(i) The use of Indian Languages does not contribute more to economic activity at workplaces
than the use of English

(ii) Native language-speaking illiterates and non-graduate literates do not contribute more to production than English-speaking graduates

(iii) The choice of language changes according to the class of workforce.

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The above-mentioned hypotheses are tested with the use of data collected and analysed through statistical tools such as SPSS and Stata (for information chapter 3, page 40). To find out the association between two category variables in the data collected, SPSS chi-square test is administered, and to find the statistical significance and association across all variables Stata Logistic model has been used.

SPSS Chi-Square Independence Test

SPSS Chi-Square Independence Test determines whether there is an association between two categorical variables drawn from the same data. Peng *et al*., (2022) studied the importance of speaking the same language in crowdfunding, for this they utilised the Chi-

square test. Belas et al, (2022) also used Chi-square test to understand the impact of covid on the small scall businesses. Further, Meng and Chapman (1966) explored the use od chi-square test. Chen and Chen (2011) used the chi-square measure in the text categorization. Hence this also explored the possibilities of using the Chi-square test to understand the categories of language use on different socioeconomic factors.

Here, the null hypothesis is a prerequisite to finding out the association between two variables. If a strong association occurs between two variables, therefore we refute the null hypothesis is rejected and the alternative hypothesis is accepted.

The test statistic for the Chi-Square Test of Independence is denoted X^2 and is computed as:

$$\chi 2=\sum i=1R\sum j=1C(oij-eij)/2eij$$

In which oij is the observed cell count in the ith row and jth column of the table and eij is the expected cell count in the ith row and jth column of the table, computed as eij=row i total∗col j total grand total. The quantity (oij - eij) is sometimes referred to as the residual of cell (i, j), denoted rij.

The calculated X^2 value is then compared to the critical value from the X^2 distribution table with degrees of freedom $df = (R - 1)(C - 1)$ and chosen confidence level. If the calculated X^2 value > critical X^2 value, then we reject the null hypothesis.

The problem

To identify which language (s) used more in economic activity at workplaces

6.11.1 Testing Hypothesis 1

In section 6.11.1 to 6.11.4 the general hypotheses are tested the data relevant to the hypothesis, SPSS Chi-square test and results are presented in their respective sub sections

Hypothesis

HO: The use of Indian Languages does not contribute more than the use of English in economic activity at workplaces

H1: The use of Indian languages contributes more to economic activity than the use of English at workplaces

6.11.2 Data Set of Use of Language in Economic Activity in Workplaces

S.No	Workplaces	Use of Language		Total
		English	Indian Languages	
1	organized Sector	78	682	760
		10.3%	89.7%	100.0%
2	Unorganized Sector	1	464	465
		0.2%	99.8%	100.0%
Total		79	1146	1225
		6.4%	93.6%	100.0%

Table 6.67 Data Set of Use of Language in Economic Activity in Workplaces

Table 6.67 provides the sample data set of the use of language in economic activity at workplaces. The data consists of 1225 workforce and their choice of language in economic activity. The sample data is categorized largely into the organized sector and unorganized sector. The use of language is presented in columns of the table namely English and Indian languages. The sample data from the organized sector was collected from 760 members of the workforce which is 10% of the sample from the all-organized sector workforce. From the collected sample data 78 (10.3%) members speak English in their economic activity while 682 (89.7%) members speak Indian languages while doing economic activity. There is a dramatic difference between the use of Indian languages and English in organized sector workplaces.

On the contrary, in the unorganized sector, out of a total sample of 465 only one person uses English. The use of the English is more in organized sector as it consists of graduates who use English. The one person in the unorganized sector who speaks English could be the one who occupies the higher position. However, out of 465 numbers, nearly 99% of the workforce of the unorganized sector use their native languages in economic activity. Overall, the use of Indian languages in the workplace is 93.6% whereas 6.4% of the workforce uses English in economic activity as in our data collected.

6.11.3 Chi-Square Test Analyses of Use of Language in Economic Activity in Workplaces

S.No	Workplaces	Count	Use of Language		Total
			English	Indian Languages	
1	organized Sector	Observed Count	78	682	760
		Expected Count	49	711	760
		Residual	29	-29	
2	Unorganized Sector	Observed Count	1	464	465
		Expected Count	30	435	465
		Residual	-29	29	
Total		Observed Count	79	1146	1225
		Expected Count	79	1146	1225

Table 6.68 Chi-Square Test analysis of Use of Language in Economic Activity in Workplaces

Table 6.68 shows the Chi-Square test analysis of the use of language in economic activity in workplaces. The Chi-Square test takes the count of observed account, expected count and residual count to analyse the data set to find out the association between the use of language and economic activity in the workplace. These counts are presented in the second column of the table 6.68. The observed count is responses from the empirical data collection. The expected count is provided by the SPSS which shows probable expected responses and finally residual count which is the difference between the observed account and the expected count. Computing these three accounts, the SPSS Chi-Square test provides the analysis spot to show whether there is a significant association between the two categorical variables, namely the use of language and economic activities at the workplaces. The observed account of the use of English is 78, but the expected count is 49 the difference between these two counts is 29 in the same way the observed account of the sample data of the use of Indian languages is 682 the expected counts are 711 which is

little more than the observed count. On the other hand,. The observed count of the use of English is 1, and the expected count is 30, which is more than the observed count. We have 29 differences between these two counts. Of Indian languages in the organized sector, the absorbed account is 464 and the expected count is 435 the difference between these two counts is 29.

6.11.4 Results of Chi-Square Tests of Use of Language in Economic Activity in Workplaces

Test	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	48.279	1	.001
Continuity Correction[b]	46.628	1	.001
Likelihood Ratio	68.770	1	.001
Linear-by-Linear Association	48.240	1	.001
N of Valid Cases	1225		

Table 6.69 Results of Chi-Square Tests of Use of Language in Economic Activity in Workplaces

The table 6.69 presents the Chi-Square results of tests of the use of language in economic activity in the workplaces. The value of the square test is 48.279, and the degree of freedom is 1; the significance between the use of language and economic activity in the workplaces is 0.001 which means there is a significant association between the use of language and economic activity. The Indian languages are used 93.6% and English by 6.4% workforce. Therefore, the null hypothesis that the use of Indian languages does not contribute more in economic activity than English, is rejected because the p-value is less than 0.05 which shows a significant association and the percentage of the use of Indian languages by far the highest 93.6%. Hence, the data found solid evidence to support the alternative hypothesis that Indian languages contribute more in economic activity than English.

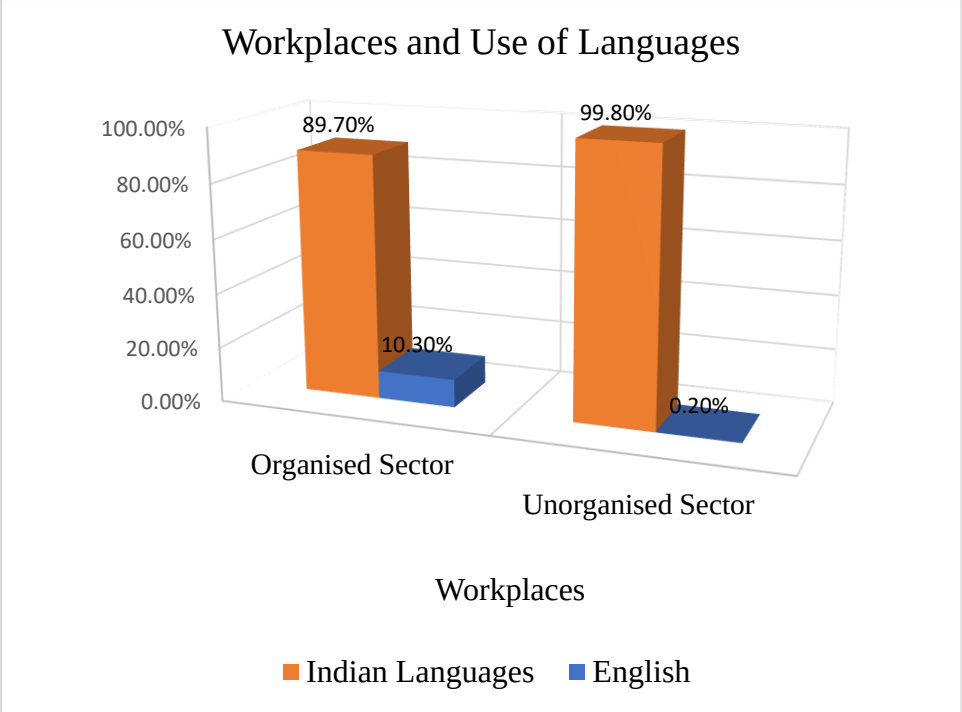


Chart 6.37: Workplaces and Use of Language

The bar chart 6.37 shows the difference between the use of language in organized and unorganized sectors. The use of Indian languages in the organized and unorganized sectors is greater than English. A considerable workforce in the organized sector hence it is a little higher than the unorganized sector where there is only 0.20% however the overall percentage of the use of Indian languages in both sectors is raised sharply.

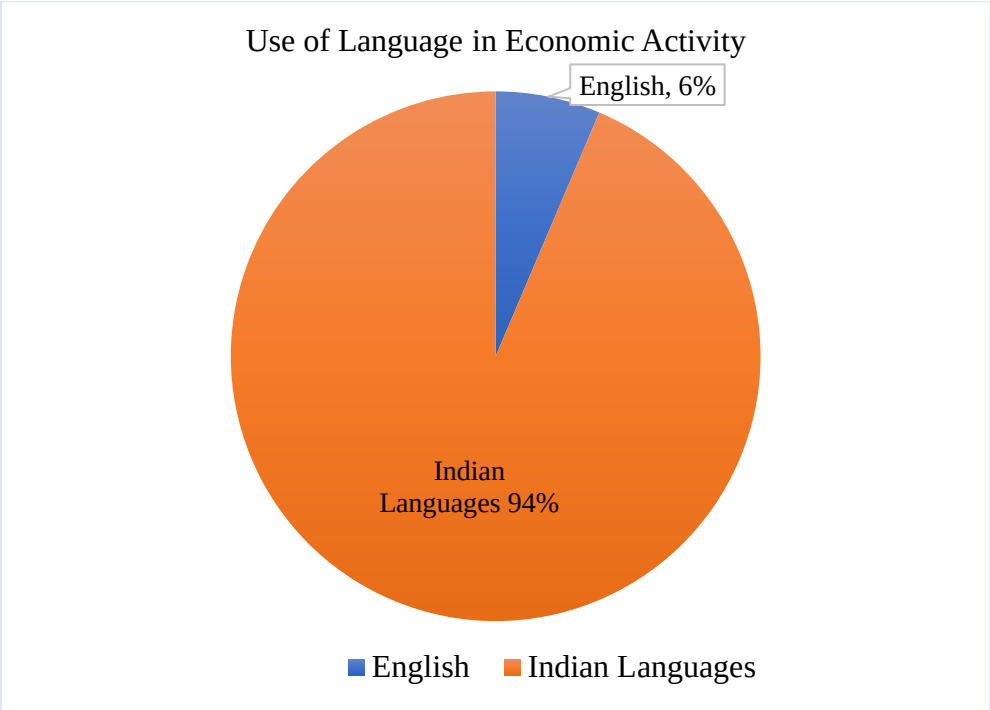


Chart 6.38: Use of Language at Workplaces

The pie chart 6.38 illustrates the use of language in organised and unorganised sectors which involve in economic activity. The pie chart is divided into two parts as there are English and Indian languages that are used in economic activity. The orange portion indicates the use of Indian languages and the blue part indicates the use of English in economic activity.

6.11.5 Testing Hypothesis 2:

In section 6.11.5 to 6.11.8 the general hypotheses are tested the data relevant to the hypothesis, SPSS Chi-square test and results are presented in their respective sub section.

Hypothesis

H0: Native language speaking illiterates and non-graduate literates do not contribute more in production than English speaking graduates.

H1: Native language-speaking illiterates and non-graduate literates contribute more in production than English-speaking graduates.

The Problem

To find out the education levels of workforce who contribute to production in economic activity.

6.11.6 Data set of Education Levels and Use of Language in Workplaces

S.No	Education Level	Use of Language		Total
		English	Indian Languages	
1	English-speaking Graduates	58	144	202
		28.7%	71.3%	100.0%
2	Native Language Speaking Non-Graduates and Illiterates	21	1002	1023
		2.1%	97.9%	100.0%

Total	79	1146	1225
	6.4%	93.6%	100.0%

Table 6.8.5 Data Set of Education Levels and Use of Language in Workplaces

Table 6.8.6 provides information about education levels and use of language at the workplaces. The total workforce has been divided into two large groups based on the education and choice of language they use in their economic activity. The first group is English-speaking graduates. The workforce who completed their graduation and can speak English in economic activity is grouped under English-speaking graduates. However, not all English-speaking graduates can speak English in workplaces, and some of them might use their native languages in economic activity.

The second group is 'Native Language Speaking Non-Graduates and Illiterates' by definition they are non-graduates and who did not undergo formal education and their native languages in their economic activity. But some of them might use English to communicate with their superiors in their economic activity. There are 202 English-speaking graduates who can speak English, but only 58 (28.7%) of them use English in their economic activity while 144 (71.3%) workforce use Indian languages. This shows more graduates who can speak English but choose to use native languages in the workplaces. In a similar fashion native language-speaking non-graduates and illiterates are 1023 in number but 21 (2.1%) of them use English in their economic activity, and the majority of them 1002 (97.9%) workforce use their native languages. These numbers are quite evident to show that 93.6% of the entire workforce uses their native language in the workplaces whereas the other 79 numbers with 6.4% use English. On the other hand, the data set shows the number of English-speaking graduates is less than the native language-speaking non-graduates and illiterates. In economic activity, the number of native language-speaking non-graduates and illiterates is greater in number than English-speaking graduates.

6.11.7 Chi-Square Test For Education Levels and Use of Language in Workplace

S.No	Education Levels	Count	Use of Language		Total
			English	Indian Languages	
1	English-speaking Graduates	Observed Count	58	144	202
		Expected Count	13.0	189.0	202.0
		Residual	45.0	-45.0	

2	Native Language Speaking Non-Graduates and Illiterates	Observed Count	21	1002	1023
		Expected Count	66.0	957.0	1023.0
		Residual	-45.0	45.0	
Total		Count	79	1146	1225
		Expected Count	79.0	1146.0	1225.0

Table 6.70: Chi-Square Test For Education Levels and Use of Language in Workplaces

The above table 6.70 describes the analysis of the Chi-Square test for education levels and the use of language economic activity at workplaces. The observed count is about the sample collected from the fieldwork and the response according to their use of language. English-speaking graduates actually use English in economic activity as shown in the observed count which is 58, the expected count is 13.0, and the residual count is 45.0 Similarly English-speaking graduates who speak Indian languages at the workplaces are 144 numbers which is far greater than the use of English. The expected count is 189 members, the residual is -49. If we take the observed count of native language-speaking non-graduates and illiterates who speak English is 21, and out of 1023 members, 1002 members speak native languages which is reported in the observed account. The expected count of English and Indian languages is 66.0 and 957.0 respectively. The use of English residual is -45.0, and under Indian languages, 45.0 is the residual count. In total 1146 members speak native languages and 79 of them use English.

The analysis shows that the number of native language-speaking non-graduates and illiterates is higher than the English-speaking graduates. Based on the observed number and expected number, the SPSS Chi-Square test computes the significance level of the variables above the given table.

6.11.8 Results of Chi-Square Tests

Results of Chi-Square Tests			
Tests	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	198.735	1	.000
Continuity Correction[b]	194.341	1	.000
Likelihood Ratio	138.910	1	.000

Linear-by-Linear Association	198.573	1	.000
N of Valid Cases	1225		

Table 6.71 Results of Chi-Square Tests

Table 6.71 shows the results of the square tests of education levels and use of language in economic activity at workplaces. Taking account of observed and expected count high square test provides the value that is 198.735 and degrees of freedom is 1, and finally Pearson Chi-square significance is 0.001 which is nothing but the p-value. Since the p-value is 0.001, there is a significance between education levels and the use of language in economic activity at workplaces. The analyses also shows that the number of English-speaking graduates is 58 which is less than the native language-speaking non-graduates and illiterates 1002. Hence the Null hypothesis - native language-speaking non-graduates and illiterates contribute less in economic activity than the English-speaking graduates is rejected because statistical significance shows that the number of English-speaking or less in number and native language-speaking non-graduates and illiterates are more in the number who participate in economic activity at workplaces. Therefore the null hypothesis is rejected, and the alternative hypothesis native language-speaking non-graduates and illiterates are contributed more in economic activity than English-speaking graduates.

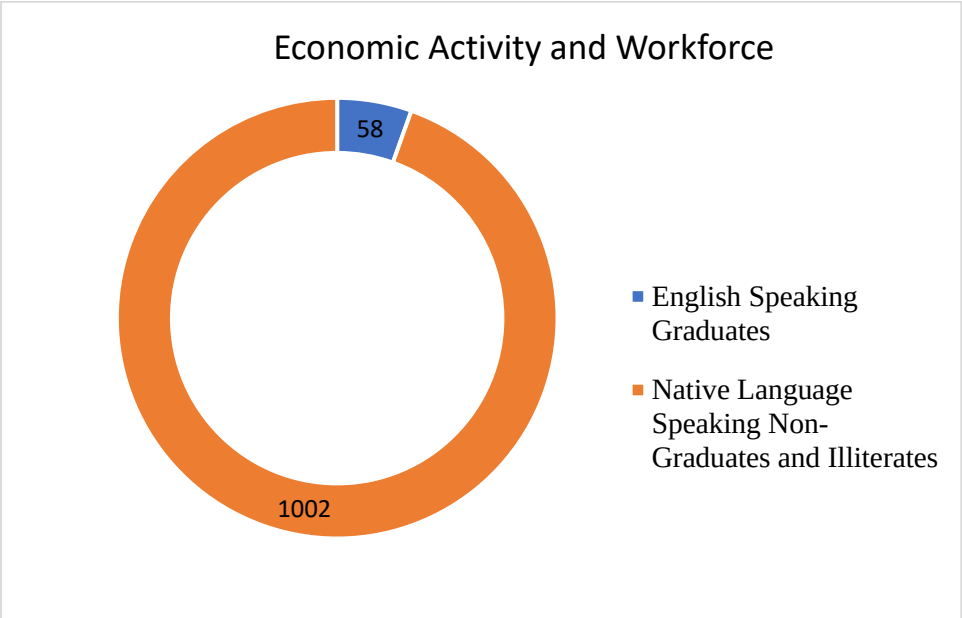


Chart 6.39 Economic Activity and Workforce

The pie chart 6.39 clearly shows that Indian language speaking non-gradation illiterates participation is more in economic activity than English-speaking graduates.

6.11.9 Testing Hypothesis 3:

In section 6.11.9 to 6.11.11 the general hypotheses are tested the data relevant to the hypothesis, SPSS Chi-square test and results are presented in their respective sub sections

Hypothesis:

H0: The choice of language does not change according to the class of the workforce.

H1: The choice of language changes according to the class of work.

The Problem

To determine whether the choice of language changes according to the class of the workforce.

6.11.9 Data Set of Class of Workforce and Use of Language in Economic Activity

S.No	Class of Workforce	Use of Language		Total
		English	Indian Languages	
1	Super-ordinates	29	8	37
		78.4%	21.6%	100.0%
2	Sub-ordinates	13	78	91
		14.3%	85.7%	100.0%
	Sub-subordinates	37	1060	1097
		3.4%	96.6%	100.0%
Total		79	1146	1225
		6.4%	93.6%	100.0%

Table 6.72: Class of Workforce and Use of Language in Economic Activity

Table 6.72 shows the sample data set of the class of workforce and their use of language in economic activity. The class of workforce has been divided into three groups. The first group is superordinated who occupy the highest position like owners, general managers, managers, etc in the workplace. The second group is Sub-ordinates who are less in position than the super-ordinates who occupy certain positions like safety officers, engineers, supervisors, etc. The third and final group is Sub-subordinates who obey the instructions of the engineers, safety officers and supervisors, and workforce in the workplaces. The work of the Sub-subordinates do more labour work than the Super-ordinates and Sub-ordinates.

Out of 1225 samples, 37 members are Super-ordinates, 91 members are Sub-ordinates, and 1097 members are Sub-subordinates . Super-ordinates tend to speak the English language as their number shows that 29 (78.4%) out of 37 numbers speak English only 8 (21.6 %) members speak Indian languages. Among Sub-ordinates, 13 (14.3%) out of 91 members speak Indian languages whereas 78 (85.7%) members speak Indian languages in economic activity. The use of English from Super-ordinates to Sub-ordinates has fallen to 78 to 14% which is a 64 percent decrease from Super-ordinates to Sub-ordinates.

In the third group Sub-subordinates , out of 1097 members, 37 (3.4%) members only speak English whereas 1060 (96.6%) members speak Indian languages. In some, 93.6% workforce speak Indian languages, and 6.4% but forced to speak English in economic activity. The percentage of English declined from super ordinance to Sub-ordinates. As you can see, 78.4% of Super-ordinates speak English, 14.3% of Sub-ordinates speak English, and only 3.4% of Sub-subordinates speak English.

On the contrary, the use of Indian languages increases as the class of the workforce goes down. In the given data set only 21.6% of Super-ordinates speak Indian languages, 85.7% of Sub-ordinates speak Indian languages, and Sub-subordinates 96.6% use Indian languages in economic activity which is the largest percentage of all classes of the workforce in the workplace. We can see the choice of languages changes from one class of workforce to another class of workforce based on the evidence shown in the above table.

6.11.10 Chi-Square Analysis Data Set For Class of Workforce and Use of Language in Economic Activity

S.No	Class of Workforce		Use of Language		Total
			English	Indian Languages	
1	Super-ordinates	Observed Count	29	8	37
		Expected Count	2.4	34.6	37.0
		Residual	26.6	-26.6	
2	Sub-ordinates	Observed Count	13	78	91
		Expected Count	5.9	85.1	91.0
		Residual	7.1	-7.1	

	Sub-subordinates	Observed Count	37	1060	1097
		Expected Count	70.7	1026.3	1097.0
		Residual	-33.7	33.7	
Total		Observed Count	79	1146	1225
		Expected Count	79.0	1146.0	1225.0

Table 6.73 Chi-Square Analysis Data Set For Class of Workforce and Use of Language in Economic Activity

Table 6.73 provides the Chi-square test analysis of the data set of the class of workforce and use of language the economic activity. The observed count of the Super-ordinates who speak English is 29 and expected count of the same is 2.4, and the residual count is 26.6. Similarly, the super-ordinates who speak Indian languages are 8 which is an observed account, and the expected count is 34.6, which is more than the observed count and the residual count is - 26.6. of the Sub-ordinates who speak English is 13 and the expected count is 5.9 the residual is 7.1.

In addition to that, for Sub-ordinates who speak Indian languages 71, their expected count is 85.1, which is a little less than the observed count, and the residual count is minus 7.1. The observed count of Sub-subordinates who speak English is 37, their expected count is 70.7, and the residual is -33.7. Sub-subordinates who speak Indian languages are 1060 their expected count is 1026.3, which is almost close to the observed count their residual is 33.7. Based on the above set of analysis, test results are shown in below table where we can find whether there is significance between the class of workforce and their choice of language.

6.11.11 Results of Chi-Square Tests

Tests	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	343.773	2	.001
Likelihood Ratio	149.080	2	.001
Linear-by-Linear Association	278.344	1	.001

N of Valid Cases	1225		

Table 6.74 Results of Chi-Square Tests

Table 6.74 describes the results of the Chi-square tests provided by the SPSS. The Chi-square value is 343.773, and the degrees of freedom of the computer table is 2. The significance of the above-mentioned variables is 0.001. Since the p-value is less than 0.05, we can say that there is a significant association between the class of workforce and their use of language in the economic activity at websites. In addition to that, the choice of language changes from one class of workforce to another class of workforce as displayed in table 1 data set for hypothesis 3. Hence based on the statistical significance we can reject the null hypothesis that the choice of language doesn't change from one class of workforce to another class of workforce, and the empirical evidence supports the alternative hypothesis that the choice of language changes from 1 class of workforce to another class of workforce.

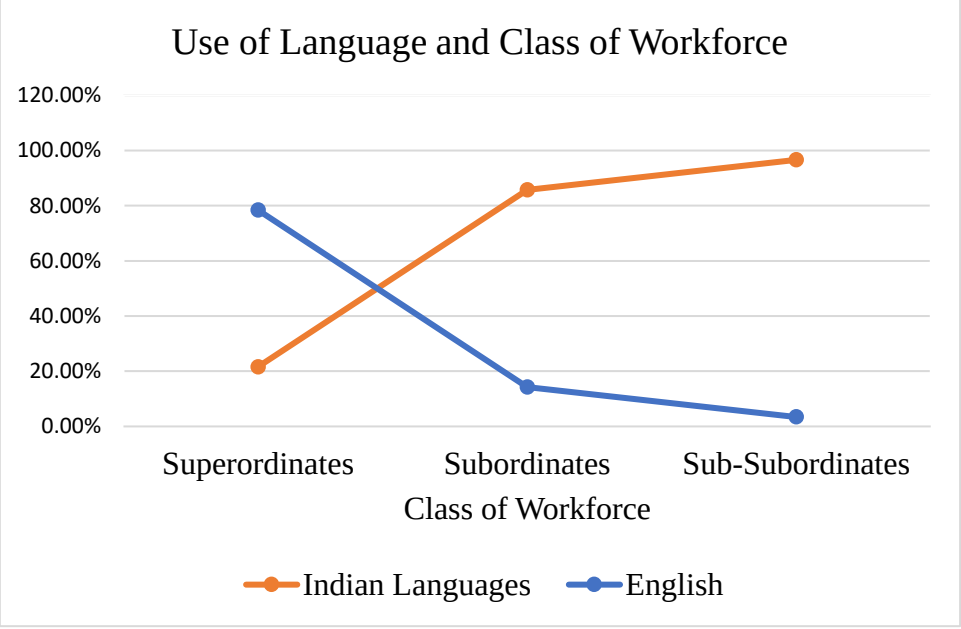


Chart 6.40: Use of Language and Class of Workforce

The choice of language from one class of workplace to another class for force can be identified in the line chart mentioned. In the line chart, the orange line indicates Indian languages and the blue line indicates the use of English in economic activity according to the class of workforce. As we can see, the orange line starts from the lower percentage of Super-ordinates and rises shortly to the Sub-ordinates, and it is the peak to the Sub-

ordinates. The use of English starts nearly with 80% and falls sharply to the subordinate below 20% and further dips to the Sub-subordinates . The blue line and the orange line meet between Super-ordinates and Sub-ordinates where they exchange the use of language for another language. Sub-subordinates did not exchange the languages but simply used both languages in different circumstances.

6.12 Logistic Regression

Logistic regression is used when the dependent variable is dichotomous (two outcomes). Gándara (2018) used logit model to understand the economic values of bilingualism in the Unites States of America (USA). Further, Govindapuram *et al*.,(2022) used a logit model to understand the access to formal credit by using a primary level data from NFHS data. Based on this we used logit model to understand the use of language in the Indian languages context.

In this context, the use of language in economic activity at the workplaces has been tested against the other independent variables such as age, gender, native place, class of workforce, education levels, and mother tongue of the workforce. Strata is one of the advanced econometric tools that compute the association using this logit model. In the SPSS Chi-Square test, we saw the association between two category books and their significance level. This model shows significance levels across all variables through language and economic activity.

The logistic regression approach is one of the important approaches for developing a probability model for the Binary response variables. It follows a Logistic distribution. We can estimate the Logit Model by the following formula,

Logit: $F(Y) = \log[Y/(1-Y)]$

$L_i = \ln (P_i/1-P_i) = \beta_1 + \beta_2 X_i + \varepsilon_i$

Where,

- Y is a binary dependent variable.
- X_i is Explanatory Variables.
- L_i is logit, β_1& β_2 are coefficients ε_i is a stochastic term.

P_i is a Probability of success

Further to understand the use of language at the workplace, uses Logit Model explains the different factors that will influence Which language to use? Here we have two options, one is English (0) and another one is Indian languages (1).

The Model:

$$\mathbf{L_i = \ln (P_i /1- P_i) = \beta_1 + \beta_2 Gender + \beta_3 Age + \beta_4 Education + \beta_5 ClassOfWork + \varepsilon_i}$$

Choice of language USE – English or Indian Languages (0 or 1)

Table 6.75: Social Variables of Workforce and The Use of Language

S.No	Social Variables of Workforce	Use of Language
1	Mother Tongue	1.128***
		(0.389)
2	Age	-0.377**
		(0.152)
3	Native Places	-0.0426
		(0.296)
4	Class of Workforce	2.190***
		(0.375)
5	Education Levels	-2.552***
		(0.353)
6	Gender	0.125
		(0.0796)
	Observations	1,225

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The variables with three stars **(***)** indicate that the p-value is less than 0.001, which shows the independent variable has a significant association with the use of language. In other words, the said variables are closely linked to the use of language. In the same way, the which has two starts **(**)** in which the p-value is less than 0.05, are linked with language use. Finally, the variables with one star **(*)** connection or zero star show no

association or link with the use of language. As it was shown in the 7.2 table, The mother tongue, class of workforce, and education levels of the workforce have three stars **(***)** which indicates a significant association with the use of language. Similarly, the age of the workforce has two stars **(**)** connection with the use of language, which means they have a less significant association with the use of language. The native place of the workforce and gender of the workforce have no association with the use of language.

Mother tongue is one of the key finding in this study as there is a strong correspondence between the mother tongue of the workforce and the use of language in economic activity which is indicated by (***) in the table 7.1.1, which shows they have a highly significant relationship. Native workforce of Telangana who is more in number, and some of them who occupy the highest positions use English to communicate with their co-workers and sometimes use native languages to communicate with Subordinates. If we see the table 6.59 in 174 page, Telugu speaking people use Indian language with 83%, even Hindi and Lambadi speaking people also majority of them are using Indian languages, Therefore, there is a great significant association between the mother tongue of the workforce and the use of language.

The second variable, age, has a slightly less significant association than gender concerning the use of language. As per the results, the age group below 20 and above 60 do not English in economic activity at workplaces, the highest percentage of use of English (9.4) was found with the age group of 20 - 29, and the least with 5.3 % with the age group of 50 - 59. However, most of the groups use 100 % of their native languages in economic activity. Therefore, the study found that there is no strong link between the age of the workforce and the use of language in economic activity at workplaces.

It would appear that there is no strong association between native places of the workforce and the use of language in economic activity. The data shows that some workforce migrated from 8 states of India to Kothagudem a district of Telangana to work. The highest number of the workforce are native to the Telangana state, where the study was conducted, 27 are from Andhra Pradesh, and some of the workers migrated from Uttar Pradesh, Odisha, Tamil Nadu, Bengal, Karnataka, and Maharashtra. The findings of the study show that the workforce from non-Telugu states tends to speak English in their economic activity and the

majority of the workforce, irrespective of their native language, use Indian Languages in their economic activity.

The significant association between the class of the workforce and the use of language is an important finding of this study. The study reveals that the use of English gradually decreases as the class of the workforce goes down. Super-ordinates tend to use English more (78.4%) than Sub-ordinates (14.3%) and Sub-subordinates (3.4%) in economic activity. On the contrary, The use of Indian languages increases as the class of the workforce lowers. Super-ordinates use Indian languages at 21.6 % which is the lowest compared to other classes of the workforce, Sub-ordinates use 85.7% of Indian languages, and the lowest class of the workforce, Sub-subordinates , use 96.6 % almost close to 100% Indian languages. Therefore, the present study findings relating to the class of workforce and the use of language in economic activity confirm that there is a significant association between these two variables and show that the majority of the workforce uses Indian languages in their economic activity.

Another interesting finding of this study is the relationship between the education levels of the workforce and their use of language in economic activity. The levels of education are arranged from lower which is illiterates to the highest postgraduates. Interestingly, the use of English found to 0.0% of illiterates and gradually increases as levels of education increase. The highest percentage of the use of English was found at the postgraduate (69.5) % level. In contrast, the use of Indian languages declines little by little as levels of education increase. Illiterates use 100 percent of Indian languages which is the highest, and when it comes to primary education level, it decreases a little by 0.5 %. Finally, it reached the post-graduation level, which was found to be 30.5 %. The reason for the decrease in Indian languages as levels of education increase could be that some of the graduates and postgraduates occupy the highest position in the workplaces, and do official work, therefore the use of Indian languages decreases. However, the majority of the workforce 1146 out of 1225 use Indian languages.

The study of spoken language use shows that males seem to use English (7.3%) more than females (4.3%) despite the use of English. The majority of them use their native languages (93.6%) in economic activity at workplaces. The use of English exists in organized sector workplaces in which the participation of men is more than in unorganized

sector workplaces. According to the evidence of this study, women's participation in unorganized sector workplaces is more than men which could be why the use of English has its link to the choice of language. However, the study found that there is no significant association between gender language use in economic activity.

Besides the spoken language data at workplaces, the questionnaire also aimed to collect the written language as a form of communication. As compared to spoken language, written language is used less; it is confined to some contexts at workplaces. According to the present study, in written language communication, 62.6 percent of the workforce uses Indian languages, and 37.4 % of the workforce English.

6.13 Average Annual Gross Salary of Workforce:

Section 6.13 attempts to show the languages that are used in the economic activity and their correspondence to the average annual gross salaries of the workforce. This section discusses the average gross salary of the workforce from each selected workplace for this study. Table 6.52 presents the total number of workforce and the average gross salary of each class of the workforce. Here, the average salary is obtained from the monthly salary of the workforce as stated by management of the workplaces, and the average salary is multiplied by the twelve months, which gives the results of the annual gross salary. These yearly gross salaries are estimated or approximated based on the data provided by the workplaces.

S.No	Workplace	Average Annual Gross Salary*[9] of Workforce As in 2016					
		Super-ordinates		Sub-ordinates		Sub-subordinates	
		Num	Anu. Salary	Num	Anu. Salary	Num	Anu. Salary
1	SCCL	154	2,70,00,000	620	99,20,00,000	2324	139,44,00,000
2	KTPS	122	29,28,00,000	492	88,56,00,000	1843	11,05,80,000
3	NSLKS	25	2,40,00,000	100	5,40,00,000	375	11,25,00,000
4	HI	2	12,00,000	5	4,80,000	993	14,29,92,000
5	VBF	1	9,60,000	10	14,40,000	3639	10,91,70,000
	Total	**304**	**34,59,60,000**	**1227**	**193,35,20,000**	**9174**	**186,96,42,000**

[9] https://scclmines.com/scclnew/rtic10.asp

Grand Total: 414,91,22,000

Table 6.76: The Average of Annual Salaries of Each Class of the Workforce

Observations:

- ➢ The total average annual gross salary of the five selected workplaces is 414,91,22,000 crores.
- ➢ The average annual gross salary of subordinates is higher, with 193,35,20,000 crores, than super-ordinates and subordinates.
- ➢ Super-ordinates are fewer in number (304) compared to subordinates and sub-subordinates. Though they receive a high amount of salary than subordinates and sub-subordinates, their average annual gross salary is less than the sub-subordinates and subordinates.

6.13.1 Average Gross Salary of Workforce in Organised Sectors

Here, the average gross salary of the workforce who work in organised sectors are presented in table 6.53.

S.No	Workplace	Average Gross Salary of Workforce in Organised Sectors As in 2016					
		Super-ordinates		Sub-ordinates		Sub-subordinates	
		Num	Anu. Salary	Num	Anu. Salary	Num	Anu. Salary
1	SCCL	154	2,70,00,000	620	99,20,00,000	2324	139,44,00,000
2	KTPS	122	29,28,00,000	492	88,56,00,000	1843	11,05,80,000
3	NSLKS	25	2,40,00,000	100	5,40,00,000	375	11,25,00,000
	Total	**301**	**34,38,00,000**	**1212**	**193,16,00,000**	**4542**	**161,74,80,000**

Grand Total: 389,28,80,000

Table 6.77: Average Gross Salary of Workforce in Organised Sectors As in 2016

Observations:

- ➢ The total average annual gross salary of organised sectors is 3892880000 crores.
- ➢ In organised sectors, the average annual gross salary of subordinates is greater than super-ordinates and sub-subordinates.
- ➢ Science sub-subordinates are huge in number, i.e., 4542, hence their average annual gross salary i.e. 161,74,80,000 crores, is greater than super-ordinates who are few in number.

6.13.2 Average Gross Salary of Workforce in Unorganised Sectors:

The average annual gross salaries of unorganised sectors workforce is in this section. the salaries are provided according to the class of workforce here.

S.No	Workplace	Average Gross Salary of Workforce in Unorganised Sectors As in 2016					
		Super-ordinates		Sub-ordinates		Sub-subordinates	
		Num	Anu. Salary	Num	Anu. Salary	Num	Anu. Salary
1	HI	2	12,00,000	5	4,80,000	993	14,29,92,000
2	VBF	1	9,60,000	10	14,40,000	3639	10,91,70,000
	Total	**3**	**21,60,000**	**15**	**19220000**	**4632**	**25,21,62,000**

Grand Total: 25,62,42,000

Table 6.78: Average Gross Salary of Workforce in Unorganised Sectors.

Observations:

- ➢ Since the number of super-ordinates is few in number than subordinates and super-ordinates the average annual gross salary of super-ordinates is less than subordinates and sub-subordinates.
- ➢ It is observed that the majority workforce, i.e. sub-subordinates are receiving more average annual gross salary i.e. 25,21,62,000.
- ➢ Compared to organised sectors, unorganised sector's annual gross salary is significantly less, but sub-subordinates earn more within unorganised sectors.

6.13.3 Average Annual Gross Salary of Workforce Based on Use of Language in Workplaces:

The average annual gross salaries of the workforce of selected workplaces are distributed based on the percentage of the use of language. Education levels of workforce are provided based on the data collected for the research. A detailed correspondence of education levels of workforce and the use of language in economic activity in the selected workplaces can be seen in (page: 161) The use of language in economic activity is provided in section 6.9.3 (page 159). Now, the calculated average annual gross salaries based on the monthly salaries given by the workplaces are divided based on the results of the use of language in workplaces provided in section 6.9.3 (page 159). Here, the average annual gross salaries

are provided for the total workforce but not the samples. However, the current study's results of the analysis of the empirical evidence are applied to the total workforce.

Average Annual Gross Salary of Workforce Based on Use of Language in Workplaces				
S.No	Class of Workforce	Educational status	Use of Language	
			English	Indian Languages
1	Super-ordinates	>/=graduates and above	9,79,19,279	2,69,69,293
			2.36%	0.65%
2	Subordinates	=/<graduates	6,63,85,952	26,38,84,159
			1.6%	6.36%
3	Sub-subordinates	< graduates	12,53,03,484	359,02,35,266
			3.02%	86.53%
	Total		**28,96,08,715**	**388,10,88,718**
			6.4%	**93.6%**

Grand Total: 417,06,97,433

= equal, / or , > greater than, < less than

Table 6.78: Average Annual Gross Salary of Workforce Based on Use of Language in Workplaces

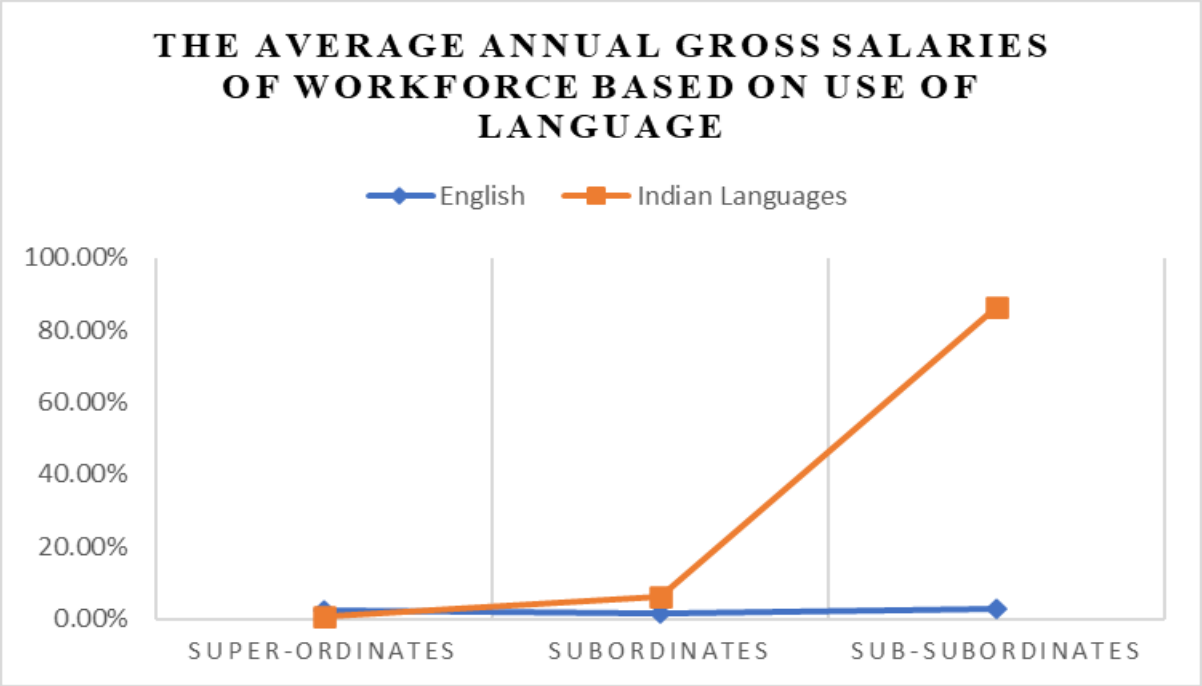


Chart 6.41 Average Annual Gross Salary of Workforce Based on Use of Language According to Class of Workforce.

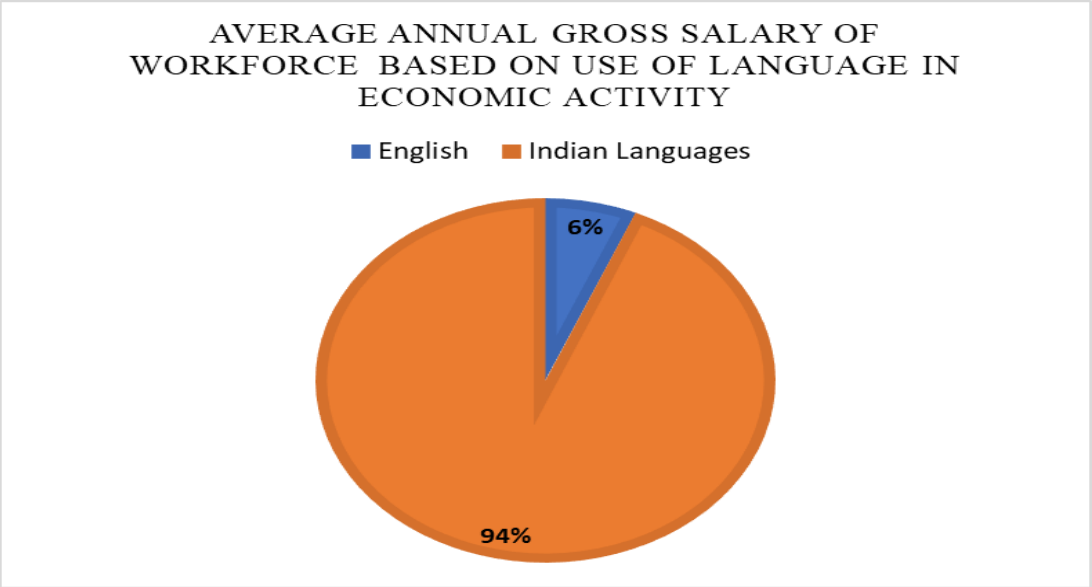


Chart 6.42 Average Annual Gross Salary of Workforce Based on Use of Language in Economic Activity

Observations:

- In the current study, the total average annual gross salaries of the workforce using Indian languages and English is 417,06,97,433 crores of rupees.
- From the total average annual gross salaries of the workforce, the use of Indian languages share is 388,10,88,718 crores which are nearly 94 %.
- The significant number of sub-subordinates are earning 359,02,35,266 crores of rupees using Indian languages, which is far greater than subordinates and super-ordinates.
- English-speaking super-ordinates' average annual gross salaries are confined to only 9,79,19,279 crores which is just 2.36 % of the total. Across all classes of the workforce who use English economic activity, the average annual gross salaries is 28,96,08,715 crores which are 6.4 % of the total average annual gross salaries.
- The current study shows that the use of Indian languages contributes more i.e. 94% of average annual gross salaries, whereas the use of English contributes only 6.4%.

6.14 Summary

This study attempted reveal the relationship between language and economy by examining the role of Indian languages and their usage in the production of economic activities. Data gathered from five selected workplaces in Telangana State. Data collected from selected workplaces analysed according to their sector, namely, organised and unorganised sectors. Choice of language in spoken communication and written communication both are analysed sector-wise. Using statistical tool such SPSS and Stata three hypotheses are tested. The data analysis shows that education levels determine choice of language – as education levels increase use of English increase, and as education levels decrease the use of Indian languages increase. Similarly, choice of language changing according to the class of workforce – when the class of force increase, the use of English increase, and as class of workforce decrease, the use of Indian languages increase. The analysis of shows that native language speaking non-graduates and illiterates participate more in economic activity than English speaking graduates. It is observed that the use of English is confined to Super-ordinates who are few in number. In addition to that, native language speaking sub-subordinates who are non-graduates and subordinates less than or equal to graduates receiving average annual gross salaries more i.e.380,31,62,000 crores than English-speaking super-ordinates whose average annual gross salary is 34,38,00,000 crores. Overall, the study shows that, Indian languages used predominantly in economic activities at workplaces with 93.6 % than English which is confined to 6.4%. The empirical evidence reveal the fact that Indian languages contribute more to Indian economy than English.

CHAPTER 7

CONCLUSION

The present study aimed to uncover the underlying relationship between language and economy involving real-time data. The empirical evidence helped this study to understand the use of language in economic activity and how they interact with each other at workplaces. Given time, the socio-economic profiling of language studied and mapped languages used in workplaces in a given socio-economic context. This study also covered the linguistic landscaping of workplaces. Based on the findings of the empirical evidence, it would appear that language is used as an indispensable tool for economic activity. It has its purpose while being used in the workplace. The study also revealed the dynamics of language used in the workplaces. The study made use of econometric statistical tools such as SPSS and Stata to find out the association between social variables such as gender, age, education levels, class of workforce, native place, and mother tongue of the workforce. The methods of these statistical tools, such as the Chi-Square test in SPSS, are used to figure out the statistical association between two categorical variables, and Logistic regression analysis to figure out the association across all categorical variables of the study.

7.1 The Key Findings of the Research

The empirical evidence was collected from five selected workplaces, from organized and unorganized sectors in the state of Telangana, India. Apart from the data gathered through the questionnaire, the study also collected data on the use of language in workplace sign boards. This data led to the linguistic landscaping of workplaces. Linguistic landscaping of the workplaces shows that the use of the Indian language in signboards has several links with the safety of the workforce, better outcomes, and the economy in investment in conveying the various types of instruction. The key findings of linguistic landscaping are provided in the following table:

S. No	Types of Signboards	Te	En	Hi	Te-En	En-Hi	Te-Hi-En	Total	%
1	Work instructions	25	7	0	0	0	2	34	18.99%
2	Safety instructions	40	12	3	0	0	0	55	30.72%

3	Pictorial instructions	12	6	1	0	0	0	19	10.61%
4	Directions	0	4		5	0	0	9	5.02%
5	General Instruction	12	0	1	0	1	2	16	8.93%
6	Health instructions	8	0		2	0	0	10	5.58%
7	Environmental instructions	6	0	0	0	0	0	6	3.35%
8	Name boards	0	15		0	0	0	15	8.37%
9	Quotes	10	3	2	0	0	0	15	8.37%
	Total	113	47	7	7	1	4	179	100
	Percentage	63%	26%	3.9%	3.9%	0.55%	2%	100%	

Table 7.1: The use of Language in Signboards

The table illustrates the use of language in signboards and its link with various types of instructions. The workplace chose the native language, 40 safety instructions in Telugu (72%), to communicate to the workforce; only 12 instructions out of 55 are provided in English (22%). For the work instructions, the workplaces gave prominence to the native language; out of 34 work instructions 25 are provided in Telugu, with 73%, and English use with 20%. The trend can be found in general instructions and health instruction in which nearly 80 % of the institutions are provided in Telugu, while the use of English confined to name boards and directions. On this basis, the study concludes that using native languages in signboards has a significant association with the safety of the workforce and play a catalyst act in production.

Concerning the quantitative data, the data gathered through the questionnaire was broadly classified into spoken and written use of language at workplaces. The following table demonstrates which variables bear a significant association with the use of language at workplaces.

S.No	Social Variables of Workforce	Use of Language
1	Mother Tongue	1.128***
		(0.389)
2	Age	-0.377**
		(0.152)

3	Native Places	-0.0426
		(0.296)
4	Class of Workforce	2.190***
		(0.375)
5	Education Levels	-2.552***
		(0.353)
6	Gender	0.125
		(0.0796)
	Observations	1,225

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 7.2: Logistic Regression Analysis of Social Variables of Workforce and The Use of Language

The correspondence between mother tongue and the use of language in economic activity is found to be one of the key findings in this current research. The independent variable mother tongue of workforce positively influences their use of language in what places has correspondence, hence there is significant association in the workplaces. Native workforce of Telangana who is more in number, and very few of them who occupied the highest positions use English to communicate with their co-workers and sometimes use native languages to communicate with Subordinates, however majority of native workforce use their native language in economic activity. If we see the table 6.59 in 164 page, Telugu speaking people use Indian language with 83%, even Hindi and Lambadi speaking people also majority of them are using Indian languages, Therefore, there is a great significant association between the mother tongue of the workforce and the use of language.

The association between the dependent variable use of language and age of the workforce has significant association which was shown by the statistical relevance that the p-value is less than 0.05. The use of language is marked by a particular age group of the workforce.

However, gender has no association with the use of language in economic activity. Since the p-value is greater than 0.05. Hence, there is no significant association between the use of language and gender.

The p-value of the use of language and the native place of the workforce is more than 0.05, which means there is no significant association between the native place of the workforce and the use of language in economic activity.

On the contrary, there is a significant association between the class of the workforce and the use of language in economic activity. The choice of language changes according to the class of the workforce. The Super-ordinates tend to use English more than Indian language whereas Sub-ordinates and sub Sub-ordinates tend to use the native languages. Hence there is a significant association between these two variables which is evident by the p-value that is less than 0.05.

In the same way, education qualification in the workforce and the use of language have significant association. The analysis shows that the number of English-speaking graduates is much less than the native language-speaking non-graduates and illiterates in economic activity. And the choice of language changes based on the education level. The graduates use English in economic activity, but the use of English reduces as education levels decrease. On the contrary, the use of Indian languages increases as education levels decrease. Association is evident between these two variables as the p-value is less than 0.05.

7.2 Results of Hypotheses

The results of the hypotheses show the significance of this study. Three hypotheses are formulated for the present study. These hypotheses are tested using econometric statistical tools such as SPSS and Stata. The results show the statistical significance to the proposed hypotheses. Since the solid evidence supports the proposed hypotheses, these three general hypotheses are accepted.

Table 7.2 Hypotheses test table.

S.No	Hypotheses	Chi-Square Results
1	H0: The use of Indian languages doesn't involve more in the economic activity than the use of English.	✗ (Rejected)
	H1: The use of Indian languages involves more in economic activity than the use of English.	☑ (Accepted)

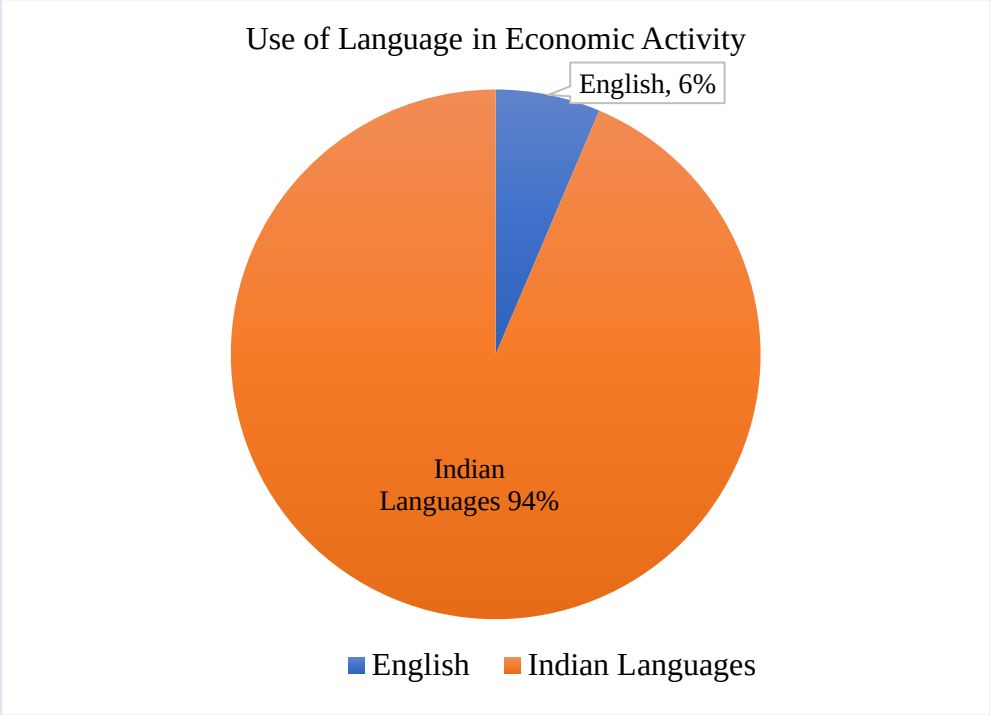
2	H0: Native language-speaking non-graduates and illiterates don't involve more in economic activity than English-speaking graduates.	✗ (Rejected)
	H1:Native language speaking non-graduates and illiterates involve more in economic activity than English-speaking graduates.	✓ (Accepted)
3	H0: The choice of language doesn't change according to the class of workforce	✗ (Rejected)
	H1:The choice of language changes according to the class of workforce	✓ (Accepted)

Based on the results of the hypotheses, we can conclude that the use of Indian languages involves more economic activity than the use of English. Generally, some people believe that the knowledge of English is the basis of the economy of India. Believing that, parents of the children are sending their children to English medium education schools in India and there is a growing demand for English medium education. However, the study considers that belief as a myth and proves with substantial evidence with real-time data that native languages are used more in economic activity than English. The results of this study suggest that there is a strong link between the use of native languages and the economy of India. From both the organized and unorganized sectors, the Indian language plays a vital role in the production and contributes to the GDP of India. Uma Maheshwar Rao (2017:59) also shows that 89.67% of workforce use their mother tongue in their economic activity in Telugu states. His study shows that the contribution of English in Indian GDP is confined to 17.26% whereas native languages contribute 82.74 %.

Education levels of the workforce play a key role in the choice of language in economic activity. The present study sheds new light on the relationship between language and economy. The contribution of the native language-speaking non-graduates and illiterates involve more in economic activity than English-speaking graduates. The evidence supports the proposed hypothesis which uncovers the relationship between the education levels of the workforce and their choice of language in economic activity. According to the data analysis, it is observed that the number of illiterates and non-graduates who speak their native language is more than the English-speaking graduates, and their contribution to production is greater than the English-speaking graduates.

The choice of language in the workplace is subject to change to the class of the workforce. The study shows that most of the Super-ordinates tend to speak English. They switch the language when communicating with Sub-ordinates who are at their next level in the workplace. Similarly, some of the Sub-ordinates who discuss work or obey the instructions of their Super-ordinates switch to English. Still, in the rest of the cases, they use their language in economic activity. Therefore, some contexts demand code-switching, and most of the contexts in economic activity enable them to use their native languages. The code-switching found in organized sector workplaces is mostly multilingual in nature. In unorganized sector workplaces, there is no such scope for code-switching. Therefore, the study shows that the choice of language changes according to the class of the workforce. The use of English declines as the class of the workforce lowers, and the use of Indian languages increases as the class of the workforce lowers. The study's findings provide a potential relationship between social variables and the use of language.

Pie chart 7.2:



The pie chart provided above demonstrates the distribution of language use in the economic activity of selected workplaces. In the pie chart, the use of Indian languages is indicated by orange colour, and the use of English is indicated by blue colour. The pie chart shows that the use of the Indian language is around 94% which is the highest than the use of English

which is confined to 6 %. The empirical evidence is good enough to show the profound use of Indian languages in economic activity and demonstrates how native languages are intrinsically liked to the economy of India.

The findings of the present study confirm the vital role of native languages in economic activity and their contribution to the economy of India. The broad implication of this study is that native languages contribute more to the GDP of India than English. By and large, people in India participate in economic activity in the unorganized sector for their livelihood, using their native languages as their human capital. The majority of people who work in the organized sector also use their native languages to generate the economy. The research provides empirical evidence and casts a new light on the intrinsic relationship between language and economy. The research finding provides potential evidence to conclude that native languages contribute more to the economy of India than English.

7.3 Limitations of the Study

The present study suggests that this research still has a long way to go to explore the relationship between language and economy. As with any other research, this research does have certain limitations. The first limitation is the nature and number of workplaces selected for the present study. Only five workplaces selected for this research number could be increased for further study. The second limitation is that sector of workplaces. As it is widely known, the GDP of India comes from its major sectors, namely, agriculture, industries, and the service sector. The contribution of these sectors varies from one sector to another sector. Similarly, the use of language in economic activity in their respective sectors also varies from one to another. Since the present study dealt with the use of language in the industry sector, future studies can focus on the rest of the sectors. The third limitation is the size of the sample. The large sample of the data might provide more avenues to explore the relationship between language and economy. The fourth and final limitation of the study is the place of study. The study was conducted and limited to Mahabubnagr, Gadwal, Wanaparthy, Kothadudem districts of Telangana State. The same study can be extended to the other states of India to get a big picture of the language economy and especially the contribution of native languages to the GDP of India.

The research suggests that for the safety and healthy state of economic activity at workplaces, the study of use of native languages should be encouraged in all domains of economic activity. Language used in signboards and manuals, guidelines may save time

and provide accurate information to workforce, native languages do this job better, hence this study suggest that the use of native language in signboards to avoid accidents and help in production. In conjunction to that, communication regarding the work among workforce is always an added advantage to the production, so language use for communication acquires a prominent role in production. Native languages can meet all requirements of efficient communication at workplaces, therefore, the study suggest native language use in interpersonal or group communications at workplaces. This also leads to group work and results in target outcomes. Other suggestion that the research offers is training the workforce in their native language, so that, the knowledge of the work can be acquired as a good human capital which might bring fourth deserved outcomes. Providing work instructions to the workforce in their native languages help them to gain firm understanding of the work, thus, providing work instruction in native language of the workforce is always wise decision to improve the production. This research eventually suggests that it would be beneficial for the public if state and central governments of India initiate skill development programmes in their native languages and promote mother tongue medium of instruction in education and its usage in worksites.

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APPENDIX

A PhD Questionnaire on

Socio-economic Profiling of Languages

పరిశోధన గురించి: పని స్థలాలలో భారతీయ భాషల వాడుక మన సమాజ ఆర్థిక వృద్ధికి ఎలా దోహదపడుతుందో తెలుసుకోవడమే ఈ అధ్యయనం యొక్క లక్ష్యం.

మీ సమాధానాన్ని క్రింద ఇవ్వబడిన గళ్ళలో టిక్ మార్కు (☑) తో సూచించండి, అవసరమైన చోట సమాధానాన్ని రాయగలరు.

మొదటి విభాగం

వ్యక్తిగత వివరాలు:

1. పరిశ్రమ / కంపెనీ పేరు: కె.ఎల్.పి.యు. పాల్వంచ
2. మీ పేరు: కె. సాయి
3. లింగము: ☑ పురుషుడు ☐ స్త్రీ ☐ లింగమార్పు
4. వయస్సు: 48
5. మీ స్వస్థలం: పాల్వంచ
6. వృత్తి: షిఫ్ట్ ఆపరేటర్
7. విద్యార్హతలు: S.S.C. I.T.I. Diploma
8. మాతృభాష: Telugu
9. తెలిసిన ఇతర భాష(లు):

భాష(లు)	మాట్లాడడం	చదవడం	వ్రాయడం
i. Telugu	☑	☑	☑
ii.	☐	☐	☐
iii.	☐	☐	☐

రెండవ విభాగం

పని స్థలాలలో భాషా వాడుక ఎంపిక

10. ఈ క్రింది వారితో సంభాషించేటప్పుడు మీరు ఏ భాషను వాడుతారు?

i. పై అధికారులతో
☑ తెలుగు ☐ హిందీ ☐ ఇంగ్లీషు ☐ ఇతరములు.....

ii. సహ ఉద్యోగులతో
☑ తెలుగు ☐ హిందీ ☐ ఇంగ్లీషు ☐ ఇతరములు.....

iii. క్రింది స్థాయి ఉద్యోగులతో
☑ తెలుగు ☐ హిందీ ☐ ఇంగ్లీషు ☐ ఇతరములు.....

11. మీరు మీ డిమాండ్లను పై అధికారులకు తెలపడానికి ఏ భాషను ఉపయోగిస్తారు?
☑ తెలుగు ☐ హిందీ ☐ ఇంగ్లీషు ☐ ఇతరములు.....

మూడవ విభాగం

వ్రాయుటకు భాషా ఎంపిక

12. దయచేసి ఈ క్రింది సందర్భాలలో మీ భాష ప్రాధాన్యతని అందించండి.

ఉత్తరాలు వ్రాయుట:

a. వ్యక్తిగతంగా;

i. సెలవు దరఖాస్తు
☐ తెలుగు ☐ హిందీ ☑ ఇంగ్లీషు ☐ ఇతరములు.....

ii. ఈమేల్స్ వ్రాయడం
☐ తెలుగు ☐ హిందీ ☐ ఇంగ్లీషు ☑ ఇతరములు.....

అధికారికంగా;

i. అధికారిక పత్రాలు
☐ తెలుగు ☐ హిందీ ☑ ఇంగ్లీషు ☐ ఇతరములు.....

ii. సిపార్సు లేఖలు
☐ తెలుగు ☐ హిందీ ☑ ఇంగ్లీషు ☐ ఇతరములు.....

iii. ఫిర్యాదు లేఖలు
☑ తెలుగు ☐ హిందీ ☐ ఇంగ్లీషు ☐ ఇతరములు.....

A PhD Questionnaire on

Socio-economic Profiling of Languages

About the research: The goal of this study is to find out how the use of Indian languages at various worksites contributes to the economic growth of our society.

Please provide your answer with tick mark ☑ in the given box and write wherever it is needed.

Section I

Personal details

1. Name of the industry/company: Singareni Collieries Company limited.
2. Your name Manoj Kumar
3. Gender ☐ male ☑ female ☐ others
4. Age: 42 yr
5. Native place Bihar
6. Occupation Service
7. Educational qualification B. Tech (mining)
8. Mother tongue Hindi
9. Other Language(s) known: English, telugu, Bengali

Language(s)	Speaking	Reading	Writing
i. English	☑	☑	☑
ii. Urdu	☑	☑	☑
iii. Telugu	☑	☒	☒

Section II

Choice of language use at worksite

10. What language do you use when you converse with?

i. With superordinate
☑ Telugu ☑ Hindi ☑ English ☑ Other Bengali

ii. With partners
☑ Telugu ☑ Hindi ☑ English ☑ Other Bengali

iii. With subordinates
☑ Telugu ☑ Hindi ☑ English ☐ Other .....

11. What language do you use to make your demands to your higher authorities?

☑ Telugu ☑ Hindi ☑ English ☐ Other .....

Section III

Choice of language for writing

12. Please provide your language preference in the following contexts:

Writing letters:

a. Personal

i. Leave letters
☐ Telugu ☑ Hindi ☑ English ☐ Other .....

ii. Drafting emails
☐ Telugu ☑ Hindi ☑ English ☐ Other .....

b. Official

i. Order letters
☑ Telugu ☑ Hindi ☑ English ☐ Other .....

ii. Recommendation letters
☑ Telugu ☑ Hindi ☑ English ☐ Other .....

iii. Complaint letters
☐ Telugu ☐ Hindi ☑ English ☐ Other .....

एक पीएचडी प्रश्नावली

भाषाओं की सामाजिक आर्थिक रूपरेखा

शोध के बारे में : इस अध्ययन का लक्ष्य यह पता लगाने के लिए है कि किस प्रकार विभिन्न भारतीय भाषाओं का उपयोग हमारे समाज की आर्थिक वृद्धि में योगदान देता है।

कृपया नीचे दिए गए बॉक्स में टिक मार्क ☑ कर अपना उत्तर दें और जहां जरूरत हो, वहां लिखें।

पहला भाग

व्यक्तिगत विवरण

1 उद्योग / कंपनी का नाम: SCCL

2 आपका नाम Hindi Tamil

3 लिंग : ☑ पुरुष ☐ स्त्री ☐ विपरीतलिंग

4 उम्र: 35

5 मूल आवास : Andhra ?

6 काम: Job ?

7 शैक्षिक योग्यता: 12th ?

8 मातृभाषा: Hindi

9 अन्य भाषा(एँ) अवगत

	बोलना	लिखना	पढ़ना
i. Telugu ?	☑	☑	☑
ii. Hindi ?	☑	☑	☑
iii. English	☑	☑	☑

दूसरा भाग

कार्यस्थल में भाषा के उपयोग का चयन

10. बातचीत में आप किस भाषा का उपयोग करते हैं

i. उच्चकोटी कर्मचारी से

☐ तेलुगु ☑ हिंदी ☑ अंग्रेज़ी ☐ अन्य भाषा

ii. सह कर्मचारियों से

☐ तेलुगु ☑ हिंदी ☑ अंग्रेज़ी ☐ अन्य भाषा

iii. अधीनस्थ कर्मचारी से

☐ तेलुगु ☑ हिंदी ☑ अंग्रेज़ी ☑ अन्य भाषा

11 आप अपने उच्च अधिकारियों से अपनी मांगों को व्यक्त के लिए किस भाषा का उपयोग करते हैं?

☐ तेलुगु ☑ हिंदी ☑ अंग्रेज़ी ☐ अन्य भाषा

तीसरा भाग

लेखन के लिए भाषा का चुनाव

12 निम्नलिखित संदर्भ में अपनी भाषा वरीयता प्रदान करें :

पत्र लेखन

(अ) व्यक्तिगत

(1) प्रार्थना पत्र
☐ तेलुगु ☑ हिंदी ☑ अंग्रेज़ी ☑ अन्य भाषा Hindi ?

(2) ई मेल
☐ तेलुगु ☑ हिंदी ☑ अंग्रेज़ी ☐ अन्य भाषा

(आ) सरकारी

(1) आदेश पत्र
☐ तेलुगु ☑ हिंदी ☑ अंग्रेज़ी ☐ अन्य भाषा

(2) सिफारिश पत्र
☐ तेलुगु ☑ हिंदी ☑ अंग्रेज़ी ☐ अन्य भाषा

(3) शिकायत पत्र
☐ तेलुगु ☑ हिंदी ☐ अंग्रेज़ी ☐ अन्य भाषा

आपके बहुमूल्य समय के लिए बहुत बहुत धन्यवाद

Institutional Ethics Committee
University of Hyderabad

Justice TNC Rangarajan
Chairperson

Prof. Geeta K. Vemuganti
Member Secretary

Decision Letter of Institute Ethics Committee

IEC No. **Application No:**	UH/IEC/2019/137	**Date of review**	30-07-2019
Project Title:	Socio-economic Profiling of Languages with Special reference to worksites		
Principal Investigator/ Co-PI:	PI: J. D. Prabhakar CI: Dr. K. Parameswari		
Participating Institutes if any	---	**Approval from Participating Institute**	---
Documents received and reviewed	Protocol, ICF		
In case of renewal submission of update	----		
Decision of the IEC:	Approved after the conditions suggested at the IEC meeting were fulfilled on 26.08.2019 Duration: One year from date of approval		
Any other Comments Requirements for conditional Approval	----		
Members Present	Sri Justice Rangarajan, Prof. Geeta K. Vemuganti, Dr. C.T. Anitha, Dr. Sunita Mishra, Dr. Suvashisa Rana, Dr. Savitri Sharma, Smt. Vimala Sthanikam, Dr. Insaf Ahmed		

Please note:

a. Any amendments in the protocol must be informed to the Ethics committee and fresh approval taken.
b. Any serious adverse event must be reported to the Ethics Committee within 48 hours in writing (mentioning the protocol No. or the study ID)
c. Any advertisement placed in the newspapers, magazines must be submitted for approval.
d. The results of the study should be presented in any of the academic forums of the hospital annually.
e. If the conduct of the study is to be continued beyond the approved period, an application for the same must be forwarded to the Ethics Committee.
f. It is hereby confirmed that neither you nor any of the members of the study team participated in the decision making/voting procedures.

Chairperson

(Justice Rangarajan)
Chairperson
Institutional Ethics Committee (IEC)
School of Medical Sciences
University of Hyderabad
Hyderabad-500 046. Telangana.

Member Secretary

(Prof. Geeta K. Vemuganti)
Member Secretary
Institutional Ethics Committee (IEC)
School of Medical Sciences
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ది సింగరేణి కాలరీస్ కంపెనీ లిమిటెడ్

(ప్రభుత్వ సంస్థ)

భూగర్భ

మరియు

ఉపరితల గని కార్మికుల

శిక్షణా పాఠ్యాంశములు

2009

ప్రచురణ

మానవ వనరుల అభివృద్ధి శాఖ

(HUMAN RESOURCE DEVELOPMENT DEPARTMENT)

కొత్తగూడెం

సింగరేణి కాలరీస్ కంపెనీ లిమిటెడ్

(ప్రభుత్వ సంస్థ)

గనుల చట్టము, 1952
Mines Act, 1952

ప్రచురణ

మానవ వనరుల అభివృద్ధిశాఖ

(HUMAN RESOURCE DEVELOPMENT DEPARTMENT)

కొత్తగూడెం

జె.డి.ప్రభాకర్
8500227185

భారతీయ నుడుల ఆర్థిక మూలాలు: పరిచయం

ప్రపంచ ఆర్థిక వ్యవస్థలో భారతదేశ ఆర్థిక ఉన్నతినీ, దానికి గల కారణాలనూ ఈ వ్యాసంలో చర్చించడం జరిగింది. దేశానికి పట్టుకొమ్మలుగా నిలిచిన గ్రామీణ ఆర్థిక కార్యకలాపాలూ, వాటిలో స్థానిక నుడుల వాడుక– దేశ ఆర్థిక వ్యవస్థకు ఏ విధంగా బలాన్ని చేకూరుస్తాయో ఈ వ్యాసంలో తెలియజెప్పాను. ప్రపంచ బ్యాంకు, అంతర్జాతీయ కార్మిక సంస్థ, ఐఎంఫ్ మొదలగు వాటి నుండి ఆధారాలను సేకరించి, అసంఘటిత రంగం ద్వారా జరిగే ఆర్థిక కార్యకలాపాలూ వాటికి జీవం అందించే అమ్మనుడుల పాత్రనూ ఇందులో శాస్త్రీయ కోణంలో అభివర్ణించారు. అమ్మనుడుల విద్యా, దాని ద్వారా వచ్చే నైపుణ్యాలూ దేశ ఆర్థిక ఉన్నతికి ఏవిధంగా దోహదపడతాయో ఈ వ్యాసం వివరిస్తుంది.

పరిచయం: సంపద సృష్టి మానవ మనుగడకు మూలం. సంపదను కేవలం డబ్బూ, వస్తు రూపాలలో చూసి దానిని నిర్వచించలేము. అవి కేవలం మారకపు విలువకు ప్రతిరూపాలే. సంపద వివిధ రూపాలలో ఉన్నప్పటికీ జ్ఞానం అత్యంత విలువైన సంపదగా పరిగణించవచ్చు. ఒక దేశ ఆర్థికాభివృద్ధి ఆ దేశంలో ఉండే సహజ వనరులూ, ఆ దేశ ప్రజల జ్ఞానసమృద్ధిపై ఆధారపడి ఉంటుంది. ఏదైనా ఒక సమస్యకు మూలం తెలుసుకున్నప్పుడు ఆ సమస్యకు పదునైన పరిష్కారాన్ని అందించవచ్చు. అలాగే విజయానికి కారణమైన మూలాలను తెలునుకున్నప్పుడు విజయాన్ని కొనసాగించడానికి వీలవుతుంది. ప్రపంచంలో ఆర్థికాభివృద్ధి చెందిన అమెరికా, చైనా, జపాను, జర్మనీ, యునైటెడ్ కింగ్డమ్ మొదలగు దేశాల అభివృద్ధికి కారణాలు – సహజ వనరుల వినియోగమూ, ఉత్పత్తి నదుపాయాలూ, ఉత్పాదకత. కానీ వీటన్నిటినీ సమన్వయపరిచేది జ్ఞానం. ఆ జ్ఞానానికి మూలం నుడి. "నుడి, వ్యక్తినీ సమాజాన్నీ కలిపివుంచుతుంది. సామాజిక వ్యవస్థకు నుడే పునాది. వ్యక్తికీ ఆర్థిక వనరులకూ మధ్య సంబంధాలలో నుడికి సంబంధించిన విధి విధానాలు ఉన్నాయి" (గారపాటి ఉమామహేశ్వరరావు, 2017). ఆర్థిక వ్యవస్థకు సహజ వనరులు ఎంత ముఖ్యమో ఆ ప్రాంతంలో ఉపయోగించే సహజ నుడులూ అంతే ముఖ్యం. ప్రజల నిత్య అవసరాల మేరకు చేసే వ్యవసాయమూ, వస్తూత్పత్తీ, సేవా సహజ వనరులపై ఆధారపడి ఉంటాయి. ఆ విధంగా సహజ వనరులను ఉపయోగించి చేసే వ్యవసాయం, పశువులూ, చేపల పెంపకం, పాడి పరిశ్రమ, గనుల తవ్వకం, ఇతర వస్తూత్పత్తి సేవలకు శ్రమశక్తి అవసరం అవుతుంది. వాటి ఉత్పత్తికి పనిచేసే శ్రామికులకి పనికి అవసరమైన పరిజ్ఞానం అంతా కూడా వారి మాతృభాషతో ముడిపడి ఉంటుంది. "అమ్మనుడి ఆర్థిక స్వావలంబనకు ఆధారం. ఈ స్థానాన్ని మరొక నుడి ఆక్రమణకు అవకాశం కల్పించడం మన హక్కులను కాలరాయడమే అవుతుంది" (గారపాటి ఉమామహేశ్వరరావు, 2017)

క్ర.సం	దేశం	విద్యా మాధ్యమం (ప్రాథమిక, మాధ్యమిక విద్యలో)	శ్రమ శక్తి (కోట్లలో) 2020 సం.*	అక్షరాస్యత % (15 సం. పై)+	స్థూలజాతీయోత్పత్తి (GDP%) కోట్ల,డాలర్లలో (2020 సం.)**
1.	అమెరికా	ఇంగ్లీషు, స్పానిష్, ఫ్రెంచ్, హవాయి, అమెరికా మాడలికం, భారతీయ ఇంగ్లీష్ మాండలికం.	16.52	99	2,09,53, 030.00
2.	చైనా	మాండరిన్, ప్రాంతీయ భాషలు.	77.85	96.8	1,47,22, 730.70
3.	జపాన్	జపనీస్	6.87	99	50,57, 758.96
4.	జర్మనీ	జర్మన్	4.34	99	38,46, 413.93
5.	యు.కె	ఇంగ్లీష్, గేలిక్	3.47	99	27,59, 804.06
6.	భారతదేశం	తెలుగు, తమిళం, మలయాళం, కన్నడం, హిందీ, బెంగాలీ మొ.) లేదా (ఇంగ్లీషు)	47.17	74	26,60, 245.25

మూలం: *,** ప్రపంచ బ్యాంకు నివేదిక 2020వ సంవత్సరం. + ప్రపంచ జనాభా సమీక్ష 2022.

పట్టిక 1.1 లో చూపిన విధంగా ప్రపంచంలో ఆర్థికంగా అభివృద్ధి చెందిన దేశాలు, దానికి గల కారణాలను పరిశీలించినట్లయితే, మొదటి స్థానంలో ఉన్న అమెరికా 99% తో పాటు 16.52 కోట్ల శ్రమశక్తితో ముందంజలో నడుస్తోంది. వారి ప్రధాన అమ్మనుడులపైన ఇంగ్లీష్‌లో విద్యాబోధన జరుగుతోంది. కొన్ని రాష్ట్రాలలో స్పానిష్, ఫ్రెంచ్ (లూసియానాలో), హవాయిన్ (హవాయిలో) ప్రాథమిక మరియు మాధ్యమిక విద్యను అందిస్తోంది. ఏ రాష్ట్రాలలో ఏ నుడిని అత్యధికంగా ఉపయోగిస్తున్నారో ఆ భాషలో ఆ ప్రాంత విద్యార్థులకు మాతృభాషలో విద్యను అందించడానికి నుడి ప్రణాళికలు రూపొందించారు. తర్వాత ప్రపంచంలోనే అత్యధికంగా 77.58 కోట్ల శ్రమశక్తి కలిగిన దేశమైన చైనా 96

శాతం అక్షరాస్యతను సాధించి అమెరికాని తలదన్నే విధంగా సాంకేతికంగా ఆర్థికంగా అభివృద్ధి చెందింది. చైనా, జపాన్, జర్మనీ, దేశాలు పూర్తిగా ప్రాథమిక మాధ్యమిక విద్యను అమ్మనుడిలోనే అందిస్తున్నాయి. హెల్లర్, ఎం. (2003) ప్రస్తావించినట్టుగా ప్రపంచీకరించబడిన కొత్త ఆర్థిక వ్యవస్థ అనేక రకాలుగా నుడి మరియు గుర్తింపుతో ముడిపడి ఉంది (ఉదా. బామన్ 1997; కాస్టెల్స్ 2000; గిడెన్స్ 1990). అక్కడి శ్రమశక్తి నైపుణ్యత కలిగి ఆర్థిక ఆర్థిక కార్యకలాపాలలో చురుకుగా పని చేస్తున్నారంటే దానికి కారణం వారి అమ్మనుడిలో విద్యను అభ్యసించడమే. ఆయా దేశాలలో సహజ వనరులు ఉత్పాదకత మొదలైన అంశాలు ఆ దేశ ఆర్థిక వ్యవస్థను ప్రభావం చూపుతున్నప్పటికీ వాటిని సరైన క్రమంలో ఉపయోగించుకునే జ్ఞానాన్ని అందజేస్తున్న అమ్మనుడిలో విద్యా మాధ్యమాన్ని ఒక ప్రత్యేక అంశంగా పరిగణించాల్సి అవసరం ఉంది.

1. ప్రపంచంలో భారతదేశ ఆర్థిక వ్యవస్థ:

భారతదేశ ఆర్థిక వ్యవస్థకు మూలస్తంభాలు యువతే అని చెప్పవచ్చు. ఇంటర్నేషనల్ లేబర్ ఆర్గనైజేషన్ ప్రకారం మనదేశంలో 80.80 కోట్లమంది యువత ఉన్నారు. భారతదేశంలోని మొత్తం జనాభాలో 60 శాతం అన్నట్లు. ప్రపంచంలో ప్రస్తుతం ఆర్థికాభివృద్ధిలో ఏడవ శాతాన్ని దక్కించుకున్నా, 2030 నాటికి ఆసియాలో మొట్టమొదటి స్థానాన్ని సంపాదించుకుంటునట్లు ఇన్ఫర్మేషన్ హ్యాండ్లింగ్ సర్వీసెస్ (అయ్‌హెచ్‌ఎస్) పేర్కొంది. జపాన్ ఆర్థిక వ్యవస్థను త్వరలోనే అధిగమిస్తుందనీ, ప్రపంచంలో నాలుగో స్థానాన్ని పొందుతుందనీ అంచనా వేసింది. దేశంలో ప్రస్తుతం 47.17 కోట్ల శ్రామికశక్తితో, అమెరికా, జపాన్, జర్మనీ, యునైటెడ్ కింగ్డమ్ శ్రమశక్తితో పోలిస్తే మనది అత్యధికం. అయినప్పటికీ ఆ దేశాలు ఆర్థిక ప్రగతిలో ముందు ఉండడానికి కారణాలు వారికి ఉన్న ఉత్పాదకతా సామర్థ్యం, సదుపాయాలూ నైపుణ్యం కలిగిన శ్రామికశక్తి కావచ్చు. అన్నిటికంటే ముఖ్యంగా ఆ దేశాలు అమ్మనుడిలో మాధ్యమ విద్యకు ప్రాముఖ్యతను ఇచ్చినట్లు కనిపిస్తోంది. ఏడుపదుల స్వతంత్రదేశంలో 74 శాతం అక్షరాస్యతను సాధించినప్పటికీ మనదేశంలో నిరుద్యోగసమస్య దేశాన్ని పట్టిపీడిస్తోంది. సెంటర్ ఫర్ మానిటరింగ్ ఇండియన్ ఎకానమీ (సిఎంఐఈ) 2021 ప్రకారం, దేశంలో 5.3 కోట్ల మంది నిరుద్యోగులు ఉన్నట్లు తెలిపింది. అందులో ముఖ్యంగా ఏటా 15 లక్షల మంది ఇంజనీర్లు తమ చదువులు పూర్తి చేసుకుని బయటకు రాగా అందులో 80 శాతం మంది యువత నిరుద్యోగులుగా మారుతున్నారు. దీనికి గల ప్రధాన కారణం చదువు ఉన్నా పనికి కావాల్సిన నైపుణ్యాలు లేకపోవడమే. విద్యార్థులు ఈ విధంగా ప్రతి రంగంలోనూ ప్రతి ఏటా నిరుద్యోగులుగా మారుతున్నారు. దీనికి గల ప్రధానకారణం విద్యా మాధ్యమమే. చదువు నైపుణ్యంగా రాకపోవడానికి కారణం సరైన సదుపాయాలు లేకపోవడంతో పాటు విద్యను ఆంగ్లమాధ్యమంలో అందించడమే. ఇంజనీరింగ్ చదివిన 86 శాతం మంది ఉద్యోగులు ఆంగ్లం అర్థం చేసుకోలేక పోతున్నారు అని సర్వేలో తేలింది. భాష అర్థం చేసుకోలేనప్పుడు అందులోని విషయావగాహన ఏ విధంగా ఆకళింపు చేసుకుంటారు? చదువు నైపుణ్యంగా ఎలా మారుతుంది? అందువలన ప్రపంచంలో ఆర్థిక అభివృద్ధి చెందిన దేశాలతో మనం పోటీ పడాలి అంటే మన అమ్మనుడిలో విద్య తప్పనిసరి. మన దేశంలోనే ఆర్థిక వనరుల సద్వినియోగానికి మన స్థానిక నుడిని ఉపయోగించి ఆర్థిక అభివృద్ధి చెందాలి.

2. ఆర్థిక వ్యవస్థలో అసంఘటితరంగ పాత్ర:

ఆర్థిక కార్యకలాపాలను స్థూలంగా రెండు రంగాలుగా విభజించవచ్చు. వ్యవస్థీకృత రంగం (ఆర్గనైజ్డ్ సెక్టర్ మరియు అసంఘటితరంగం (అన్‌ఆర్గనైజ్డ్ సెక్టర్). వ్యవస్థీకృత రంగం మరియు అసంఘటితరంగం పునరుత్పత్తి, వృద్ధి ప్రక్రియల మధ్య సంబంధాన్ని కొత్త కోణంలో విశ్లేషించడం చాలా కీలకంగా మారింది (భట్టాచార్య, ఆర్., భట్టాచార్య, ఎస్.,& సన్యాల్, కె, కె.(2013). సంఘటిత రంగంలో శ్రామికులకు నియమిత పని సమయం, జీతం, యజమానితో పని ఒప్పందం, పన్ను చెల్లింపు మొదలగు లక్షణాలు ఉంటాయి. అసంఘటిత రంగానికి పై లక్షణాలు ఏవీ ఉండవు. స్వేచ్ఛగా స్వతంత్రంగా పని చేసుకునే వెసులుబాటు ఉంటుంది. మనిషికి తన నైపుణ్యాన్ని ఉపయోగించి సొంత పనినీ, వ్యాపారాన్నీ చేసుకునే అవకాశం ఉంటుంది. గ్రామీణ ప్రాంతాలలోగానీ పట్టణ ప్రాంతాలలో గానీ వీరి వ్యాపారాలు పుట్టగొడుగుల్లా పుట్టుకొస్తుంటాయి. అంతర్జాతీయ శ్రామిక సంస్థ (ఇంటర్నేషనల్ లేబర్ ఆర్గనైజేషన్) గణాంకాల ప్రకారం ప్రపంచంలో రెండు వందల కోట్ల మంది శ్రామికులు అసంఘటిత రంగంలో ఆర్థిక కార్యకలాపాలు చేస్తున్నారు. ప్రపంచంలోని తక్కువగా లేదా మధ్యరకంగా అభివృద్ధి చెందుతున్న దేశాలలో స్థూల జాతీయోత్పత్తికి (జిడిపి) అసంఘటిత రంగం నుంచి దాదాపు 35 శాతం సంపద చేకూరుతోందనీ, అభివృద్ధి చెందిన దేశాలలో 15 శాతం వరకు స్థూల జాతీయోత్పత్తి వస్తుందనీ సర్వే నివేదికల ద్వారా తెలియజేశారు.

పట్టిక 2.1 దేశ సమూహాల వారీగా (గ్రామీణ/పట్టణ) అనధికారిక ఉపాధి వాటాలు (శాతాలలో)

క్ర. సం	అంశాలు	ప్రపంచ వ్యాప్తంగా	అభివృద్ధి చెందిన దేశాల్లో	వేగంగా అభివృద్ధి చెందిన దేశాల్లో	అభివృద్ధి చెందుతున్న దేశాల్లో
1.	అసంఘటిత శ్రమశక్తి	61	18	67	90
1.1	గ్రామీణ	80	22	83	90
1.2	పట్టణం	44	17	51	79
2.	వ్యవసాయం	94	59	93	98
2.1	గ్రామీణ	95	64	95	98
2.2	పట్టణం	87	49	82	98

3.	పరిశ్రమలు	57	16	67	73
3.1	గ్రామీణ	69	17	75	87
3.2	పట్టణం	49	15	61	65
4.	సేవ	47	18	55	74
4.1	గ్రామీణ	65	19	71	79
4.2	పట్టణం	39	17	47	70

మూలం: అనధికారిక ఆర్థిక వ్యవస్థలో స్త్రీలు మరియు పురుషులు-ఒక గణాంక సంక్షిప్తి (2019); జాతీయ కార్మిక శక్తి డేటా ఆధారంగా అంతర్జాతీయ కార్మిక సంస్థ (ILO) లెక్కలు.

పైన పేర్కొన్న పట్టిక 2.1 ను గమనించినట్లయితే ప్రపంచవ్యాప్తంగా ఉన్న శ్రమశక్తి వ్యవసాయ రంగంలో ఎక్కువగా కనిపిస్తోంది. వ్యవసాయ రంగంలో 94 శాతం, పరిశ్రమలలో 57 శాతం, సేవ రంగంలో 47 శాతం శ్రమశక్తి ఉన్నట్లు అంతర్జాతీయ కార్మికసంస్థ తెలియజేస్తోంది. ఇందులో గమనించాల్సిన విషయం ఏమిటంటే శ్రామికవర్గం ఎక్కువమంది గ్రామీణ ప్రాంతాలవారే. ప్రతి రంగంలోనూ గ్రామీణ కార్మిక శక్తి ఎక్కువగా ఉంటోంది. దీన్ని బట్టి మనం అర్థం చేసుకోవాల్సిన విషయం ఏమిటంటే, గ్రామీణ ప్రాంతాలలో నివసించే ప్రజలు తమకున్న జ్ఞానాన్ని ఉపయోగించి తమ అమ్మనుడిలోనే సంభాషిస్తూ ఆర్థిక కార్యకలాపాలు నిర్వహిస్తున్నారని తెలుసుకోవాలి. ఈ ఆర్థిక కార్యకలాపాలు వాటి నుండి వస్తున్న ఆదాయం స్థూల జాతీయోత్పత్తికి మూల స్తంభంగా నిలుస్తున్నాయి. అభివృద్ధి చెందిన దేశాలలో ఈ వైవిధ్యం కొట్టొచ్చినట్టు కనిపిస్తోంది. అదేవిధంగా అభివృద్ధి చెందుతున్న దేశాలు, వేగంగా అభివృద్ధి చెందుతున్న దేశాలలో కూడా ఈ స్వల్ప వ్యత్యాసాన్ని మనం చూడవచ్చు. అభివృద్ధి చెందిన దేశాలలో శ్రామిక శక్తి తక్కువగా 18 శాతం ఉండటం, తక్కువగా అభివృద్ధి చెందిన, అభివృద్ధి చెందుతున్న దేశాలలో 67, 90 శాతం ఉండడం ఆ దేశంలోని శ్రామికుల శక్తి సామర్థ్యాన్ని చూపిస్తోంది. ఏ దేశంలో అయితే అసంఘటిత రంగం తక్కువగా ఉందో అక్కడ సంఘటిత రంగం ఎక్కువగా నైపుణ్యంతో పనిచేస్తున్నట్టుగా తెలుస్తోంది. అదే విధంగా ఆ దేశాలలోని అక్షరాస్యతా, విద్యామాధ్యమం కూడా వాటికి సహకరించేవిగా ఉంటున్నాయి. వ్యవసాయం, చేతివృత్తులు, చిన్న చిన్న వ్యాపారాలు మొదలగువాటికి కూడా నైపుణ్యాలు అవసరమే.

3. భారతదేశంలో వ్యవస్థీకృత, అసంఘటిత రంగాల ఆదాయం స్థానిక నుడుల పాత్ర:

భారతదేశ ఆర్థికవ్యవస్థనూ, అందులో స్థానిక భాషల పాత్రనూ అర్థం చేసుకోవడానికి భారతదేశానికి వస్తున్న ఆదాయంలో వ్యవస్థీకృత అసంఘటిత రంగాల్లో నుంచి వస్తున్న ఆదాయాన్ని కూడా పరిగణించాల్సిన ఆవశ్యకత ఎంతైనా ఉంది. ఆర్థిక కార్యకలాపాలు వ్యవస్థీకృత, అసంఘటిత రంగాల ద్వారా ఫలితాలను ఇస్తాయి. ప్రతి ఆర్థిక రంగంలోనూ వ్యవస్థీకృత ఇంకా అసంఘటిత మార్గాల ద్వారా వాటి విలువ తెలుస్తుంది. ఉదాహరణకు వ్యవసాయంలో దాని నుండి వచ్చే విలువ రెండు రంగాల ద్వారాను అని తెలుస్తోంది. దీన్నిబట్టి ఏయే రంగాలలో ఆర్థిక కార్యకలాపాలలో స్థానిక భాషలను ఉపయోగిస్తూ సంపదను సృష్టిస్తారో తెలుసుకోవడానికి వీలుపడుతుంది. వివరాలకు కింద పొందుపరిచిన పట్టిక 3.1 ను చూడండి.

పట్టిక 3.1 భారతదేశం – ఆర్థిక కార్యకలాపాల ద్వారా వ్యవస్థీకృత మరియు అసంఘటిత రంగం
(జోడించిన స్థూల విలువలో (జివిఎ) వాటాగా)

పరిశ్రమ	2011-12		2017-18	
అంశాలు	వ్యవస్థీకృత	అసంఘటిత	వ్యవస్థీకృత	అసంఘటిత
వ్యవసాయం, అడవులు, చేపలుపట్టడం మొ	3.2	96.8	2.9	97.1
గనులూ-తవ్వకాలు	77.4	22.6	77.5	22.5
తయారీ	74.5	25.5	77.3	22.7
విద్యుత్,గ్యాస్,నీరు	95.7	4.3	94.7	5.3
నిర్మాణం	23.6	76.4	25.5	74.5
వసతి; ఆహారసేవలు; వాణిజ్యం	13.4	86.6	13.4	86.6
రవాణా; నిల్వలు; ప్రసారం	53	47	52.3	47.7
ఆర్థిక సేవలు	90.7	9.3	88.1	11.9
రియల్ ఎస్టేట్, నివాసాల యాజమాన్యం	36.6	63.1	47.2	52.8
పరిపాలన, రక్షణ	100	0	100	0
ఇతర సేవలు	58.8	41.2	52.1	47.9
ప్రాథమిక ధరల వద్ద మొత్తం జివిఎ	46.1	53.9	47.9	52.4

మూలం: మినిస్ట్రీ ఆఫ్ స్టాటిస్టిక్స్ అండ్ ప్రోగ్రామ్ ఇంప్లిమెంటేషన్,ఇండియా. ఏడవ IMF స్టాటిస్టికల్ ఫోరమ్‌లో సమర్పించబడింది (వాషింగ్టన్ డీసి., 2019).

పట్టిక 3.1. లో చూపిన విధంగా జోడించబడిన స్థూల విలువలో (జివిఎ) అసంఘటిత రంగాల్లో ఎక్కువ విలువ ఉన్నట్టు గమనించవచ్చు. ఉదాహరణకు వ్యవసాయం 2017-18 సంవత్సరంలో వ్యవస్థీకృత రంగం నుంచి 2.9% ఉంటే అసంఘటిత రంగం నుండి 97.1 శాతం ఉన్నది. విద్యుత్తు, గ్యాసు, నీరు, ప్రజా పరిరక్షణ, పాలన మొదలగునవి కేంద్ర రాష్ట్ర ప్రభుత్వాల ఆధ్వర్యంలో నడుస్థాయి కాబట్టి అవి వ్యవస్థీకృత రంగం క్రిందకివస్తాయి. మరికొన్ని ప్రైవేట్ ఉత్పత్తులు సేవలు అయినా వాటికి పన్ను చెల్లించే విధానం పని సమయాలు జీతాలు మొదలగునవి ఉంటాయి కాబట్టి అది కూడా వ్యవస్థీకృత రంగంలోకి వస్తాయి. వీటిలో పనిచేయడానికి నైపుణ్యత, విద్య అవసరం. అందులోనూ పనిచేసేవారు అమ్మనుడి అన్ని సమయాల్లో వాడినప్పటికీ

కేవలం ఉన్నతాధికారులలో, సాంకేతిక విషయాలను సంబంధించి వివరించేటప్పుడు ఆంగ్ల భాషను వాడతారు. అసంఘటిత రంగాల్లో మాత్రం ఎక్కువ పనివారు గ్రామీణ ప్రాంతాలకు చెందినవారు కాబట్టి తోటి పనివారితో మాట్లాడేటప్పుడు వారి అమ్మనుడులను ఉపయోగిస్తారు. భారతదేశ జోడించబడిన స్థూల విలువలు స్థానిక భాషల ఉపయోగం వలననే చేకూరుతోంది. ఐఎంఎఫ్ 2017-18 లెక్కల ప్రకారం భారతదేశంలో 52.4 శాతం అసంఘటిత రంగాల ద్వారా విలువ చేరిన స్థూల ఉత్పత్తి చేకూరుతోంది. కేవలం వ్యవసాయం, చేపలు పట్టడం, అటవీ వనరుల నుండి అసంఘటిత రంగం ద్వారా 96.7 శాతం జోడించిన స్థూల విలువ GVA, (GDP)ని రంగాల వారీగా కొలవడానికి ఉపయోగించి ఒక ప్రక్రియ వస్తుందని ఐఎంఎఫ్ 2017-18 పేర్కొంది.

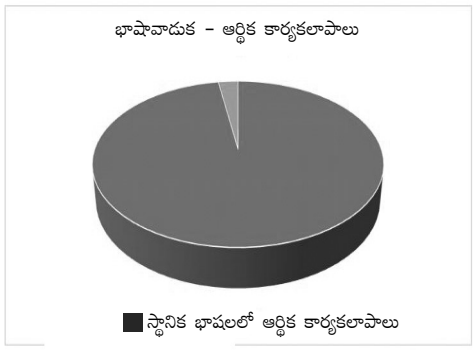
ఆర్థికాభివృద్ధిలో స్థానిక నుడుల వాడుక:

దేశంలోని ఆర్థిక కార్యకలాపాలు వ్యవస్థీకృత అసంఘటిత రంగాల నుంచి సుమారు 97.74% నిరక్షరాస్యులు, గ్రాడ్యుయేట్స్ కానీ పనివారితో స్థానిక భాషల వినియోగం ద్వారా జరుగుతున్నాయి. దీనికి గల ఆధారాలను పరిశీలిస్తే, దేశంలో ఆంగ్లంలో, చదవడం రాయడం మాట్లాడటంతోపాటు ఆర్థిక కార్యకలాపాలలో వ్యవహరించేవారు గ్రాడ్యుయేట్స్ అనుకుంటే మనదేశంలో గ్రాడ్యుయేట్స్ 6.8 కోట్ల పైచిలుకు ఉన్నారు. అంటే పదిమందిలో ఒకరు గ్రాడ్యుయేట్ అన్నమాట. మొత్తంలో 8.15 శాతం మంది మాత్రమే గ్రాడ్యుయేట్స్. చదువుకున్న గ్రాడ్యుయేట్స్ అందరూ ఉద్యోగం చేస్తున్నారా అంటే కాదు. ఇందులో 26 శాతం మంది మాత్రమే ఉద్యోగులు, 74 శాతం మంది నిరుద్యోగులే. అంటే ఆర్థిక కార్యకలాపాలలో 97.74 శాతం స్థానిక నుడుల వాడుకలోనే జరుగుతున్నది. ఇందులో ఎక్కువ శాతం పనివారు గ్రామీణ ప్రాంతాలలో వ్యవసాయం, కుటీర పరిశ్రమలు, చేపల పట్టడం, కుండలు చేయడం, బట్టలు నేయటం, కల్లు తీయడం, నిర్మాణ కూలీలుగా పనిచేస్తూ సంపద సృష్టిలో పాల్గొనేవారే. వీరు అందరూ పూర్తిగా తమ అమ్మనుడిని మాత్రమే ఉపయోగించి పనిచేస్తారు.

పట్టిక 4. భారత గ్రాడ్యుయేట్లలో ఇంగ్లీషూ ఇతర స్థానిక భాషలలో ఆర్థిక కార్యకలాపాలు:

గ్రాడ్యుయేట్ల సంఖ్య	గ్రాడ్యుయేట్ల శాతం	గ్రాడ్యుయేట్ ఉద్యోగులు %	గ్రాడ్యుయేట్ నిరుద్యోగులు %	స్థానిక భాషలలో ఆర్థిక కార్యకలాపాలు	ఇంగ్లీష్ భాషలో ఆర్థిక కార్యకలాపాలు
6,86,00,000	8.15	26	74	97.4	2.6

పటం 1.



ఆర్థిక కార్యకలాపాలు ఎంత సహజంగా, నైపుణ్యంతో సహజ భాష అయిన మాతృభాషలో జరుగుతుందో వాటినుండి వచ్చే ఉత్పత్తి గానీ సేవ గానీ అంతే ఉన్నతంగా ఉంటుంది. పనికి కావలసిన నైపుణ్యాన్ని విద్య ద్వారా అందించవచ్చు. మాతృభాషా మాధ్యమంలో విద్యని అందించడం దేశ ఆర్థిక ప్రగతికి మూలం. దేశ ఆర్థిక ప్రగతికి కూడా స్థానిక భాషల వాడుకే మూలం. మన సంపద సృష్టికీ జీవన మనుగడకు మూలమైన మాతృభాషను అన్ని వేళలా ఉపయోగించడం సమాజ అభ్యున్నతికి దారి తీస్తుంది. మన దేశ ప్రగతికి మూలాలుగా నిలిచిన మన స్థానిక భాషల విలువను తెలుసుకొని వాటిని అన్ని రంగాల్లోనూ పరిరక్షించడం మన తక్షణ కర్తవ్యం.

ఈ వ్యాసరచయిత పరిశోధక విద్యార్థి,
హైదరాబాదు విశ్వవిద్యాలయం.

అంకెలు తెలిపే 'ఇంగ్లీషు' నిజాలు!

2011 జనాభా లెక్కల సందర్భంగా భారతదేశంలో కేవలం 0.02 శాతం అంటే 5000 మందిలో ఒక్కరు మాత్రమే ఆంగ్ల భాషను తమ మాతృభాషగా తెలిపారు. కానీ విచిత్రంగా ఈ ఆంగ్లభాషే సుప్రీమ్ కోర్టులో, పెద్ద పెద్ద పరిశ్రమలలో, ప్రభుత్వ కార్యకలాపాలలో, ప్రముఖ మీడియా సంస్థల్లో చెలామణీ అవుతోంది.

మన జనాభా లెక్కల్లో తెలుపనప్పటికీ అనధికారికంగా ఒక 6.8% మంది అంటే ప్రతి వంద మందిలో కేవలం ఏడుగురు ఆంగ్లభాషలో మాట్లాడగలమని నమ్ముతారు. ఆంగ్లం కన్నా 43 ఇతర భాషలు ఎక్కువగా భారతదేశంలో మాట్లాడబడతాయి.

సాంస్కృతిక వారసత్వాన్ని కాపాడటంలో మాతృభాషలు కీలకం

తొలి సారిగా పిల్లలుగా ఉన్నప్పుడు నేర్చుకునే పద్యాలు, పాటలు, కథలు, మాతృభాషల్లో నేర్చుకున్నప్పుడు అవి ఆయా ప్రాంతాల అంశాలను కలిగి ఉంటాయి. ప్రపంచాన్ని పరిచయం చేసే ఈ తొలి పాఠాలు మాతృభాషలో ఉండటమే మేలు. ఈ విషయాన్ని గ్రహించిన దిల్లీకు చెందిన మోహిని గుప్త అనే ఆవిడ సోషల్ మీడియాలో మదర్‌టంగ్‌ట్విస్టర్స్ (ఫేస్‌బుక్‌లో / ఇన్‌స్టాగ్రాములో mothertonguetwisters, ట్విట్టర్‌లో @mttandmore) పేరుతో ప్రాంతీయ భాషల్లోని చిన్నపిల్లల పాటల్ని, కథల్ని, పద్యాలను అందరికీ పరిచయం చేస్తున్నారు. వీరు అనువాద సాహిత్యం పై కూడా సామాజిక మాధ్యమాల్లో రాస్తూ ఉంటారు.

జె.డి.ప్రభాకర్
8500227185

పనిస్థలాల్లో దేశీయ భాషల వాడుక-దేశ ఆర్థికాభివృద్ధి 2

సమాజంలో ఎందుకు కొన్ని భాషలు ఎక్కువ విలువైనవిగా ఎంచబడతాయి? ఎందుకు మిగిలిన భాషలు తక్కువ విలువైనవిగా ఎంచబడతాయి? భాషకు గల గొప్ప చరిత్రా, బలమైన వ్యాకరణమూ, పదజాలమూ, సాహిత్యం కారణంగా గొప్ప భాషలుగా పిలువబడతాయా? కాదు! భాషల విలువ భాషల వాడుకపై ఆధారపడి ఉంటుంది. మన శరీరంలోని అన్ని భాగాల్లోకి రక్త ప్రసరణ జరిగితే ఎంత ఆరోగ్యకరంగా శరీరం ఉంటుందో సమాజంలోని అన్ని రంగాలలో అమ్మనుడిని ఉపయోగిస్తే సమాజం కూడా అంతే ఆరోగ్యంగా ఉంటుంది. ఒక సమాజంలో, ఏ రంగంలో అయితే అమ్మనుడి వాడుక తగ్గుతుందో అక్కడ నుండే సమాజం నడక కుంటుపడుతుంది. మరీ ముఖ్యంగా పనిచేసే స్థలాలలో అమ్మనుడి వాడుక సమాజానికి ముఖ్యమైనది. మనిషి జీవితమంతా సంపద సృష్టి తోడే ముడిపడి ఉంది. సంపద సృష్టికి మూలం జ్ఞానం. జ్ఞానానికి మూలం భాష! భాషకీ సంపదసృష్టికీ గల సంబంధాన్ని అంచనా వేయడమే ఈ పరిశోధనా వ్యాసం ఉద్దేశం. మన సమాజంలో, మనదైన ప్రజా స్వామ్యంలో, భాషా ప్రణాళికలను అమలు చేసే ప్రభుత్వాలు మన దైనందిన జీవితంలో ఇంగ్లీషూ, మన అమ్మనుడీ, తదితర దేశీయ భాషల 'ఆర్థికవిలువల' పట్ల మనకు ఉన్న నమ్మకాలూ, మనం మోస్తున్న అవాస్తవిక అంచనాలు వాటి విశ్లేషణలూ 'చర్చకు రాని అనమగ్ర అంశాలు'గానే ఉంటున్నాయి. 'విలువ' అనే పదం అర్థశాస్త్రానికి సంబంధించినది. భాష యొక్క 'ఉపయోగపు విలువను' సూక్ష్మ-అర్థశాస్త్ర కోణంలో చూడాలి. నిత్యం మనం సాధారణ అవసరాలు తీర్చుకోవడానికి భాషని ఉపయోగించినా పని చేసే సందర్భాలలో ఉపయోగించేటప్పుడు భాషని వస్తూత్పత్తి చేయడానికో, సేవా పరంగా ఉపయోగించడానికో వాడుతాము. కాబట్టి పనికి భాష ఒక ఉపకరణంగా, ఒక వాహికగా ఉపయోగపడుతోంది. పనిచేసే చోట్లల్లో శ్రామికులు అందరూ సమిష్టిగా ఉత్పత్తి చేసిన ఉత్పాదనల ఆదాయానికీ వారు ఉపయోగించే భాషలకూ ఎటువంటి సంబంధాన్ని కలిగి ఉంటుందో అనుభవంలోకి వచ్చిన ఆధారాలతో శాస్త్రీయ పద్ధతిలో తెలియజేయటమే దీని ముఖ్య ప్రయోజనం.

క్షేత్ర పర్యటన:

పనిస్థలాల్లో వివిధ సందర్భాలలో వివిధ రూపాలలో ఏ భాషను ఏ విధంగా వాడుకలో ఉందో తెలుసుకోవడానికి క్షేత్ర పర్యటన ఎంతో దోహదపడుతుంది. శ్రామికులు అందరూ కలిసి సమిష్టిగా పని చేసే సందర్భాలలో వారందరూ ఒక లక్ష్యంతో, నిర్దేశించిన పనులలో పని చేయడానికి వారందరినీ సమన్వయపరిచేందుకు భాష కీలక పాత్ర పోషిస్తోంది. ఉత్పత్తిలో భాష పాత్రను క్షేత్ర స్థాయిలో తెలుసుకోవడానికి తెలంగాణ రాష్ట్రంలోని కొత్తగూడెం జిల్లాలో సింగరేణి బొగ్గు గనుల పరిశ్రమను ఎన్నుకోవడం జరిగింది. సి.ఐ.ఏ. ఫ్యాక్‌బుక్ గణాంకాల ప్రకారం భారత దేశ స్థూల జాతీయ ఉత్పత్తి (GDP) వ్యవసాయ రంగం 15.4 శాతం, సేవా రంగం 61.5 శాతం కాగా 23 శాతంతో పరిశ్రమ రంగం 560.97 బిలియన్ల డాలర్లు (41,64,221 కోట్ల రూపాయలు) పంచుకుంటూ ప్రపంచంలో ఆరవ స్థానంలో నిలిచింది. అటువంటి పరిశ్రమ రంగంలో ముఖ్య పాత్ర వహిస్తున్న సింగరేణి బొగ్గు గనులు 46,021 మంది కార్మిక శక్తితో 640.44 లక్షల టన్నుల బొగ్గు ఉత్పత్తితో భారతదేశానికి 9.2% జాతీయ స్థూల జాతీయ ఉత్పత్తి (%స్థఈఆ%) అందిస్తుంది. దేశానికి ఇంతటి ఆదాయాని అందిస్తున్న ఇటువంటి పరిశ్రమలో నెల రోజుల పాటు క్షేత్రస్థాయిలో శ్రామికుల మధ్య సంభాషణలూ, పరిశ్రమలో ఉపయోగించే భాష, శిక్షణా మాధ్యమంపై పరిశోధన చేయడం జరిగింది.

సమాచార సేకరణ పద్ధతి:

సింగరేణి బొగ్గు గనుల పరిశ్రమ 51% తెలంగాణ రాష్ట్ర పరిధిలో 49% కేంద్ర పరిధిలో ఉంటుంది. కాబట్టీ, కార్మికులు అత్యధికులు స్థానికులే ఉన్నా తెలుగేతర కార్మికులు కూడా ఇందులో పని చేస్తారు. వారినుంచి పనిచేసే చోట భాష ఎంపిక సమాచారాన్ని తెలుసుకునేందుకు ఒక ప్రశ్న పత్రాన్ని రూపొందించాం. కొత్తగూడెం సమీపంలోని బొగ్గు గనుల్లో పనిచేసే మొత్తం కార్మికులు 4,400 మంది కాగా వారిలో 10% మాదిరిగా సమాచారం సేకరించాం. ఈ సమాచారాన్ని ఒక శాస్త్రీయ పద్ధతిలో స్తరీకృత యాదృచ్ఛిక నమూనా (స్ట్రాటిఫైడ్ రాండమ్ స్యాంప్లింగ్) ద్వారా సేకరించాం. పనిస్థలంలో శ్రామికులు పై స్థాయి నుండి కింది స్థాయి వరకు సుమారు 20కి పైగా వివిధ వృత్తుల్లో పనిచేసేవారు ఉంటారు. ప్రతి వృత్తి నుండి 10 శాతం పనివారిని సమాచారానికి యాదృచ్ఛికంగా ఎంచుకున్నాం.

20 ప్రశ్నలు ఉన్న ప్రశ్నపత్రాన్ని తెలుగు కార్మికులకూ తెలుగేతర కార్మికులకూ వీలుగా ఉండేందుకు తెలుగు, హిందీ, ఇంగ్లీషు మూడు భాషల్లో తయారుచేశాం. చదవరాని కార్మికులతో ముఖాముఖిగా మాట్లాడుతూ సమాచారాన్ని సేకరించాం. పనిస్థలంలో అమ్మనుడి వాడుకకు గల ప్రాముఖ్యతనూ, అవసరాలకు సంబంధించి వారు వెలిబుచ్చిన అభిప్రాయాలను కూడా పోగుచేశాం. మునుపు చర్చించిన పనికి సంబంధించిన శిక్షణా మాధ్యమాన్నీ, పుస్తకాలనూ, భద్రతా సూచనలనూ కూడా పరిగణలోకి తీసుకున్నాం. ఇలా పోగు చేసిన సమాచారాన్ని ఎస్. పి. ఎస్. ఎస్. (సామాజిక శాస్త్రాల గణాంక

విశ్లేషణ కూర్పు) ద్వారా విశ్లేషించాం.

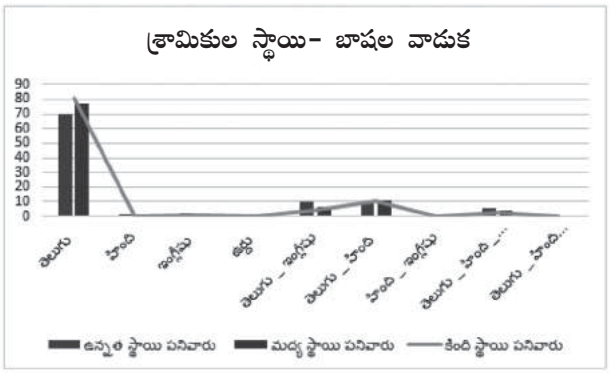
సమాచారం - విశ్లేషణ:

శ్రామికుల విభజన: సింగరేణి బొగ్గు గనుల పరిశ్రమలో పని చేసేవారు ఎక్కువగా తెలంగాణ, ఆంధ్ర ప్రదేశ్, మహారాష్ట్ర, బీహార్, ఉత్తర ప్రదేశ్ రాష్ట్రాలకు సంబంధించినవారు. అయితే వీరిలో అత్యధికులు 90% తెలంగాణ రాష్ట్రంవారే. తీసుకోబడిన 400 మంది శ్రామికుల నమూనాలో పురుషులు 389 మంది ఉండగా కేవలం 11 మంది మాత్రమే స్త్రీలు ఉన్నారు. దీనికి కారణం బొగ్గు గనులలో చేసే పని పూర్తిగా శారీరకశ్రమ కావడం. నమూనాలో తీసుకోబడిన స్త్రీలు ఆ పరిశ్రమకు సంబంధించిన కార్యాలయంలో పనిచేసేవారు. ఈ పరిశ్రమలో సంక్షేమ, ఇంజనీరింగ్, సర్వే, ఉత్పత్తి, భద్రత వంటి విభాగాలుగా పని చేసేవారిని విభజించినప్పటికీ ఈ పరిశోధనలో పరిశ్రమలో పనిచేసేవారందరినీ వారి పని ఆధారంగా స్థూలంగా ఉన్నత స్థాయి, మధ్యమ స్థాయి, కింది స్థాయి శ్రామికులుగా విభజించాం.

పట్టిక 1 : శ్రామికుల స్థాయి-భాషల వాడుక

క్ర.సం	వాడకంలో భాషలు	పనివారి స్థాయిలు %		
		ఉన్నత%	మధ్య%	కింది%
1.	తెలుగు	69.7	76.70	80.70
2.	హిందీ	1.00	0.80	0.50
3.	ఇంగ్లీషు	2.50	0.30	0.80
4.	ఉర్దు	0.30	0.30	0.30
5.	తెలుగు- ఇంగ్లీషు	9.80	6.50	4.50
6.	తెలుగు-హిందీ	9.80	10.80	10.50
7.	హిందీ-ఇంగ్లీషు	0.50	0.30	0.30
8.	తెలుగు-హిందీ-ఇంగ్లీషు	6.00	3.80	2.30
9.	తెలుగు-హిందీ-లంబాడి	0.60	0.60	0.30
మొత్తం		100	100	100

పట్టిక-1లో చూపిన విధంగా ఉన్నత స్థాయి ఉద్యోగస్తులు చాలా తక్కువ సంఖ్యలో ఉంటారు. పరిశ్రమకు సంబంధించిన పనికి దిశానిర్దేశాలు చేయడం, విధివిధానాలను రూపొందించడం వీరి పని. మధ్యమ స్థాయి పనివారు ఉన్నత స్థాయి అధికారులు ఆదేశించిన పనులను రూపకల్పన చేయడానికి పని చేస్తారు. వారు



పటం-1: శ్రామికుల స్థాయి - భాషల వాడుక

కిందిస్థాయి శ్రామికులతో బొగ్గు గనుల్లో పని చేయిస్తూ పర్యవేక్షణ అధికారులుగా ఉంటారు. కింది స్థాయి ఉద్యోగులు వివిధ విభాగాలలో ప్రత్యక్షంగా బొగ్గు ఉత్పత్తికై గనుల్లో పని చేస్తారు.

పట్టిక-1లో చూపిన విధంగా ఉన్నత స్థాయి ఉద్యోగస్తులు చాలా తక్కువ సంఖ్యలో ఉంటారు. పరిశ్రమకు సంబంధించిన పనికి దిశానిర్దేశాలు చేయడం, విధివిధానాలను రూపొందించడం వీరి పని. మధ్యమ స్థాయి పనివారు ఉన్నత స్థాయి అధికారులు ఆదేశించిన పనులను రూపకల్పన చేయడానికి పని చేస్తారు. వారు కిందిస్థాయి శ్రామికులతో బొగ్గు గనుల్లో పని చేయిస్తూ పర్యవేక్షణ అధికారులుగా ఉంటారు. కింది స్థాయి ఉద్యోగులు వివిధ విభాగాలలో ప్రత్యక్షంగా బొగ్గు ఉత్పత్తికై గనుల్లో పని చేస్తారు.

భాషల వాడుక: పైన పేర్కొన్న వివిధ స్థాయి శ్రామికుల మధ్య జరిగే చర్చా, సంభాషణలూ వాటికై ఎంపికచేసుకొని వాడే భాషా చర్చించదగిన అంశాలు. బొగ్గుగనుల్లో ఉత్పత్తికి సంబంధించిన పనులు ఎక్కువ మట్టుకు సూచనల మీదే ఆధారపడి ఉంటాయి. శ్రామికులు ఏ ఒక్క సూచన మరచినా, ఉత్పత్తిలో నష్టం వాటిల్లడమే కాకుండా శ్రామికుల ప్రాణం పోయే ప్రమాదం కూడా ఎంతో ఉంది. ఉదాహరణకు, బొగ్గుగనిలో పేలుడు పదార్థంతో బొగ్గును తీసేందుకు వాడే క్రమంలో ఆ గుంపులో పని చేసేవారందరూ వారికి సంబంధించిన పని మరియు భద్రతా సూచనలు అత్యవసరం. అందులో ఏఒక్కరు పనీ మరియు భద్రతా సూచనలు మరిచినా ఉత్పత్తి నష్టమూ ప్రాణ నష్టమూ జరిగే అవకాశం ఎక్కువగా ఉంటుంది. కాబట్టి అటువంటి పనిచేసే సందర్భాలలో వారు వాడే మాట గానీ, శబ్దాలు గానీ, సైగలు గానీ, భాషల సూచనలు గానీ ఎంతో ప్రాముఖ్యతను కలిగి ఉంటాయి. కాబట్టి పై అధికారులు క్రింది స్థాయి శ్రామికులతో చేసే భద్రతా సూచనలకు ఉపయోగించే భాష మాతృభాష అయి ఉంటుంది. ఎందుకంటే వారు సమాచార స్పష్టత ప్రతి కింది స్థాయి శ్రామికుడికి ఎటువంటి లోపం లేకుండా అందాలని ఆకాంక్షిస్తారు.

ఉన్నత స్థాయి పనివారి భాష : సింగరేణి బొగ్గు గని పరిశ్రమ తెలంగాణ రాష్ట్రం మరియు కేంద్ర ఆధీనంలో ఉంటుంది కాబట్టి ఉన్నత స్థాయి పనివారి మధ్య జరిగే సంభాషణలలో భాషా వైవిధ్యం ఎక్కువగా ఉంటుంది. కొన్నికొన్ని సందర్భాలలో కేంద్రం నుండి వచ్చే వివిధ రాష్ట్రాల ప్రతినిధులతో అధికారులతో సంభాషించేటప్పుడు ఎక్కువగా ఇంగ్లీషును వాడుతారు. సమావేశాలలో ఇంగ్లీషు భాషనే ప్రాధాన్యంగా ఉపయోగిస్తారు. ఉత్పత్తికి సంబంధించిన అధికారిక ప్రకటనలూ, ఆ గనుల శాఖకు అందించే నివేదికలకూ, అంతర్జాలంలో ఉపయోగించే సమాచారానికి అంతటా ఇంగ్లీషు భాషనే వాడతారు. ఈ ఉన్నత స్థాయి ఉద్యోగస్తులు పరిశ్రమలోని స్థానికుల శాతంలో ఒక శాతం కంటే తక్కువగానే ఉన్నారు. వీరు తీసుకున్న నిర్ణయాలూ, ఉత్పత్తి ప్రతిపాదనలూ, సాంకేతిక సమాచారాలూ, సంక్షేమ సమాచారాలూ మొదలగునవి తమ కింది స్థాయి అధికారులతో అనగా మధ్యమ స్థాయి పనివారితో అమ్మనుడి

అయిన తెలుగులోనో, తెలుగేతరులతో ఇంగ్లీషులోనో లేదా హిందీలోనో చర్చిస్తారు.

మధ్యమ స్థాయి పనివారి భాష: పరిశ్రమకు సాంకేతిక పరిజ్ఞానం అందించడంలో, పనుల రూపకల్పనలో, భద్రతా సూచనలు అందించడంలో, పనుల పర్యవేక్షణలో వీరు ఉపయోగించే భాష ఉత్పత్తికి ఎంతగానో సహకరిస్తుంది. సాంకేతిక పరిజ్ఞానం ఇంగ్లీషులో ఉన్నప్పటికీ వాటిని స్థానిక భాషలోకి అనువదించి క్రింది స్థాయి శ్రామిక వర్గాలకు అందే విధంగా చేయడం వీరు చేస్తున్న కృషి అని చెప్పొచ్చు. పనితోపాటు అమ్మనుడి ప్రాముఖ్యతకు వీరు ఎంతో విలువను ఇస్తారు కాబట్టి కింది స్థాయి ఉద్యోగస్తులతో పని గురించి చర్చించేటప్పుడు గుంపు సమావేశాలలోనూ వీరు అమ్మనుడి అయిన తెలుగుభాషలోనే పనిగురించిన సమాచారాన్నీ భద్రతా సూచనలనూ అందిస్తారు. క్రింది స్థాయివారితో పాటు ఉంటూ బొగ్గు గనుల్లో ఉత్పత్తి పనుల్లో సమయానికి తగిన సూచనలు ఇవ్వడం ఉత్పత్తిలో కీలక ప్రక్రియ. వీటిలో ఎటువంటి అవగాహనా లోపం జరిగినా ఉత్పత్తికీ కార్మికుల ప్రాణాలకీ నష్టమే. కావున సమాచారాన్ని అందించేటప్పుడు వారికి సహజ ప్రక్రియలో పని అర్థమయ్యే భాష అయిన అమ్మనుడిలోనే సూచనలు తెలుపుతారు. అమ్మనుడిని వాడడంతో ఉత్పత్తి పనులు సజావుగా సాగుతాయి. మధ్యమ స్థాయి ఉద్యోగస్తులు వారి సహోద్యోగులతో చర్చలో మాట్లాడేటప్పుడు కూడా అమ్మనుడినే ఉపయోగిస్తారు. చాలా తక్కువ సందర్భాలలో కేవలం తెలుగేతర వారితోనే ఇంగ్లీషులోనో లేదా హిందీలోనో సంభాషిస్తారు.

కింది స్థాయి పనివారి భాష: పరిశ్రమలో కిందిస్థాయి శ్రామికుల సంఖ్య అత్యధికం. పై స్థాయి ఉన్నత స్థాయి శ్రామికుల నుండి తీసుకునే పని సూచనలతో ఉత్పత్తిని ఒక రూపంలోకి తీసుకురావడానికి వీరి కృషి ప్రధానమైనది అని చెప్పవచ్చు. ఎక్కువ సంఖ్యలో ఉన్న ఈ శ్రామికులందరి మధ్య పనిచేసే సందర్భంలో సమన్వయం కుదరడం ఉత్పత్తికి ప్రధానమైనది. ఈ పని అక్కడి స్థానిక భాష అయిన తెలుగుద్వారానే జరుగుతుంది. ఉన్నత స్థాయి అధికారులు పని సూచనలు చేసేటప్పుడు వినే భాషా, శిక్షణ తరగతిలో నైపుణ్యాలను పెంపొందించుకునేందుకు వీరు నేర్చుకునే భాషా మాధ్యమం పనిచేసే సందర్భంలో ఎప్పటికీ ఉపయోగపడుతూనే ఉంటాయి. వివిధ పనులకు వివిధ గుంపులుగా పనిచేసే సందర్భాలలో ప్రతి గుంపులో వారి సహోద్యోగులతో పని సంబంధిత సంభాషణలు ఆ పనిని పరిపూర్ణ స్థాయిలో విజయవంతం చేసేందుకు సహకరిస్తాయి. సహోద్యోగులతో మాట్లాడేటప్పుడు అక్కడివారు ఎక్కువమంది స్థానికులే కాబట్టి వారి స్థానిక భాష తెలుగులోనే సంభాషిస్తారు. ఏదైనా ఒక పని చేయడానికి దానికి సంబంధించిన విధాన రూపకల్పన అవసరమవుతాయి. వీటిని సంపూర్ణంగా అమలు చేసేందుకు వారు ఉపయోగించే భాష కీలకపాత్ర పోషిస్తుంది. సంభాషణలు ఎంతో సహజంగా అర్థవంతంగా ఉంటేనే ఉత్పత్తి కూడా వారు రూపొందించిన విధంగానే వస్తుంది. కాబట్టి పై స్థాయి ఉద్యోగస్తులు ఇచ్చిన సూచనలు క్రింది స్థాయి వరకు వినియోగించి, అనుకున్నంత ఉత్పత్తి జరగడం కేవలం స్థానిక భాష వాడుకతోనే సాధ్యపడుతోంది.

పరిశ్రమలో అక్షరాస్యత మరియు భాషల వాడుక:

భాష వాడుక పరిశ్రమలో పని చేస్తున్న శ్రామికుల అక్షరాస్యతతో కూడా ముడిపడి ఉంది. పరిశ్రమల్లో పనిచేసే వారందరి అక్షరాస్యతను ఆధారంగా నిరక్షరాస్యులు, ప్రాథమిక విద్య, మాధ్యమిక విద్య, ఇంటరు లేదా డిప్లమో గ్రాడ్యుయేట్లు పోస్ట్ గ్రాడ్యుయేట్లుగా విభజించడం జరిగింది.

శ్రామికుల స్థాయి	వాడుక భాషలు	నిరక్షరాస్యులు	విద్యార్హతలు				శ్రామికుల శాతం
			i - x	ix-xii	గ్రాడ్యుయేట్లు	పీ.జీ	
కింది స్థాయి శ్రామికులు	తెలుగు	5.3%	40.6%	7.8%	14.0%	2.3%	70.0%
	హిందీ	0.3%	0.8%	–	–	–	1.0%
	ఇంగ్లీషు	–	0.5%	1.0%	0.8%	0.3%	2.5%
	ఉర్దు	–	0.3%	–	–	–	0.3%
	తె-ఇ	–	2.3%	1.3%	4.5%	1.5%	9.5%
	తె-హి	0.5%	6.5%	1.8%	0.8%	0.3%	9.8%
	హి-ఇ	–	0.3%	–	–	–	0.3%
	తె-హి-ఇ	–	2.5%	0.5%	3.0%	–	6.0%
	తె-హి-ల	–	0.3%	–	–	–	0.3%
స్థాయి శ్రామికులు	తెలుగు	5.6%	42.1%	9.5%	16.8%	3.0%	77.0%
	హిందీ	–	0.5%	–	0.3%	–	0.8%
	ఇంగ్లీషు	–	–	–	0.3%	–	0.3%
	ఉర్దు	–	0.3%	–	–	–	0.3%
	తె-ఇ	–	2.3%	1.0%	2.0%	1.0%	6.2%
	తె-హి	0.5%	6.5%	1.3%	2.6%	0.3%	11.4%
	హి-ఇ	–	0.3%	–	–	–	0.3%
	తె-ల	–	0.3%	–	–	–	0.3%
	తె-హి-ల	–	1.5%	0.8%	1.5%	–	3.8%
	తె-హి-ల	–	0.3%	–	–	–	0.3%
పైస్థాయి శ్రామికులు	తెలుగు	5.5%	44.1%	10.0%	17.5%	3.5%	80.7%
	హిందీ	–	0.5%	–	–	–	0.5%
	ఇంగ్లీషు	–	0.3%	0.3%	0.3%	–	0.9%
	ఉర్దు	–	0.3%	–	–	–	0.3%
	తె-ఇ	–	0.3%	1.3%	1.8%	0.5%	4.5%
	తె-హి	0.3%	6.5%	1.3%	2.5%	–	10.5%
	హి-ఇ	–	0.3%	–	–	–	0.3%
	తె-హి-ఇ	–	0.3%	0.3%	1.3%	0.3%	2.0%
	తె-హి-ల	–	0.6%	–	–	–	0.6%
	మొత్తం	6.0%	53.9%	12.5%	23.3%	4.3%	100.0%

తె=తెలుగు, హి=హింది, ఇ=ఇంగ్లీషు, ల=లంబాడీలు, పీ.జీ=పోస్టుగ్రాడ్యుయేట్లు

ఉన్నత స్థాయి పనివారిలో ఎక్కువమంది పోస్టుగ్రాడ్యుయేట్లూ, గ్రాడ్యుయేట్లూ. మధ్యమ స్థాయి పనివారిలో ఎక్కువమంది గ్రాడ్యుయేట్లు. కిందిస్థాయి పనివారిలో ఎక్కువగా నిరక్షరాస్యులూ, ప్రాథమిక, మాధ్యమిక విద్యను అభ్యసించినవారు, ఇంటరు లేదా డిప్లమో చేసినవారు, కొద్దిమంది మాత్రమే గ్రాడ్యుయేట్లు ఉన్నారు. నిరక్షరాస్యులు తోటి ఉద్యోగస్తులతో మాట్లాడేటప్పుడు వారి

మాతృభాష అయిన తెలుగు, ఉర్దూ, హిందీ, లంబాడి భాషలు మాట్లాడతారు. నిరక్షరాస్యులు ఒకే భాష తెలిసినవారు అమ్మనుడిలోనే వ్యవహరిస్తారు. సామాజిక వర్గాన్నిబట్టి కొందరు లంబాడితో పాటు తెలుగునూ, హిందీ లేదా ఉర్దూతోపాటు తెలుగునూ పరిశ్రమలలో ఉపయోగిస్తారు. మాధ్యమిక విద్య, ఇంటరు లేదా డిప్లమో అభ్యసించినవారు తెలుగులోనే సంభాషణలు జరుపుతారు. కేవలం కొన్ని సందర్భాలలో మాత్రమే వారి సామాజిక వర్గంవారు పరిశ్రమలో ఎదురైనప్పుడు లేదా తోటి సహచరులుగా పనిచేసేటప్పుడు లంబాడి హిందీ లేదా ఉర్దూ మాట్లాడతారు. తెలుగేతర సిబ్బందితో హిందీలో వ్యవహరిస్తారు. ఇది చాలా తక్కువ సందర్భాల్లో మాత్రమే జరుగుతుంది. మధ్యమ స్థాయి శ్రామికులలో కొందరు ఇంగ్లీషు మాధ్యమంలో చదివి ఇంగ్లీషులో మాట్లాడడం రాయడం కొంత వచ్చినవారేగానీ అతి తక్కువ సందర్భాలలో ఉన్నత స్థాయి ఉద్యోగస్తులతో మాట్లాడేటప్పుడు ఇంగ్లీషులో వ్యవహరిస్తున్నారు. ఉన్నతస్థాయి అధికారులు తెలుగువారైతే అనధికారిక చర్చలూ సంభాషణలలో తెలుగును ఉపయోగిస్తున్నారు. అధికారిక చర్చలూ సంభాషణలలో ఇంగ్లీషును వాడుతున్నారు. ఉన్నతస్థాయి అధికారులు తోటి ఉద్యోగులు తెలుగువారు అయితే అనధికారిక చర్చలలో సంభాషణలో తెలుగులోనే వ్యవహరిస్తారు. సామూహికంగా జరిగే చర్చాకార్యక్రమాలలో ఇంగ్లీషును ఉపయోగిస్తారు. ఈ ఉన్నత స్థాయి

క్ర. సం	భాషల ఎంపిక	విజ్ఞప్తులు	సెలవు చీటీలు	మెయిల్స్	ఆజ్ఞలు	సిపార్సు లేఖలు	ఫిర్యా-దులు
1.	తెలుగు	70.4	45.6	31.6	42.4	46.4	49.1
2	హిందీ	0.3	0.5	0.8	0.5	0.8	0.3
3	ఇంగ్లీషు	10.3	33.6	51.6	33.8	31.1	27.8
4	ఉర్దూ	0.3	0.3	0.3	0.3	0.3	0.3
5	తెలుగు-ఇంగ్లీషు	11.5	13.8	10.0	15.5	11.5	15.5
6	తెలుగు-హిందీ	4.8	1.8	1.5	1.5	1.8	2.0
7	తెలుగు-ఇతరాలు	0.3	0.5	0.3	0.5	0.5	0.5
8	హిందీ-ఇంగ్లీషు	0.3	0.3	0.8	0.5	0.3	0.3
9	ఇంగ్లీషు-ఇతరాలు	1.8	0.8	0.3	0.3	0.3	1.0
10	తె-హి-ఇ	0.3	1.5	0.5	1.3	1.5	1.0
11	ఇతరములు		0.3	2.5	1.0	1.0	97.7
12	హి-ఇ-మ		1.3	0	0		
13	తప్పిపోయినవి				2.5	4.8	2.3
	మొత్తం	100	100	100	100	100	100

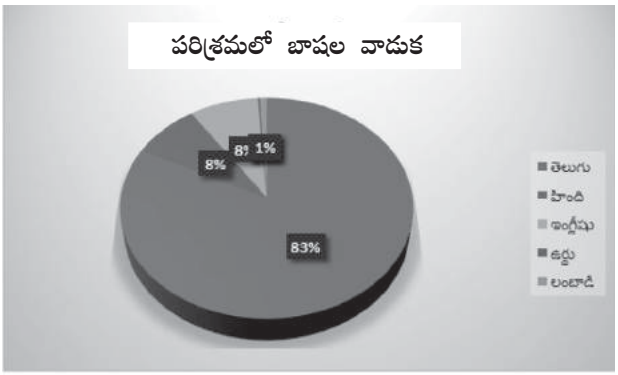
అధికారులు పోస్టు గ్రాడ్యుయేషన్ చేసినవారు. కాబట్టి అధికారిక సమాచారం ఇవ్వడం, స్వీకరించడం ఇంగ్లీషులోనే జరుపుతారు.

పరిశ్రమలో రాతలో భాషల వాడుక:

పరిశ్రమలలో ఉపయోగించే భద్రతా సూచనలు, శిక్షణా పాఠ్యాంశాలలో అధిక భాగం తెలుగులోనూ, స్వల్పంగా ఇంగ్లీషూ హిందీలో లిఖిత రూపంలో జరిగే వ్యవహారాన్ని కూడా పరిగణలోకి తీసుకోవడం జరిగింది.

మౌఖికంగా జరిగే సంభాషణలూ చర్చలలో ఉపయోగించే భాష ఉత్పత్తిలో ప్రత్యక్ష పాత్ర వహించినప్పటికీ, పరిశ్రమకూ కార్మికులకూ మధ్య జరిగే కొన్ని అధికారిక వ్యవహారాలు జరపడానికి రాతనే ఉపయోగిస్తారు. వీటిలో ఎక్కువగా సెలవు చీటీలు, ఫిర్యాదులు, ఆజ్ఞలూ విజ్ఞప్తులూ, సమీక్షా పత్రాలు, ఈమెయిళ్లూ, అధికారిక నోటీసుల ఉంటాయి. వీటిని కూడా భాషల వాడుక లెక్కలోకి తీసుకోవాల్సిన అవసరం ఉంది. ప్రాథమిక, మాధ్యమిక, ఇంటరు లేదా డిప్లమో విద్య చదివిన కిందిస్థాయి ఉద్యోగస్తులు తమ సెలవూ, విజ్ఞప్తి పత్రాలను తెలుగులోనే రాస్తారు. మధ్యమ స్థాయి ఉద్యోగస్తులు కొంత ఇంగ్లీషు భాష నేర్చుకోవడం మూలాన వారి సెలవు చీటీలూ, ఈమెయిళ్లూ, విజ్ఞప్తులూ, సమీక్షలూ, అధికారిక నోటీసులూ ఇంగ్లీషులో ఉంటాయి. ఉన్నత స్థాయి ఉద్యోగస్తులు సహోద్యోగులతో, మధ్యమ స్థాయి ఉద్యోగస్తులతో వ్యవహారాలు జరిపేందుకు వ్రాసే అధికారిక ఈమెయిళ్లూ ఉత్తరాలూ పని సంబంధిత పత్రాలూ సమీక్షా పత్రాలూ మొదలగునవి ఇంగ్లీష్‌లోనే ఉంటాయి.

రాతలో వాడే భాషల వాడుక అధికారిక వ్యవహారాల కోసం ఉపయోగించిన మౌఖికంగా ఉపయోగించే భాష ఉత్పత్తిలో ఎక్కువగా ఉపయోగంలో ఉంటుంది. పరిశ్రమలో కొందరు శ్రామికులు తెలుగేతరులు అయినప్పటికీ కొంతమంది తెలుగు నేర్చుకుని వాడడం జరుగుతోంది. వారి భాష ఎంపిక కూడా ఉత్పాదనకు వీలుగా ఉండాలని ఎంచుకుంటారు. కాబట్టి స్థానికులు పరిశ్రమలో ఉపయోగించే అమ్మనుడి వాడుక, తెలుగేతరుల దేశీయ భాషలూ ఇంగ్లీష్‌తో పోలిస్తే అత్యధికంగా వాడుకలో ఉన్నాయి. ఉత్పత్తిలో ఉపయోగించే దేశీయ భాషలు దేశ ఆర్థిక వ్యవస్థకే పట్టుగొమ్మలు.



పటం-2:

ఈ పరిశ్రమ నుండి దేశానికి వచ్చే స్థూల జాతీయ ఉత్పత్తిలో తెలుగు 83% పాలుపంచుకోగా తదితర దేశ భాషల తోడ్పాటు కేవలం 9% మాత్రమే. అంటే ఇంగ్లీషు ద్వారా సమకూడేది కేవలం 8 శాతం మాత్రమే. అంటే మన మాతృభాషల ద్వారా 92 శాతం సంపద సృష్టి జరుగుతోంది. ఇది ఒక ప్రత్యేక పరిశ్రమలో నమూనాగా నిర్వహించిన ఈ అధ్యయనం అమ్మనుడులే మన సంపద సృష్టికీ మన సమాజాభివృద్ధికీ మూల స్తంభాలుగా ఉన్నాయని మనం గ్రహించాలి.

ఈ వ్యాసరచయిత పరిశోధక విద్యార్థి,
హైదరాబాదు విశ్వవిద్యాలయం.

Socio-economic Profiling of Indian Languages: With Special Reference to Worksites

by J D Prabhakar

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