

Factors Influencing Rural Non-Farm Employment And Quality of Employment

SYNOPSIS OF THE THESIS

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1. Introduction

In the context of developing or less developed countries, an analysis of the rural labour market and, as a result, patterns of means of subsistence has been essential in order to comprehend the process of development in these countries. Agriculture continues to be the primary source of employment in many nations, as the vast majority of the population lives in rural areas. However, because there are now more people working in rural regions, relying solely on agriculture to address the issue of unemployment in these places is not a viable solution. As a result, the rural non-farm sector has evolved into a significant contributor to the employment market. Diversification in rural employment has gained substantial relevance in India during the past two decades, and has been examined by a number of scholars. The studies based on secondary data demonstrate a gradual drop in the rural economy's reliance on agriculture as a primary source of income, as well as a minor degree of economic diversification. Analysis of the quantitative relevance of the non-agricultural sector in the development process is crucial. However, the presence of a considerable proportion of the poor in rural areas raises questions regarding the kind and conditions of the employment in which people currently engage and the wages they earn. The diversification can be determined by analysing secondary data. However, existing secondary data does not adequately explain the causes of this diversification, as it varies from place to region. It also fails to investigate the reasons behind the disparities in regional poverty rates. However, secondary data do not contain information on earnings earned by non-agricultural sectors. These data estimate the potential of several non-agricultural sectors to provide rural workers with steady employment and reduce poverty. As a result, a micro-level study is carried out in order to formulate certain policy prescriptions. The current study makes an attempt to analyse the nature of participation of various categories of households in non-farm employment and the level of earnings accruing there from by using micro-level data. This study also examines the sectoral composition of rural non-farm sector and the main

determinants of rural households' access to various types of activities. Additionally, this study attempts to measure the quality of employment by using the information at the individual worker level and comparing the incidence of poverty. The current study makes an attempt to address three fundamental issues by utilising data collected at the micro level. Initially, the research variables are identified through a review of the literature and these initial variables are tested with the help of a reliability and validity study. The final selected variables are then used to develop the structured questionnaire. This questionnaire is then administered to collect the relevant information about the study objectives from the target respondents of two districts. The data collected through this process are then processed, cleaned, and incorporated into SPSS for further analysis. Respondents are coming from two study districts. A t-test is applied to understand whether any significant difference exists among the target respondents of these two districts. The study also tried to identify the quality of non-farm employment to ascertain the future prospects of this sector. Lastly, the thesis comes with different recommendations so that policymakers are able to implement the same for future growth. One of the important recommendations is to create skill-based training for non-farm workers which helps to produce the products in an effective manner. Government intervention is also important as the creation of non-farm activities will help to reduce the movement from one place to other. As a result of which the socio-economic imbalance may be addressed.

1.1.Thesis Outline

The thesis is divided into five chapters. The details are mentioned below:

Chapter 1: This chapter introduces the topic of research and a detailed idea is given based on the available facts and figures.

Chapter 2: This chapter focuses exclusively on the review of the existing literatures so that appropriate gaps can be identified.

Chapter 3: This chapter focuses on the research methodology part of the study. It is important in the sense that it helps the researcher to develop a blueprint to conduct the research.

Chapter 4: Since this is a quantitative study, an appropriate statistical tool has been identified to analyse the data collected during the survey period.

Chapter 5: This chapter deals with findings, recommendations, and conclusions based on the statistical results that the researcher derived in Chapter 4.

2. Research Motivation

A sector change is always inevitable in case of rural workforce. Generation of employment opportunity in the rural sector is always an area of concern for the policy makers. Over the period it has witnessed that most of the eligible workforce are shifting from agriculture to find alternative livelihood. As a result of which rate of migration is also in the higher side. A migration always keeps the place of origin more vulnerable as this place failed to get adequate supply of manpower when there is a requirement. Thus, it is important to understand what the dimensions are of non – farm employment opportunities, the sectors which should be focused so as to retain the manpower in their own place. But this is only one side of the coin. Along with creation of job, it is also important to investigate the quality of employment. The study develops a weighted average score to understand the diversity in rural non – farm workforce and the quality of the employment that are generated through various activities. The development of weighted average score to measure the quality of employment in the rural non – farm sector is itself a unique work and would add value to the existing field of literature.

2.1. Scope of the Research

- The study covers two specific districts of West Bengal, where a bipolar growth can be witnessed. A bipolar growth means, one district has been identified with highest growth

in non – farm employment and another district has been identified with lowest growth in non – farm employment.

- The study is based on census as well as primary data, which has been collected during data collection phase in the selected study district. Some amount of sampling and non – sampling error is there in the data set.
- The study covers only non – farm sector, hence, any observation in the farm sector has been ignored.

3. Literature Review

The Rural Non-Farm Sector (RNFS), for some time neglected by policymakers, has been very attractive since the 1970s, as the rural households in the developing world are increasingly aware that they are not dependent only on agriculture for a livelihood because an increasing share of rural incomes is derived from non-farm sources. The agriculture sector offers a limited promise of creating additional employment for the growing rural labour force and the interest in the rural non-farm sector is the product of a growing understanding of its significance and possible contribution to rural livelihoods. In addition to the problems of rural out-migration and the resulting congestion of urban centers, leads to the expansion of the non-agricultural economy which is most of the time informal in nature.

Many researches in developing countries in the last 3 decades, therefore, have focused on the understanding of the rural non-agricultural sector's dynamics and growth impulses. As Fisher et al. (1997) note, no standard definition exists in relation to RNFS (internationally, or in India) and a neat classification of the sector is also not possible due to its diversity. The wording 'rural,' 'non-farm,' 'non-agricultural' and 'employment' therefore creates confusion and ambiguity. The literature. Chadha (1997) notes that although national sample survey data show how much the rural workforce works in each production sector, it is not known whether the job

is in rural, semi-urban, or urban areas. In particular, the literature evaluating the significance of RNFE in India is based on two main sources of data – ten-year censuses and five-year rounds of NSS labour and unemployment surveys – but definitions of employment and classification of workers vary from one source to another, which makes a comparison problem. It is also alleged that the rural non-farm sector is grossly underestimated because of a failure to capture the diversity of rural jobs and misinterpretation of women workers, as stated in the literatures (Hazell and Haggblade 1991; Sen 1994; Fisher et al., 1997). Hazell and Haggblade (1991) argue that the census and the NSS class 'rural' are populations less than 5 000 inhabitants, but that the figures have risen by a further 5% if rural towns of up to 1,00,000 inhabitants had been included.

The non-farm rural economy is generally referred to as all non-farm activities that generate farm household revenues by the means of wage employment or self-employment, including income in kind and money transfer. That is to say, it covers all economic activities in rural areas other than agriculture, hunting, forestry and fisheries (Lanjouw and Lanjouw, 1995). It has a negative definition, as 'non' agriculture, which includes a broad array of activities, including manufacturing, trade, transport, services, transfer payments and transfers of temporary or seasonal migration (Davis and Pearce, 2001). In RNFE, the meaning of 'rural' is vital to understand its nature, importance and viability (Lanjouw and Lanjouw, 1995). In spatial terms, there are some major problems defining the RNFE. Barrett et al. (2001) note that activities may be 'locally' in the same village or neighbourhood, (ii) in the nearby rural village or neighbouring countryside – and (ii) in the middle of two cities (b) out of the home sub-categories. These differences are especially important in terms of the level of household dependence on the local economy. In the same context, Chadha (1992) highlighted the important difference between 'rural household non-farm employment' and 'rural non-farm sector' as such, while discussing problems with interpreting the RNFE employment data.

Mukhopadhyay (1985) argues that a number of conflicting literature evidence and controversies relating to the rural non-farm sector arise precisely because of the lack of a clear definition and analytical framework characteristic of its nature and position in the economic system; and a large proportion of this confusion is lost when components of the rural non-farm are analysed. The author believes that a great deal of controversy regarding the nature and dynamics of rural non-farm operations can be resolved if the essential heterogeneity in the sector is analysed.

- Non – farm activities from the perspective of various countries in the World
- Non – farm activities in India
- Non – farm activities in West Bengal

The reviews will try to identify the nature and quality of non – farm employment in each of these three sections.

3.1. Non – farm Activities from the Perspective of various Countries in the World

Godslove S et al. (2020) found the influence of non-farm activities on rural communities' economies in Enugu state, Nigeria was examined in this report. Data were evaluated using descriptive statistics, average variables and variance analysis (ANOVA). The results indicate that household income and rural economic diversification have had the greatest positive impact, while the plants and land erosion have been the most significant and detrimental impacts on rural populations in the study field of non-farm activities. In general, in contrast to the gain of non-farm operations in the sample region the impact of negative effects on households has been poorly ranked. It has been inferred from the ANOVA findings that the beneficial effects in both groups are significantly different. The advantages, however, depended on the venue. Therefore, this study indicates that the achievement of a prosperous rural economy in the state of Enugu should depend on deliberate policies that promote non-farm operations, as they supplement the

household farm income. Hajduet al. (2020) pointed out that while the agrarian change in South and South Africa has been taking a shape for many years, rural areas continue to house millions of people, who are characterized by extreme poverty and vulnerability. Key practices on livelihoods are being studied, including paying work, reception of the Social Grant, development of horticultural and livestock resources, and cutting of firewood. Thus, these changed subsistence practices over time often vary between and within them. The key results for poor houses in the villages are that wage labour has dramatically deteriorated, and the extension of social services has avoided deeper suffering. Agriculture and the harvest of aquatic resources remain dynamic, albeit involving villagers unevenly. In another study Bate et al. (2019) explored the tourism opportunity in the small coastal area of north east coast of Africa. The natural capital played a crucial role to develop tourism infrastructure. The area also attracted lot of people looking for job opportunities in the study area. The influx of people in search of jobs also affected the ecological balance in the study area. The growth in any particular sector should be given priority without affecting the natural capital of that place. The authors argued that it is the responsibility of the government to handle the inadequate situation in the study area. Sohns et al. (2018) pointed out that businesses in developing countries have based the majority of the empirical work performed on business survival, although studies on business survival in rural areas are also rare in emerging markets. This paper seeks to resolve the void in the study by using parametric survival models with mixed results in order to explore the effects of variables on the likelihood of survival of micro companies in rural Vietnam at various explicative stages. The findings reveal that corporate variables control the survival probability of these micro-firms. However, the empirical findings also suggest that microenterprises are linked to their wider economic climate, and also add significantly to the explanation for survival probabilities for microenterprises in rural Vietnam in some locations, such as the access to markets and financial services. Mckillop et al.'s (2018) Young farmers'

study has historically centered on the future of the farming region or contrasted young and older farmers' creativity, productivity or entrepreneurialism. This study, on the other hand, discusses creativity disparities among young farmers. Innovative methods are described here as processes and practices that are more likely to contribute to improved farm production and profitability. The findings showed the gaps between young farmers' real creativity on the farm and what topic specialists consider 'significant.' Young farmers have been found to vary in their creative scores, which apply to various fields, such as productivity in general, breeding, IT, or output monitoring. Due to the relatively low number of young farmers in many EU countries, including Ireland, research and extension organisations, instead of the current widespread approach which fails to distinguish their interest from that of the older generation, should create programs, adapt discussion groups and concentrate learning on specific types of young farmers. To maintain robust and focused course programs to encourage growth, agricultural education suppliers need to understand these distinctions. In another study, Chand (2018) mentioned that globalization is the key motivating factors behind growing inequality, especially in emerging countries, as is evidenced by the rapid growth in foreign trade, financial globalization and technological transition, particularly ICTs. Such technological advances usually increase the demand for skilled labor, which in these economies is poorly supplied and widely divided between regions and social classes. In India, a lack of public infrastructure spending is responsible for the failure to make good use of the possibilities that globalization opens up, resulting in increased geographical and rural-urban inequalities. Raising public infrastructure, schooling and healthcare investments and giving sufficient priority to agricultural, rural non-farm and manufacturing development is necessary in order to mitigate inequality by adequate job opportunities. In advanced democracies that have experienced rapid structural change, there have been increasing inequalities. The institutional democracy architecture must be redesigned so as to embody the social long-term desires for justice and fair play more appropriately. Asfaw

et al. (2017) in their study mentioned that in minimizing hunger and in the face of negative effects of climate change, the diversification of livelihood sources for subsistence farmers outside cultivation plays a major part. The inter sectoral survey study design was used to analyze the factors determining involvement in non-farm activities by rain-food-based small holders using mixed methodologies. The main restrictions that prevented farmers from pursuing non-farm activities are access to sufficient resources, inadequate infrastructure and lack of preparation. Bolt (2017) focused on changing pattern of agricultural works in Southern Africa. Agricultural work appears to invoke the past rather than other forms of jobs in Southern Africa. However, recent events have as well as racialized hierarchies in plantations have followed economic integration and cost-cutting accidental ties. Farmers' paternalist legacies, which were shaped by workers' homes on the ground, have changed agriculture work participation. Mao et al. (2017) used the 2011-12 Chinese Health and Retirement Longitudinal Study (CHARLS), which discusses how caring for grandsons and vulnerable parents has an effect on off-farm Chinese rural middle-aged adults. The results suggest that the treatment of grandchildren has a negative effect on rural middle-aged men and women's involvement in off-farm jobs and working hours, according to socio-economic and demographic characteristics. Parent care should not influence off-farm jobs and working hours in the same way. In addition, the study showed that annual compensation was also influenced adversely by treatment for women and men caring for grandchildren. In a new study Sarkar et al. (2016) discussed that the role of rural non-farm work is widely acknowledged as it grows as an increase in the overall income of rural households. Though rural non-farm income contributions are measured primarily by means of the output approach, the underlying determinants of rural household participation are rarely evaluated in terms of who and where will participate and how personal, family and local attributes affect individual capacities and opportunities. The involvement of household members in rural non-farm jobs was evaluated using a logit model and found that

the skill level of the member of the household was the most powerful factor for deciding rural non-farm jobs. Other factors, such as the availability of cultivable land, the overall income of the individual, the distance from para to the nearest hat/bazar, also played a significant role. More focus is required for capacity development of rural people in special trade with provision of credit and marketing facilities, in order to encourage rural non-farm jobs. This will entail the updating of the existing government and non-governmental training programs, which operate at local levels, i.e., close to rural development centers and rural bases. Tschirleyetal. (2015) aims to explain how the evolution of jobs in the agri - food system (AFS) and between the food system and the rest of the economy will affect the evolution of food transition in East and Southern Africa. It also considers briefly the consequences for training and learning of skills. The authors connect shifting diets with the framework of jobs. In order to establish scenarios of shifts in the job system, the writers use alternate estimates of dietary transition in 15 and 30 years. As long as ESA's sales continues to grow similar to that of the last decade, their economies' transition is possibly advancing drastically. The key characteristics would be: a sharp decrease in the share of workers employed in agriculture, even though absolute figures grow modestly, a sharp increase in the AFS share, and an even sharper rise in the share taken beyond AFS. In addition to food processing, marketing, transport and other AFS services, it is likely that the AFS food preparation outside the home will expand more quickly.

3.2.Non–Farm Activities in India

Chatterjee (2020) mentioned a case where State acquires agricultural land for an industrial area in Maharashtra, India, and examines the non-farm trajectory for deportees. The empirical example will be the perfect one to observe the prospects for the dispossessed rural landlords in capitalist times of a classic "transition" to factory work. The production center that is being established offers precarious manual work opportunities for male and female workers of the Scheduled Caste and Scheduled Tribes. The empirical analogy is the best one to take into

account the opportunities for the deposed rural landlords of a classic "transition" to manufacturing in capitalist times. The newly created development center gives the men and women of the Scheduled Caste and Scheduled Tribes insecure manual employment opportunities. In another study Majumdar (2020) Rural transition has been historically thought of as modernisation, rural growth, changes in the urban system, and demographic transfer from the agriculture sector to non-agriculture economic sectors. Along with human factors, there is a need for growth in the infrastructure sector as well. In their article Khurana et al (2022) mentioned that electricity's role in the formation and performance of rural non-farm entrepreneurial ventures is hotly debated. The purpose of this research is to determine how access to household electricity influences rural households' decisions to engage in entrepreneurial activities within their own homes in India. Using panel fixed-effects logit models, a panel dataset of nearly 20,000 rural households collected in 2004-05 and 2011-12 was used to investigate the impact of access to electricity on participation in rural non-farm enterprises. Furthermore, the impact of electricity access on non-farm enterprise earnings is investigated using Heckman two-stage selection models. Various analytical methods were used in the study of rural transition, and various measures examined the extent and degree of rural change/transformation included in these approaches. The rural development strategy in the analysis of rural transformation was criticized for not always containing development. This essay analyzes the Indian experience and argues that the rural development of India involves migration from agriculture into the non-agricultural field and a de-agrarianization of the Indian economy. Alha (2020) argues that improvements in the Baspur village economy were driven by the increased integration of the village with the outside world, enabled by better connectivity and transport modes. Over the years, non-farm work development has been a big factor in the growth and income distribution in the village economy, mainly casual and informal in nature in the form of migrant workers. This has drastically reduced rural households' reliance upon

agriculture along with already existing migratory sources that are considered important in terms of sustaining livelihoods. This can be seen in men's refusal to conduct farming work, a reduction in the number of land leases in the village, and a steep increase in farmers' incomes over the years. In a significant study Melo et al. (2020) discussed the importance of skill development to improve the employment scenario in the rural non-farm sector. The level of involvement in education and its job impacts in Dibang Valley (Arunachal Pradesh) is analyzed on the basis of primary data from 200 families. Participation in the preparation for skills is found to support workers in the non-farm market. However, training in skills acquisition for one year has been more successful than training for less than one year in terms of job creation and income production. In their study Sahoo et al. (2020) aims to research the improvements in rural poverty and its relation with the post-reform increase in agricultural production for Odisha. For the class analysis of rural poverty, the rural household classification (occupation groups) of National Sample Survey Organization (NSSOs) was used from the unit-level Consumer Expenditure Survey (CES) results. During the post-reform era, the Odisha economy experienced a strong growth in Net State Inland Product (NSDP). During the 1990s, the state saw a negative increase in agricultural productivity, less rural poverty and a distress in occupational mobility from the agricultural to non-agricultural sectors. However, the farm sector reported high growth, higher reduction of rural poverty and job mobility in the farm sector in the next decade. In the 2000s all rural occupational classes have experienced higher monthly per capita spending (MPCE) growth and rapid reductions in rural poverty. The development of the agriculture sector is therefore the key catalyst in Odisha to reduce rural poverty. Sen (2020) examines shifting living standards from 1993-1994 to 2011-2012 in rural Indian areas, which are also aligned with the on-going economic reforms. These modifications may either be due to changes in the development component or to changes in the equity component. The paper therefore explores, through a scheme of algebraic decomposition, the

impact of the growth and distribution components on changes in the living levels and their relative function. It also examines the impact of socio-economic influences on living standards through econometric models. Data on consumer expenses was used for this study by National Sample Survey Organizations for 15 major Indian countries. The findings show that living conditions in rural areas in all of the Indian countries have increased (actually). More than compensates for the negative effects of distribution and positive improvements in certain countries in the positive growth effect.

3.3.Non – Farm Activities in West Bengal

In their study Satpati et al. (2021) discussed the livelihood opportunities in specific regions of West Bengal. Because of environmental and human reasons, livelihood opportunities are variable from area to region. No such studies take into account a broad geographical area and tribal regarding their livelihood choices. This research will also make a difference in literature. The research paper attempts to analyze the means of survival and safety of the tribes. The research was carried out in West Bengal along the south west plateau and mountainous area. Secondary information and primary data were used. The main data were collected using stratified random sampling techniques. For the collection of variables and metrics, the Sustainable Living Fund (SLF) was used. The key findings of the study are that small farms and conventional technologies are no longer designed to satisfy the increasing demands of tribes. The massive industrial and ever-increasing household demands are also causing forest supplies to decline very rapidly. Still, tribal walk much more miles than ever before to harvest forest resources. Better training opportunities could open up new opportunities for younger generations and economic diversification and certainly add to the good economic standing of tribal people. Deka et al. (2020) discussed the issues and challenges of farmer's producer companies operating in West Bengal. Farmers' producers are seen as an institutional arrangement to provide small farmers market access and safe livelihoods. In India, in the past

8–10 years more than 4200 producers' organizations have been registered to organize millions of farmers to raise their profits. Most of these organisations however are in an early stage of being established across many obstacles. With the aid of primary data gathered from interviews with CEOs of 36 such companies in West Bengal, India, it was attempted by this report, to understand the difficulties of farmer production companies (a form of producer organisation). The analysis also examined the concerns surrounding the creation by production firms of institutional purchasers of a supply chain on the basis of a real-time trial, which involved the method of supplying a bulk purchaser of vegetables. The study showed that farmers' lack of confidence and knowledge is a major barrier to the formation of manufacturing firms. The operations of such organizations are challenged by inadequate preparation, incompetent management, and weak organization. In addition, the coordinated use of technologies, preparation, and planning will strengthen some of the inadequacies in the manufacturers' supply chain as seen in the experiment. Sarkar et al. (2020) discussed the problems of circular labour migration in the state of West Bengal. The Indian economy has been influenced by circular labor migration from rural areas. In general, circular migration has also been linked to the repression and non-freedom of migrant labor due to the effects of remittances in the household economy of migrants. This paper focuses on labour movement from one of the economically deprived districts of West Bengal, India into the construction sector. First, it explores who is involved in this mechanism of migration and highlights the essence of such migration. Secondly, it discusses the results of labor migration that is both economic and social. Thirdly, this is related to the wider discussions on the links between migration and growth. This paper suggests that the long-term, life-cycle consequences of such circular labor migration must not be investigated, instead of dwelling on the short-term and stagnant benefits from migration. In the research work, Biswas (2020) attempts, with the Bai–Perron system of numerous systemic split analysis methods, to explain West Bengal's economic development.

The Bengal economy experienced two shifts in its production growth between 1960 and 2014. The first split happened in 1983 and was affected by the breakdown in the agricultural market, a result driven by a transition in the policy regime. The second break took place in 1993, followed by a break in the financial sector and a change in the political system within the same political sphere. This research has investigated further in terms of sectoral composition and policy characteristics of the different stages of development. The economy of West Bengal is said to have progressed from an early stage of development to a moderate or balanced period of growth and a high stage of growth. Agrarian stalemate, industrial deceleration and political unrest had been observed at the low growth level. In the other hand, in the medium growth period agricultural growth and political stability had been unparalleled. During the high growth period, the tertiary sector has grown enormously and political turmoil in the latter portion. Dutta (2019) conducted a comparative study between two states viz. Gujrat and West Bengal to understand the growth of small-scale industries in rural areas. The current literature gained comparatively less support from rural, local, unorganized and industrial companies.

4. Research Gap

The extensive study shows many directions in the field of non – farm sector. The study reveals that the growth of non – farm sector mainly depends on the factors like level of education, linkage with the market, flow of credit, long term skill training, skill enhancement of the workforce, social interaction easy availability of raw materials, infrastructure and many more. Each of these factors are playing important role for the growth of the non – farm sector. But the review identified that one crucial area i.e., quality of employment is totally ignored in the existing literature. So, the research question can be developed based on the existing gap.

4.1. Research Question

- a) Does the identified factors creating impact in the study area in terms of generating income opportunities in the non – farm sector?
- b) Do the identified factors are able to improve the quality of employment in the study area related to non – farm sectors?

5. Research Objective

Based on the research gap and subsequent research questions, the following objectives are developed:

- Identification of factors that have a link with non–farm income generating opportunities in the study area
- To make a comparative study among two study districts to understand how far the factors are able to improve the quality of non–farm employment
- To understand the perception of the respondents regarding role of the factors in improving the quality of non–farm employment in the two study districts

5.1. Research Hypotheses

Based on the result the study helped to develop main hypotheses.

- *Hypothesis 1: Access to productive resources have an impact on quality of employment in the study districts.*
- *Hypothesis 2: Supportive role of government and private sectors have an impact on quality of employment in the study districts.*
- *Hypothesis 3: Long term support to create productive employment have an impact on quality of employment in the study districts.*

- These 3 main hypotheses are based on some sub – hypotheses.

Sub – Hypotheses for Hypothesis 1:

- H1a: There is no significant difference of opinion exists among the respondents of two study districts that level of education has a direct link with quality of employment.
- H2a: There is no significant difference of opinion exists among the respondents of two study districts that skill acquisition has a direct link with quality of employment.
- H3a: There is no significant difference of opinion exists among the respondents of two study districts that access to market has a direct link with quality of employment.
- H4a: There is no significant difference of opinion exists among the respondents of two study districts that access to credit has a direct link with quality of employment.
- H5a: There is no significant difference of opinion exists among the respondents of two study districts that lack of training has a direct link with quality of employment.

Sub – Hypotheses for Hypothesis 2

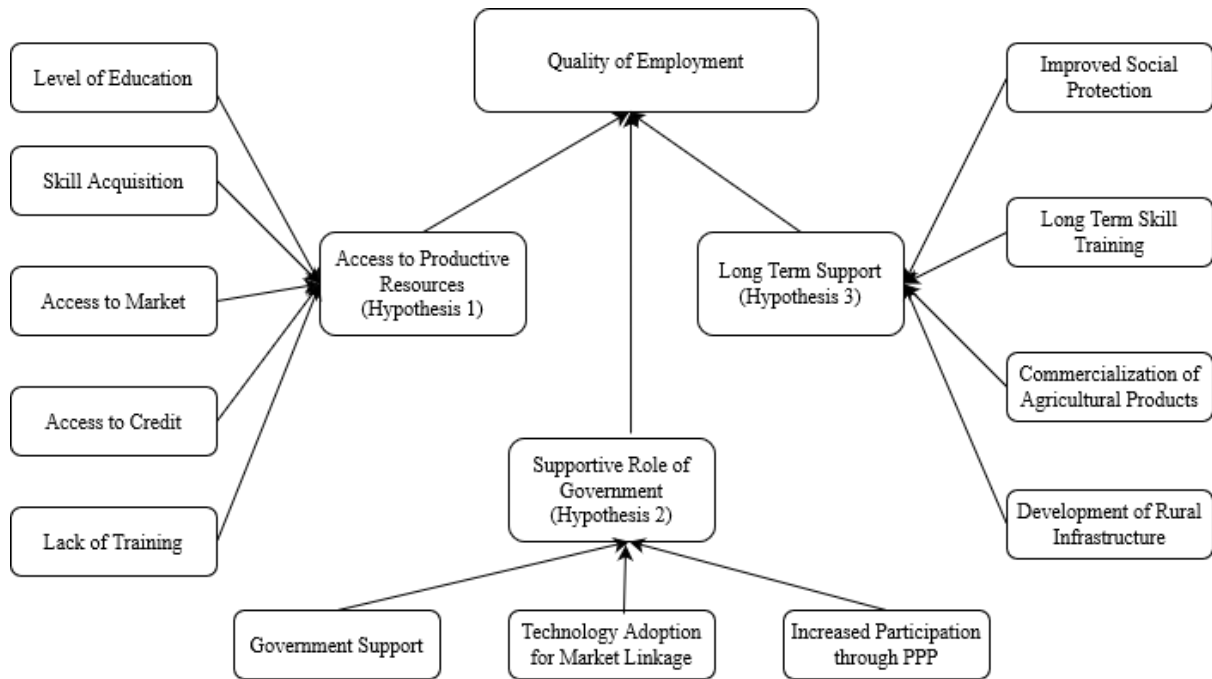
- H6a: There is no significant difference of opinion exists among the respondents of two study districts that government support to improve access to finance has a direct link with quality of employment.
- H7a: There is no significant difference of opinion exists among the respondents of the two study districts that the development of market linkage through technology has a direct link with the quality of employment.
- H8a: There is no significant difference of opinion exists among the respondents of the two study districts that increased participation through PPP model has a direct link with quality of employment.

Sub – Hypotheses for Hypothesis 3

- H9a: There is no significant difference of opinion exists among the respondents of two study districts that improved social protection has a direct link with quality of employment.
- H10a: There is no significant difference of opinion exists among the respondents of two study districts that long term skill training has a direct link with quality of employment.
- H11a: There is no significant difference of opinion exists among the respondents of two study districts that commercialization of agricultural products has a direct link with quality of employment.
- H12a: There is no significant difference of opinion exists among the respondents of two study districts that development of rural infrastructure has a direct link with quality of employment.

6. Conceptual Model

Based on the discussion above the following conceptual model is developed. The model is based on the variables identified through a review of the literature and exploratory research (focus group). A detailed description of the hypotheses are mentioned in next chapter.

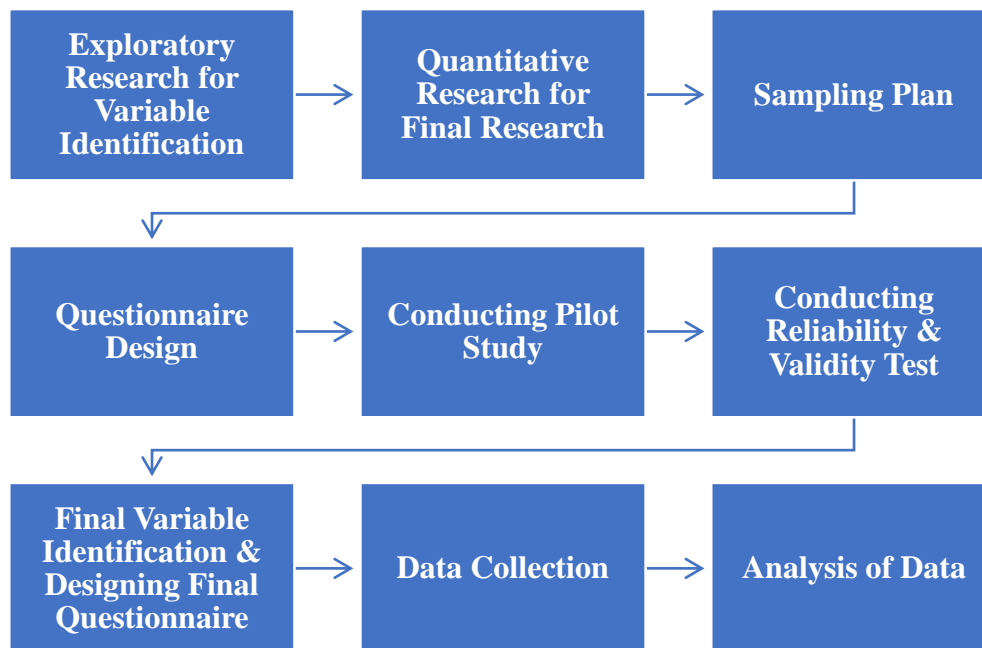


7. Research Methodology

The research processes have an important role in deciding how quantitative research may be done. The basic goal of any primary study is to identify the research problem. It will not yield any substantial results until and until the study problem is explicitly established. The researchers can devise a technique to keep the study on track using a well-planned mechanism. Any deviation leads to unfinished business. This flow must be determined in order to plan the research. The research methodology is a technique that aids in the identification of various research procedures. As a result, the research approach must be planned in accordance with the identified problem. The research topic is identified in this study by a thorough examination of the literature and further confirmation of the concept. There are two types of research: generic qualitative research. A qualitative research approach is a method that aids in the exploration of

sensitive information. As a result, the strategy used here is primarily informal in nature. A quantitative approach of research, but on the other hand, may be used if the work is focused on primary data. The intricacies of this process will be explored later in this example, both qualitatively and quantitatively.

Flow Chart on Methodology of Research



8. Data Analysis

This section of the study is going to focus on the data received through primary survey. The survey conducted for a period of two months helped to collect data from 372 respondents spread over two districts of West Bengal. The main objective of this section is to get an idea about the research objectives identified earlier. As the main objective is to identify the quality of employment in non – farm sector, the information collected with the help of structured questionnaire is able to help to get meaningful information. The questionnaire was divided into two segments to collect the relevant information. Section A comprises information about basic demographic information and type of non – farm sectors where the respondents are working. The second section addresses the responses related to research variables identified for this study

through literature review. Initially, 24 variables were identified but after reliability and validity study only 12 variables were found to be relevant and incorporated in the final study. 12 hypotheses were also developed with the help of these 12 variables. These variables are also used to collect information about quality of employment in the non – farm sector in the study area. The weightage used in the Likert scale is used as a score to calculate the weighted average score for each of the variables. The same is then proposed to compare two identified districts, i.e., Nadia and Purulia. The details of the study results are discussed subsequently.

8.1. Analysis of Data Related to Demographic and General Information

Table 4.1. District wise Distribution of the Respondents

District	Frequency	Percentage
Nadia	186	50
Purulia	186	50
Total	372	100

Source: Survey Data

Observation: The result shows that out of the total 372 respondents, 50% are from Nadia district and rest of the 50% are from Purulia district. The data was collected in such a manner so that equal representation should be there from both the districts. The equal representation from both the districts helps to compare the quality of employment.

Table 4.2. Gender wise Distribution of the Respondents

District	Gender	Frequency	Percentage
Nadia	Male	133	71.5
	Female	53	28.5
Purulia	Male	152	81.7
	Female	34	18.3

Source: Survey Data

Observation: The table 4.2 shows gender wise distribution of the respondents. It can be seen that irrespective of the districts, participation of women members is less than their male members in the present study. The same is observed during primary survey as well. The response from women members were significantly low. This shows the dominance of male members over their female counterpart.

Table 4.3. Age wise Distribution of the Respondents

District	Age	Frequency	Percentage
Nadia	< 18 Years	21	11.3
	18 Years - 35 Years	78	41.9
	36 Years - 55 Years	71	38.2
	> 55 Years	16	8.6
Purulia	< 18 Years	22	11.8
	18 Years - 35 Years	89	47.8
	36 Years - 55 Years	64	34.4
	> 55 Years	11	5.9

Source: Survey Data

Observation: Table 4.3 shows age wise distribution of the respondents. The data reveals that in case of Nadia around 42% of the respondents are in the age bracket 18 years to 35 Years. A higher number of concentrations of the respondents can be seen between the age bracket 18 Years to 55 years. Around 80% of the respondents from Nadia district are in this group. In case of Purulia district, this stands at 82% which is more than Nadia district. Although, in both the districts, around 12% respondents are working who are coming under less than 18 years of age bracket, this number is relevant in the sense that most of these respondents are mainly working

in informal sectors doing odd jobs. But they are playing a crucial role in generating earnings for his or her family

8.2. Analysis of Data Related to Research Hypotheses

Hypothesis 1: Access to productive resources have an impact on quality of employment in the study districts.

Hypothesis 1a

H1a: There is no significant difference of opinion exists among the respondents of two study districts that level of education has a direct link with quality of employment.

H1b: There is a significant difference of opinion exists among the respondents of two study districts that level of education has a direct link with quality of employment.

Table 4.9. District wise response Related to Hypothesis 1a

District	Frequency	Mean	SD	t Value	Sig.
Nadia	186	4.00	.792	2.921	.004
Purulia	186	4.24	.806		

Source: Survey Data

Observation: Table 4.9 shows the result of the hypothesis related to Hypothesis 1a. It can be seen that the t significant value is less than 5% level of significance ($p=0.004$) so we can reject the null hypothesis and accept the alternative hypothesis. Hence, it can be said that a significant difference of opinion exists among the respondents of two study districts that level of education has a direct link with quality of employment.

Hypothesis 2a

H2a: There is no significant difference of opinion exists among the respondents of two study districts that skill acquisition has a direct link with quality of employment.

H2b: There is a significant difference of opinion exists among the respondents of two study districts that skill acquisition has a direct link with quality of employment.

Table 4.10. District wise response Related to Hypothesis 2a

District	Frequency	Mean	SD	t Value	Sig.
Nadia	186	3.95	.776	-2.153	.032
Purulia	186	4.12	.813		

Source: Survey Data

Observation: Table 4.10 shows the result of the hypothesis related to Hypothesis 2a. It can be seen that the t significant value is less than 5% level of significance ($p=0.032$) so we can reject the null hypothesis and accept the alternative hypothesis. Hence, it can be said that a significant difference of opinion exists among the respondents of two study districts that skill acquisition has a direct link with quality of employment.

Hypothesis 3a

H3a: There is no significant difference of opinion exists among the respondents of two study districts that access to market has a direct link with quality of employment.

H3b: There is a significant difference of opinion exists among the respondents of two study districts that access to market has a direct link with quality of employment.

Table 4.11. District-wise response Related to Hypothesis 3a

District	Frequency	Mean	SD	t Value	Sig.
Nadia	186	3.82	.829	-3.604	.000
Purulia	186	4.15	.924		

Source: Survey Data

Observation: Table 4.11 shows the result of the hypothesis related to Hypothesis 3a. It can be seen that the t significant value is less than 5% level of significance ($p=0.000$) so we can reject the null hypothesis and accept the alternative hypothesis. Hence, it can be said that a significant difference of opinion exists among the respondents of two study districts that access to market has a direct link with quality of employment.

Hypothesis 4a

H4a: There is no significant difference of opinion exists among the respondents of two study districts that access to credit has a direct link with quality of employment.

H4b: There is a significant difference of opinion exists among the respondents of two study districts that access to credit has a direct link with quality of employment.

Table 4.12 District-wise response Related to Hypothesis 4a

District	Frequency	Mean	SD	t Value	Sig.
Nadia	186	4.10	.751	-2.559	.011
Purulia	186	4.30	.789		

Source: Survey Data

Observation: Table 4.12 shows the result of the hypothesis related to Hypothesis 4a. It can be seen that the t significant value is less than 5% level of significance ($p=0.011$) so we can reject

the null hypothesis and accept the alternative hypothesis. Hence, it can be said that a significant difference of opinion exists among the respondents of the two study districts that access to credit has a direct link with the quality of employment.

Hypothesis 5a

H5a: There is no significant difference of opinion exists among the respondents of the two study districts that lack of training has a direct link with the quality of employment.

H5b: There is a significant difference of opinion exists among the respondents of the two study districts that lack of training has a direct link with the quality of employment.

Table 4.13 District-wise response Related to Hypothesis 5a

District	Frequency	Mean	SD	t Value	Sig.
Nadia	186	3.94	.886	-4.537	.000
District					
Purulia	186	4.33	.803		

Source: Survey Data

Observation: Table 4.13 shows the result of the hypothesis related to Hypothesis 5a. It can be seen that the t significant value is less than 5% level of significance ($p=0.000$) so we can reject the null hypothesis and accept the alternative hypothesis. Hence, it can be said that a significant difference of opinion exists among the respondents of two study districts that lack of training has a direct link with quality of employment.

Hypothesis 2: Supportive role of government and private sectors have an impact on quality of employment in the study districts.

Hypothesis 6a

H6a: There is no significant difference of opinion exists among the respondents of two study districts that government support to improve access to finance has a direct link with quality of employment.

H6b: There is a significant difference of opinion exists among the respondents of two study districts that government support to improve access to finance has a direct link with quality of employment.

Table 4.14 District-wise response Related to Hypothesis 6a

District	Frequency	Mean	SD	t Value	Sig.
Nadia	186	3.99	.906	-3.963	.000
Purulia	186	4.35	.846		

Source: Survey Data

Observation: Table 4.14 shows the result of the hypothesis related to Hypothesis 6a. It can be seen that the t significant value is less than 5% level of significance ($p=0.000$) so we can reject the null hypothesis and accept the alternative hypothesis. Hence, it can be said that a significant difference of opinion exists among the respondents of two study districts that government support to improve access to finance has a direct link with quality of employment

Hypothesis 7a

H7a: There is no significant difference of opinion exists among the respondents of two study districts that development of market linkage through technology has a direct link with quality of employment.

H7b: There is a significant difference of opinion exists among the respondents of two study districts that development of market linkage through technology has a direct link with quality of employment.

Table 4.15 District-wise response Related to Hypothesis 7a

District	Frequency	Mean	SD	t Value	Sig.
Nadia	186	3.97	.950	-5.089	.000
Purulia	186	4.44	.818		

Source: Survey Data

Observation: Table 4.15 shows the result of the hypothesis related to Hypothesis 7a. It can be seen that the t significant value is less than 5% level of significance ($p=0.000$) so we can reject the null hypothesis and accept the alternative hypothesis. Hence, it can be said that a significant difference of opinion exists among the respondents of two study districts that development of market linkage through technology has a direct link with quality of employment.

Hypothesis 8a

H8a: There is no significant difference of opinion exists among the respondents of two study districts that increased participation through PPP model has a direct link with quality of employment.

H8b: There is a significant difference of opinion exists among the respondents of two study districts that increased participation through PPP model has a direct link with quality of employment.

Table 4.16 District-wise response Related to Hypothesis 8a

District	Frequency	Mean	SD	t Value	Sig.
Nadia	186	3.88	.803	-.851	.395
Purulia	186	3.96	.899		

Source: Survey Data

Observation: Table 4.16 shows the result of the hypothesis related to Hypothesis 8a. It can be seen that the t significant value is more than 5% level of significance ($p=0.395$) so we can accept the null hypothesis and reject the alternative hypothesis. Hence, it can be said that no significant difference of opinion exists among the respondents of two study districts that increased participation through PPP model has a direct link with quality of employment.

Hypothesis 3

Long term support to create productive employment have an impact on quality of employment in the study districts.

Hypothesis 9a

H9a: There is no significant difference of opinion exists among the respondents of two study districts that improved social protection has a direct link with quality of employment.

H9b: There is a significant difference of opinion exists among the respondents of two study districts that improved social protection has a direct link with quality of employment.

Table 4.17 District-wise response Related to Hypothesis 9a

District	Frequency	Mean	SD	t Value	Sig.
Nadia	186	3.82	.777	-3.177	.002
Purulia	186	4.10	.945		

Source: Survey Data

Observation: Table 4.17 shows the result of the hypothesis related to Hypothesis 9a. It can be seen that the t significant value is less than 5% level of significance ($p=0.002$) so we can reject the null hypothesis and accept the alternative hypothesis. Hence, it can be said that a significant difference of opinion exists among the respondents of two study districts that improved social protection has a direct link with quality of employment.

8.3. Measurement of Quality of Employment by weighted value in two Study Districts

To develop the quality of employment using weighted value, the researcher conducted focus group interview among the target respondents of the two study districts and validated the 12 variables that are initially found through review of literature. The study also helps to develop

the weight for each of these 12 variables. It was decided that the weight of the Likert Scale is considered as standard weight to determine degree of association with the research variables among the target audience. A weight of above 3 is considered to be favourable for the variable and anything less than 3 is considered to be not favourable. The result of the study is discussed subsequently

Table 4.21. District and ‘Level of education of the workforce’(Variable 1) Cross Tabulation

District and ‘Level of education of the workforce’ (Variable 1) Cross Tabulation								
Districts	Response Related to ‘Level of education of the workforce’(Variable 1) in Likert Scale					Total	Weighted Score	Average Score
	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)			
Nadia	1	10	22	108	45	186	744	4.0
Purulia	1	8	13	87	77	186	789	4.2

Source: Survey Data

Observation: The result shows that both the districts are in favour of the variable 1 (Level of education of the workforce). It can be seen that respondents from Purulia district are more in favour of the statement than the respondents from Nadia district. Although, both the groups having positive feelings that level of education helps to improve quality of employment but respondents from Purulia are more inclined towards this factor.

Table 4.22. District and ‘Skill acquisition’ (Variable 3) Cross Tabulation

District and ‘Skill acquisition’ (Variable 3) Cross Tabulation								
	Response Related to ‘Skill acquisition’ (Variable 3) in Likert Scale					Total	Weighted Score	Average Score
	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)			
Districts								
Nadia	1	9	28	109	39	186	734	3.9
Purulia	1	8	21	93	63	186	767	4.1

Source: Survey Data

Observation: The result suggests that respondents from both the groups believe that skill acquisition is an important factor to improve quality of employment. A district level comparison suggests that respondents from Purulia district are more in favour of the statement than the respondents from Nadia districts. This means respondents of Purulia district have more faith on this particular factor than the respondents from Nadia district.

9. Findings and Conclusion

The research was started keeping in mind the importance of the non-farm sector in the lives of rural people having minimum and uncertain sources of earnings from agricultural activities. Non-farm employment is those employees which are not part of agricultural production. Hence, in a country where most of the people from rural parts are engaged in agricultural production, non-farm employment opportunities surely help them to increase their standard of living. But, most of the time, these employment opportunities are informal in nature, and to avail of these jobs, most people are migrating from one place to another. As a result of which, there exists one income disparity as well as manpower shortages. Hence, there is a need to

understand the quality of employment in non – farm sector, which is the major point of discussion in this research.

To identify the mentioned objectives, the researcher identified two study districts where the actual study was conducted. The study districts were selected on the basis of the convenience sampling technique. After the selection of study districts, the researcher exclusively identified the non–farm workers. As per the census definition, the workforce is divided into main workers and marginal workers. Under each category, the researcher excluded cultivators and agriculture workers to identify the workers engaged in non–farm activities.

10. Summary of the results

This research work started with the identification of research variables through a review of the literature and exploratory research. The process helps to identify 12 variables and those variables are categorized under three heads, viz.

- Access to productive resources
- Supportive role of government and private organizations
- Long-term support

First variable is described with the help of five factors, second variable is described with the help of three factors and third variable is described with the help of four factors. These factors helped to explain the difference of opinion among the respondents of the two study districts. Initially, total 24 variables are identified for the study. These variables are known as initial variables. These initial variables are further processed with the help of a reliability and validity study. The PCA method is applied to understand the right kind of variables that are used in the present study. All, these processes ultimately helped to identify 12 final variables that are used to understand the perceptual difference among the respondents of two study districts as well as to understand the perception of the respondents towards the quality of employment through

weighted average score. The quality of employment is derived with the help of the Likert scale and the same is also tested during the pilot study.

11. Research Contribution

- Education policy, particularly for women and the underprivileged, must be prioritized. Education is an area where lots of changes need to be taken into consideration. Along with traditional education, there is a need to incorporate skill-based education at the primary level. Dropout is a major among the young people as most of them engaging themselves in income generating opportunities at the early age. This will create a future unskilled manpower. A change in the education policy in line with New Education Policy (NEP) where multiple entry and exit option is recommended is indeed a requirement for this group.
- Expansion of regular employment and self-employment is critical for improving job quality and, as a result, household wages. As a result, the performance of Self-Help Groups (SHGs) in both study regions has to be enhanced in order to expand self-employment activities. Micro level research demonstrates that the quality of work (as determined by the kind of employment) accounts for a considerable portion of the poverty gap in terms of use (particularly for the self-employed activities). As a result, expanding self-employment activities, particularly in the Backward Region, may raise household income and thereby lower the prevalence of poverty.
- Agricultural labourers make up a sizable proportion of the workforce, particularly in the advanced regions. As a result, their earnings are seasonal and erratic. Expansion of National Rural Employment Guarantee (NREG) labour is very vital, and efforts must be made to enhance the number of employment days and eliminate salary payment delays.

- The reasons for limited access and utilisation of resources, particularly in underserved areas, must be investigated.
- There is a need to provide market access with the help of new age technologies. Some of the participants engaged in household manufacturing sector, but they are unable to get the market access because of low financial resources. Social media may be an effective tool to get the desired market but that certainly needs some amount of training. Thus, over the period of time these new marketing avenues may add value to the existing players.
- Skill based training is there both from the government side as well as from the private players but that is more or less compliance type. There is a need to link it with the actual benefits that the recipients are supposed to get. That part is missing. Too much of handholding is not required. But the people getting training need a platform which helps them to grow. In the present structure this part is missing.

Improvements in lifestyle may not be directly related to the introduction of digital transactions, but they may be related to changes in certain consumer habits. The new facilities may be capable of providing enough exposure to diverse issues. Access to the internet not only provides them with new generation financial items, but it also opens up a new world to them. Consumer understanding may improve as a result of internet access. Demand for innovative products and services will continue to rise. Previously, they did not have a thorough knowledge of these issues. New age technology will undoubtedly help to improve the problem.

12. Limitations of the Research

The study has the following limitations:

- The study is mainly based on primary data and the same is collected using a multi-stage sampling technique. Although, adequate measures are taken to get the right data some amount sampling errors may be there.
- The result of the study is mainly restricted to the specific geographical area only. Any generalization is not possible without proper validation of the data.
- Ethnic minority groups could not be interviewed due to lack of accessibility.

13. Scope of future work

The study is based on both primary data as well as secondary data which helps to identify the research gaps identified during initial phases of the study. The present study helps to identify the areas where problem areas can be identified in the non – farm sector with special reference to two districts of West Bengal. This study is restricted to specific geographical area, i.e., Nadia and Purulia districts of West Bengal so its recommendations are best suitable for these two areas only. Any generalization should be matched with the specific socio-economic profile of that particular region. The study also addressed the quality of employment in the non–farm sector only and incorporated those areas that are not coming under agricultural and allied sectors. So, any quality of employment in the farm sector is specifically avoided in this study.

Some future scope for works is discussed below

- Non-farm sector's growth on economy
- Comparative study between farm and non – farm sector
- Restricted migratory movement due to improvement in non – farm sectors

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