

**GENDERED PATTERNS AND TRENDS OF EMPLOYMENT
IN RURAL INDIA**

*Dissertation submitted to Jawaharlal Nehru University
in partial fulfillment of the requirement for the
award of the degree of*

MASTER OF PHILOSOPHY

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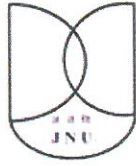
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DECLARATION

This is to certify that the dissertation entitled "***Gendered Patterns and Trends of Employment in Rural India***" is my original research work under the supervision of Prof. Sucharita Sen. I hereby submit this dissertation in partial fulfillment of the requirements for the award of the degree of Master of Philosophy of this University. This study has not been submitted in part or full for any other diploma or degree of any other University to the best of my knowledge.


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CERTIFICATE

It is hereby recommended that this dissertation may be placed before the examiners for evaluation.


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All remaining errors, if any, will solely be my responsibility.

NAEIM KHAN

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Chapter: 1

Introduction to the Gendered Patterns of Employment

1.1: Introduction

Work is very fundamental for the socio-economic empowerment and over all development of women because it enhances choices and freedom. Work is the first step towards achieving the sustainable development goal of eradicating poverty, malnutrition and increasing social & political participation of women. It increases the role of women in development and ends the vicious cycle of dependency. It has been proved that households where women have money in their hands, the incident of child malnutrition is low as compare to those households where they do not have any role in decision making. Human Development Report of 2015 published by United Nations Development Programme (UNDP) titled “Rethinking Work for Human Development” is totally devoted to the significance of work for human development that imparts the sense of dignity and security. Therefore, increasing women’s work force participation is very desirable in order to achieve the goal of gender equality and socio-economic development of the country. However, the quality of work where women are engaged in cannot be ignored because mere rise in the level of women participation in economic activities will not solve the problem of exploitation and deprivation unless women are employed as their counterparts do. In our country the work of women is not reported as they are employed in unpaid work mainly in self-employed category e.g. agriculture and household small production. Their work is not recognized and considered as uneconomic. The work of male and female have been divided, men work outside while women take care of household chores and bring up kids. There is binary between the work suited for women and men. The works which need high level of physical stamina and decision making at higher level are generally considered unsuitable for women. Abysmal presence of women in administration and higher concentration in education and health care depicts the social restrictions on the occupational choice of women. They have limited occupational choices and sometimes they have to confine themselves under the four wall of the home. The literacy rate of women is rapidly catching up to their counterpart but the education outcome is very poor in the case of rural women because patriarchy is still strong enough to limit the upper mobility of women in the hierarchy of employment opportunities. However, there are different issues with various dimensions of women’s work e.g. increasing marginalization,

unemployment, less employment diversification, “occupational segregation¹ and declining work force participation. Economic growth is not being translated into good jobs. Increasing unemployment & marginalization and at the same time decreasing work force participation shows the paradigm shift that is taking place in the Indian labour market. Undoubtedly, women are getting upper mobility as far as the quality of work is concerned but with snail’s pace. The gender disparity is more acute in rural areas where the patriarchy is stronger than that of urban places. It is to be reckoned that gender gap in work force participation is getting wider however; the literacy rate, per capita income and awareness have improved over period of last two decades. Women enter the labour market with unequal capabilities e.g. education and skill as compare to their counterpart. All these factors are working in opposite direction, making the patriarchy even stronger.

However, the women work force participation is declining as against the expectation. Since the last two decades the women work force participation is shrinking especially in rural areas while the unemployment rate is increasing. The major decline in women workers is led a withdrawal from the agriculture. Hence women could not be got employed in those sectors where jobs were generated. However, supporters of liberalization believed that opening of market would increase jobs opportunities for women. In other words, the work force participation of women tends to go up. Nandita et al (1994) Deshpande, S. (1993), highlights the role of New Economic Policy (NEP) in increasing feminization of work force by opening new job avenues for women. However, in contrary to it, Easter Boserup stressed that in the process of industrialization or modernization women got marginalized. They withdraw from the labour market because production process shifts from the home based value addition to factories with modern labour saving technologies. This change automatically excludes the women from the labour market due to unacceptability of society to allow women to work outside home. However, the work force participation rate of rural male population in working age group (15-59) is also going down. It clearly depicts a mismatch between the persons enter the labour market and total jobs generated. In the scarcity of jobs, the women are substituted by male workers (sex substitution²). In other words, males pick up majority of jobs generated pushing women to the inferior quality of work where the wages are poor, intermittent job and

¹ Occupational Segregation is referred to giving preference based on gender. In other words, employing on the basis of gender. It might be vertical (within the hierarchy of occupation) and horizontal (across the occupations). Biblarz et al emphasise that occupational segregation is caused by gender based discrimination. It creates gender pay gap. It may occur due to work experience disparity and educational disparity.

² Giving preference to males over females, generally males are preferred due to flexibility of working conditions. The employers want to get rid of maternity leave etc.

low value addition. Gross Domestic Product (GDP)³ of India is growing at sufficient rate so it is expected that new avenues will open for the youths entering the labour market but the country could not realise the potential that we have in terms of huge labour force. Introduction of labour saving and capital intensive technologies in agriculture displace manual labourers. However, women do not have property rights especially land entitlement that is the main source of livelihood in rural areas. Legally daughters are entitled to have equal share as sons do in parental property e.g. land but socially it is not acceptable especially in north India. Accessibility to land is very limited for women that increase dependency on wage labour.

The proportion of women workers working in marginal capacity is going up that is not healthy trend. Underutilization of work force is harmful for society in general and women particularly. Unemployment creates several social and economic problems, increasing dependency on working population and eats up savings that could be used for creating new jobs by increasing gross demand driven by consumption. Women's presence in non-agriculture sector is increasing but with snail's pace. However, it is of immense significance to see in what kinds of work women are getting employed in non-farm sector and its impact on women's work. Agriculture is the single largest resort of rural women for livelihoods. It has been established by various scholars that women are withdrawing from the farm but the regional pattern and type of work from where withdrawal is significant, it has to be seen in context of time and space. However, the Census and NSS adopt different methodology while collecting the data pertaining to the employment and unemployment hence it creates confusion in the minds of scholars who intend to study the work and its various types. Work force participation is different in different age group as shown by both the sources of data. Therefore, there are various gender issues in different age cohort. These are very essential to be analysed.

Work is very crucial driver of human development and in such situation it is quite desirable to explore the differences in male & female work and gender gap as reported by different sources of data in the country so that these gender differences in work can be analysed in the light of methodology adopted by data sources. Employment opportunities have increased for women in non-farm sector especially in the first decade of 21st century. Different studies have been done on the issue of women's work and in gender context but the confusion that has

³ The value of all finished goods and services produced in an economy over a specific period of time.

been created in data taken from the Primary Census Abstract (PCA) and National Sample Survey (NSS) has not been addressed in earlier work. NSS has been main source for obtaining data for analysing the problem of unemployment and marginalization (increasing the share of marginal workers to total workers). It has always been under reported in NSS. However, unemployment in different age groups reveals various aspects of gender relations with the increasing the age of women e.g. unmarried and married. So it is quite important here to find out the factors creating differences. Diversification of employment shows range of activities from where workers are driving their livelihoods. And its impact on women work has not been explored earlier. It has already been quantitatively proved that women are withdrawing from agriculture but the spatial analysis has been missed. Hence, women's work in rural areas is suffering from both the quantitative and qualitative aspect. Concentration of women in limited range of activities in itself shows the vulnerability of women in labour market. Employment diversification depicts the ability of women to get access in different types of work thus not limiting themselves to few activities. Gender gap and interstate or regional differences in the quality and pattern of women work is the core of debate. Roles of women in society, family, economy, polity and development change in different time and spaces with the constantly changing perception of society towards women.

This paper intends to address different issues pertaining to women's work especially in rural areas. With new challenges and opportunities the nature and pattern of work is undergoing a sea change as the new technology creating new process of production and consumption. Women have been the most vulnerable section of society as the new technologies arrive, they are the main sufferer. Therefore, the issues like unemployment, marginalization, women's withdrawal from agriculture and diversification of employment options have been analysed in spatial (regional) and temporal perspective. The differences in the data of NSS and the Census concerning the above issues have been dealt and a separate chapter has been devoted to a comparative study in order to find out the underlying factors creating differences in data.

There have been doubts about the data obtained from the Census and National Sample Survey (NSS) pertaining to work force participation and the unemployment rate. A difference in the women's work reported by both the important sources of data e.g. the Census and NSS have always created confusion among the researchers regarding the authenticity of data. Both of the sources of data are considered very important as far as the question of employment and unemployment is concerned. National Sample Survey takes sample while Census covers total households in the country. However, NSS is more specific and provides minute details about

employment and unemployment etc. But on the other hand, Census is not so specific but provides good information about total workers, non-workers and seeking/available for work population, even NSS calculates the number of workers according to Census population. NSS being a sample survey, sometimes it might suffer from sample error. Therefore, second chapter has been devoted to a comparative study between the Census and NSS to see underlying factors that create differences in result.

It is important to note here that the nature and composition of women's work that has undergone a sea change as they are withdrawing from agriculture and getting employed in non-farm activities. Hence their role and participation in the society is also changing with varying degree in different regions. The type of work where women are being employed is a quest as far as the quality of work is concerned. Employment diversification of rural women tends to increase as new job opportunities are being created and it will improve the quality of women's work. High economic growth, India has recorded since 1991 then it is expected that women's mobility in different sectors and job opportunities would increase. Literacy and per capita income is continuously rising thus women tends to better employed. The sectoral composition of work force is undergoing a change as new jobs are being generated in one sector while job opportunities shrinking in other. Hence it is desirable to analyse the gender issues in changing work force composition. Changing scenario with modern advanced technology favours whom. Thus the third chapter has been devoted to aforesaid issue.

Chapter fourth is dealt with the problem of unemployment and withdrawal of women from agriculture. Unemployment among the women has emerged as major problem since 1991 onwards. An attempt has been made to reveal the causes of difference in data taken from the Census and NSS pertaining to the issue of unemployment. Decline in full-time jobs and a rise in the proportion of women workers in part-time capacity shows the inability of growth process that making work force vulnerable. Hence the unavailability of suitable jobs for women might be possible reason for their withdrawal from the work force. It is good sign that women are willing to work after breaking the patriarchal norms that do not allow them to go for outdoor work. The agriculture work of women has been seen in the scenario where it has recorded major withdrawal. It becomes imperative over here to look into the regional and spatial pattern in women work force withdrawal from agriculture. The feminization of agriculture has been well debated in literature on the changing role of women in agriculture. Some argue in favour of agriculture feminization while others counter it. Therefore, it is to be

seen that is there really feminization of agriculture taking place? However, it might be mere misinterpretation of data.

1.2: Literature Review

There has been intense debate among the scholar pertaining to the “feminization⁴ and De-feminization⁵ of rural work force in general and agriculture particularly. Outstanding work of Standing, G (1989) in this regard is crucial. He tries to prove that after opening of market in developing countries, the employment opportunities for women increase as new avenues of jobs in service sector get impetus. However, Deshpande, S (1993) statistically proved the feminization of rural work force by stating that New Economic Policy (NEP) that was adopted in 1991 will increase the demand for labour especially of women by increasing occupational choices. Nandita et al (1994) and Banerjee, N (2007) also supported the argument that has been forwarded by Guy Standing. Deere (2005) finds the evidences of farm feminization in Latin America after liberalization of economy that stopped women out-migration from agriculture. However, in the context of China; Zhang et al (2006) analysed the feminization of Chinese agriculture as the role of women in farm management and decision making in agriculture increased. However, out-migration of male workers to the urban areas also contributed in the feminization of Indian agriculture. The states which record high out-migration of male workers, the proportion of women’s work force is relatively higher in farm activities because small piece of land left behind, that is taken care by women. And increasing better jobs opportunities in urban areas attract male work force from the rural areas. Historically it has been seen that males occupy better or more productive jobs and leaving the less productive or the work with low wages for women. The mobility of males is more succinct while women’s mobility is restrained by the household responsibility of child caring and house-making. Krishnaraj, M and Kanch, A (2008) highlight the role of declining

⁴ Standing, G implies the term Feminization in two conditions e.g. increasing the female work force participation rate while declining male work force participation and substitution of male by women or increasing the proportion of women in certain jobs which traditionally were occupied by males. Deere (2005) defines the feminization of agriculture by increasing the women work force participation in farm and increasing the women agriculture workers in total workers.

⁵ It is the withdrawal of women from labour force. In contrary to feminization, males replace women from the work where women were traditionally employed e.g. agriculture, healthcare (nurses) etc. for instance, if males pick up majority of jobs of nurses thus substituting women where they were historically employed. It would be called de-feminization of healthcare sector. This process can be applied at macro level in order to analyse the de-feminization in any economy.

craze of joint family and rising nuclear families, that has increased the work of women on small piece of land as own account worker.

But on the other hand, the de-feminization is the declining women work force participation or withdrawing of women from the work where they were earlier engaged in for instance agriculture and household industries. However, the participation of women in the economically meaningful activities is quite desirable for socio-economic empowerment of the women. But at the same time declining women work force participation when the country is growing at quite high economic growth rate, it is not good for the economic health of any economy. Persistent decline in women's participation and increasing marginalization raise obvious questions on the process and nature of development. Hence, it can be safely said that India's growth has not been inclusive especially for women who constitutes about 48 percent of total population of the country. However women could not be accommodated in non-farming sector as the farming sector has almost been stagnant. During the period 1983 to 2011-12 the male labour force increased from 198.5 million to 348 million, while for females the increase was from 77 million to 99 million by UPS criteria, reducing the share of females in the labour market from 28% to 22%.⁶ Increasing the incident of unemployment is causing a setback to the women who want to work. Although India has comparative advantage of being a country with "Demographic Window"⁷ but withdrawing of women from the work force at this juncture is not a welcoming trend. Moreover, it is against the promise that was made during 1990s that opening of market would increase the demand for labour especially women. But on the other hand, jobs opportunities for women are shrinking.

Women are consisted of about 48 percent of population (Census, 2011) and declining work force participation is an alarming trend which would not allow India to utilize its abundant human capital. It is very important to find out the factors discouraging women participation in economic activities especially in rural areas so that the issue can be addressed. However, withdrawing women from the work force is not desirable for India in general and rural economy in particular. Higher dependency on working population will discourage saving which is very essential for economic development and employment generation.

⁶ Abraham, V (2013), "Rural Employment Growth in India: Distress Driven?"

⁷ Having the highest population in working age group, It is not a permanent characteristic rather comes once in the evolution of a country's demographic history.

Although, declining women's labour force participation is well debated since last two decades. A number of labour economists have tried to find out the driving factors behind the sharp decline in women's participation in economic activities. The work of Claudia Golden (1994) is noteworthy in this direction that provided U-shaped relationship between economic growth and women work force participation. But any generalization or definite pattern could not be established. There are social, economic and process of development responsible for the women's participation which varies as the socio-economic conditions differ from region to region. There are three significant factors which have been well debated as the drivers of "De-feminization e.g. increasing enrolments for education, increasing household income and the lack of job opportunities for women in the labour market. Increasing unemployment rate among the rural women since 1991 onwards is the manifestation of inability of women to enter into the non-farm sector for livelihood. As far as the question of rural women's work force is concerned the agriculture mechanization and the trend towards monoculture discourages the women's employment in rural India. Therefore, the feminization of rural work force is doubtful as the recent data is available from the both sources e.g. the Census and NSS.

Different hypothesis have been put forward regarding the women's work force participation for instance as the globalization or integration of economy takes place, feminization of labour force tends to occur (Standing, G 1989) and Banerjee, N (2009) supported the argument and talked about two ways through which the feminization may happen if women replace men from the jobs where males had dominance. And the motive of employer to down grade the terms of work. But it does not hold true in Indian context where participation continues to decline while 25 years have passed when India adopted Structural Adjustment Programme (SAP). Female labour force participation FLFP has declined from 33 percent in 1993-94 to 25.3 percent in 2011-12 in rural India (NSSO, 2011). There is huge regional variations, Himachal Pradesh with 52.9 percent at the top while Bihar 5.8 percent at the bottom (68th NSSO Round, 2011). Therefore it is very difficult to generalize because different factors e.g. social values, culture, gender relation; religion, caste, education, household income and availability of decent jobs are influencing in different regions with different intensities for declining women participation rate in India. Therefore it is desirable to find out discouraging factors so that same could be addressed in time. At all India level, the de-feminization of rural work force is taking place but it is to be seen at regional level because the trend might be entirely different at state level. But as far as the question of

agriculture feminization is concerned, it has also recorded continuous decline women work force participation in agriculture since 1993-94.

There is general trend that as the family income increases; the women's participation in less remunerative jobs tends to decline. Women would prefer to confine themselves in four walls of house rather to work in distress jobs. (Neff,D et al 2012), Klasen, (2012), Ewa Lechman and Kaur Harleen (2015), Rangarajan, C et al (2011), Abraham, V (2013) talk about the decline of women labour force participation due to increasing family income and higher income from the agriculture in rural India. The wage rate has improved a lot over period of time. The main proposition that has been put forward by the supporters of economic induced withdrawal is that when the family income goes down below the subsistence level, women are compelled to participate in low paid jobs in order to augment family income. And with the passage of time, as the family income improves, women withdraw from the distress jobs to lessen the "double burden"⁸ of outside work and household chores. But on the other hand, the study done on NSSO rounds show that women those have withdrawn from the labour force mainly belong to the lower income group. If income affects women's works, women would have been withdrawn from middle and upper income groups. "It clearly shows that there is an inverse relationship between output growth and employment growth. This is true for agriculture as well as in the aggregate. In fact, the lowest rate of growth of GDP is seen for the 1999-2000 to 2004-05 periods, which incidentally is also the period of the highest rate of growth of employment. The lowest rate of growth of employment was in the period 2004-05-2007-08, which also happened to be the period of highest growth in GDP (Himanshu, 2011). But there is no one to one relation between the GDP (Gross Domestic Product) growth and the decline in employment growth because of very poor distribution of national income among all the households. The benefits of growth in the national income reach to the different sections of society with varying level. As far as the question of unorganised sector (where majority of women workforce is engaged) is concerned the effect is minimal.

Alternative hypothesis that has been put forward by the scholar like Hirway,I (2012), Kapsos et al (2014), Sunita, S (2015), Lahuti, R, and Swaminathan, H (2013) , Chowdhury, S (2011) and Kannan, K.P, (2012) is that there could not be generated enough jobs for women in non-farming sector and due to low education and lack of skill they could not compete with men

⁸ Women who are engaged in outdoor work have dual responsibilities of working outside home and taking care of household chores e.g. making food for family and bring up kids. Traditionally in our society making food for self-consumption and bringing up kids is considered sole responsibility of women.

equipped with comparatively higher education and better skill. The jobs of regular and salaried category which have been generated have been picked up by male because of better education and skill. It is evident from the fact that 5.3 million jobs were generated in regular and salaried category out of which 5.1 million jobs have been picked up by male only. Gender gap in educated male and female is narrow in urban areas as employment in non-farm sector is concerned while it becomes wider in the case of rural male and female workers. Thus lack of job opportunities for women has been one of the reasons behind the withdrawal of women from the labour force in rural India.

Women work force is concentrated at the lower ladder of economic activities mainly in farm sector and women participation varies across social group as it is highest among STs Women while lowest in Muslim women (Srivastava, N. and Srivastava, R. (2010), Lahoti, R. and Swaminathan, H. (2013) emphasis upon the fact that Indian economic growth has not been labour intensive so the dynamics of growth matters not merely growth. More than 75 percent of rural women labour force engaged in farm sector. Largest decline has taken place in the women work force who was working as non-paid category in agriculture. It is very much true that the process of development is more important than that of growth itself for generating employment opportunities for women. Labour intensive sector has not recorded major growth while capital and technology intensive sector have received huge investment thus replacing manual labour without substituting new avenues of employment for those who have withdrawn from labour intensive sector.

During last decade women enrolment for education has increased considerably since the Sarva Shiksha Abhiyan (SSA) programme was started. (Neff, D., et al, Kannan, K.P., Abraham, V. and Sunita, S.) highlight the role of increasing enrolment for education in declining female labour force participation (FLFP). Undoubtedly enrolment for education has played a crucial role but it cannot be credited as the sole reason because decline of participation in all age group cancels out the notion of education driven withdrawal. It is, of course, true that improving enrolment for education has played a partial role. Abraham, V (2013) says that increasing education among women strengthens and modernizes the patriarchal norms and thus discourages women's participation. Surjit and Bhalla (2005) establish the positive relation between the poverty and women labour force participation in rural India. High family income and women education level among the women leave positive impact on FLFP while male education leaves negative impact on women participation. Mammen and Paxson (2000) support the argument that higher male education would

discourage women participation in economic activities. While higher level of education among the women encourages women's participation.

Sudarshan and Bhattacharya (2009), Sonali, D et al (2015) take into account the individual characteristics like marital status. In other words, married women are less likely to participate in economic activities as compare to unmarried. Women's decision not to participate in labour market especially in developing countries is due to "status production"⁹ because social stigma is associated with outdoor work of women (Papanek, 1979, Klasen2012). Golden, C (1994) establishes U-shaped relation between the economic growth and women labour force participation. In other words, as economy grows then first, women participation declines and then starts rising. However, in the context of India, it has been recording declining work force participation since 1991 when new economic policy was adopted but still not showing upward trend as far as women labour force participation is concerned. In other words, according to Golden, C (1994) India has not reached on the stage when an economy starts recording rising women labour force participation.

Women cannot be viewed as the homogeneous social group rather there is wide special or regional variations in women's socio-cultural roles. There is intense debate regarding the changing work of women in Indian agriculture. Declining women work force participation is of immense significance as the economy is growing at fast rate. Modern farm technology including the use of the farm machinery (tractor, harvester, cultivator, tube well etc) mostly displace manual labour from the farming sector (Chattopadhyay, M 1984, Toor et al, 2007, Singh, 1968; Singh and Singh, 1972; Sharma, A. C., 1976). But at the same time others scholars claim that farm mechanization might have increased the labour demand by increasing cropping intensity, cropping pattern, crop diversification and increasing area under the crop that is labour intensive (Pandey ,S.M, 1974, Sarkar and Prahladachar, 1966; Wills, 1971; Grewal and Kahlon, 1972; Sharma, R. K., 1972; Acharya, 1973; Randhawa). Amarender et al (2014) states that the impact of mechanisation and use of herbicides significantly reduced employment in the farming sector while cultivated area, cropping intensity, higher use of inputs, etc. increased labour use. Indian agriculture has seen a tremendous change as far as the question of farm mechanization is concerned. Withdrawing

⁹ In Indian society, women do not go for work outdoor in upper cast or economically well-off families. It is considered as the symbol of high social status. Therefore, the families whose income has increased try to imitate the life-style and values of upper or dominant castes. Thus women get withdraw from work force and confined to the household work.

women from the farming sector which is characterized by low wage, low labour productivity, low gross value addition (GVA) and intermittent job is desirable because its share in Gross Domestic Production (GDP) has declined to about 13 percent but still employing more than 50 percent work force. According to one hypothesis due to lack of job opportunities in non-farm sector, farmers tend to overinvest in farm machinery (Hanumantha, C.H, 2010). It is, of course true that increasing use of capital intensive machines in agriculture creates new job opportunities while replacing others but the jobs generated by the use of machines are not generally suited for women who lack skill to handle new machines. For instance, the introduction of tractors, thresher, JCB (machine used mainly in agriculture and construction work) etc have undoubtedly created new jobs but not for women because they are neither suited nor socially acceptable to handle these machines. Thus employment opportunities that created by new technology have been picked up male workers however, female benefited less than that of loss. But I would not go into detail because this issue needs a separate dissertation.

It is essential here to be noted down that high women's participation in itself does not mean anything because it is quite important to see the types of employment in which women are employed. In other words, with quantity the quality also matters. In the present situation it is quite noteworthy to mention the factors working in different regions which would help to address the problem of low participation by specific policy for special region. If we see the participation of women in the paid jobs, the condition is very grim. Now it becomes very important to bring women in paid jobs who are working as unpaid workers in household and others domestic activities. Providing skill and creating decent jobs for women in rural areas is a real challenge at the time when women withdrawing from the labour market.

Since last two decades Indian economy and society as well has undergone a sea change and women's workforce engaged in farming sector has come down albeit with slow pace. Now the question obviously arises that in non-farm sector in what kind of jobs women are being employed. High presence of women in white collar jobs is the proxy indicator of upper socio-economic mobility of Indian women. It is to be seen that the economic development of last two decades been inclusive for women or not. As stated by liberal feminists that industrialization will improve women's socio-economic condition and emancipate them by increasing mobility, social participation and decision making.

1.3: Gaps in Literature

The Primary Census Abstract (PCA) and National Sample Survey (NSS) have always been confusing when outcome has been compared. There have been discrepancies as far as the question of number of total workers and unemployed persons is concerned between the Census and NSS. There has not been enough focus on finding out the factors responsible for difference in male and female work force, labour force participation and unemployment rate. Several studies have been done to analyse the quality of work where women are engaged in but employment diversification and its impact on women's work have not been researched. Main data source for analysing unemployment rate has been NSS. The Census has not been explored with the methodological differences. Regarding above all issues, the regional or spatial context was missing.

There is plenty of literature on the issue of declining women labour force participation. The emphasis has mainly been on finding out the driving factors e.g. improving household income, increasing enrolment for education, lack of employment opportunities, social stigma associated with outside work, social status production, marital status and spouse's education responsible for de-feminization especially in rural areas. But the issues mentioned above have not been explored in earlier literature with regional perspective that is the main concern of human geography.

1.4: Research Questions

Why does the Primary Census Abstract (PCA) and National Sample Survey (NSS) show difference in male and female labour force and work force participation? What is the impact of employment diversification on women's work in rural areas? Why the unemployment problem among the rural women is rising as reported by the Census?

1.5: Objectives

To find out factors which create differences in outcome of labour force and work force participation between the Census and NSS (Chapter 2).

To analyse the impact of employment diversification on women's work and find out the factors which influence diversification of women employment (Chapter 3).

To plot the spatial and temporal trend in male & female unemployment, and to analyse the factors responsible and to see the trend of withdrawal of women from agriculture with regional perspective.

1.6: Data Source and Methodology

Data have been taken from National Sample Survey Organization (NSSO) Employment and Unemployment from 50th round (1993-94) to recent 68th round (2011-12), Central Statistical Organization (CSO), Agriculture Statistics at a Glance and Primary Census Abstract (PCA).

In order to meet first objective, a comparison has been made to see the methodological differences between the Census and NSS. The main point of enquiry has been work force participation of male & female over a period from 1993 to 2011-12 covering three rounds of NSS e.g. 50th, 55th & 68th. Three consecutive decadal censuses of 1991, 2001 and 2011 have been taken in order to make study compatible. First attempt has been made to analyse the age wise work force participation of male & female population from both the sources. The discrepancies in the result guided to reveal the definitional differences in principal and subsidiary status (main & marginal) and the definition of worker in itself between the sources of data. Then male & female work force participation has been plotted in order to analyse the regional-temporal trend therein. Conceptual difference has been analysed in recognising a worker as marginal and plotted and tabulated the incidence of marginalization to see the regional pattern and underlying factors. Hence multivariate regression has been run to find out factors influencing the marginalization (increasing the proportion of marginal workers to total workers) of women work force. Therefore, the independent variables e.g. female literacy, poverty, proportion of marginal landholdings and development index have taken in order to analyse the impact of these variables on the incidence of women's work force marginalization.

Second objective seeks to analyse the compositional change in the non-agricultural work of women from 1993-94 to 2011-12. First the regional and temporal trend has been analysed with the help of tables and graphs. Then in order see to compositional change, Simpson Index of Diversification has been calculated to see employment diversification of rural & urban, male and female over period from 1993-94 to 2011-12. Simpson Index has been calculated by taking normalized value of nine fold division of activities by HDI (Human Development Index) method. The change that has taken place over period of about two decades plotted to

have better presentation of regional pattern. In spite of it, the absolute jobs created in non-farm sector for rural women has been found out in order to clear the doubt about relative percentage increase of non-farm jobs of women because women work force participation declining. Finally multivariate regression has been run to find out factors influencing the employment diversification of rural women.

In order to meet third objective, the incidence of unemployment has been depicted with the help of comparative bar graphs age wise over three decadal censuses 1991, 2001 and 2011 and plotted to analyse the regional and temporal perspectives. An increase in labour force participation and unemployment rate of rural women has been graphed in order to see jobs unavailability induced withdrawal of women from work force. Scatter diagram has been plotted to see the relationship between the unemployment rate and incidence of marginalization of women work force in rural areas. And finally women's work in agriculture has been analysed and their withdrawal from farm sector from type of work.

Chapter: 2

Women's Work Force Participation: A Comparative Study between the Census and National Sample Survey

2.1: Introduction

The Human Development Report¹⁰ of 2015 emphasises upon the 'work' for human development. Work empowers the people by ensuring a livelihood and being economic security (Human Development Report: 2015, UNDP). Work is very essential for the economic growth, poverty eradication and gender equality. Women labour force participation is the driving force in the growth of economy (Sher Vererick, 2014). It enhances the choices, freedom, sense of dignity and make the women more participative in the society. "Throughout history the nature of work has evolved. Changes in social, economic and political structures have changed the when and where of work, what of goods and services produced and the how of organizing work."¹¹ However, since last two decades (1990-2010), women labour force participation has been unchanged (ILO, 2014). It is true that the variations are higher between the developing and developed economies in the case of women labour force participation as compare to male. "The overall participation rate in India has been persistently low in comparison with other countries in the world. In 1994, India ranked 68th out of 83 countries with available data in terms of the rate of female participation. As of 2012, it ranked 84th out of 87 countries" (Kapsos et al, 2014, p.1). However, India's neighbours like Pakistan and Bangladesh have recorded an increase in the women labour force participation (ILO, DWT for south Asia¹²). In contrary to it, male labour force participation has declined over same period of time mainly due to increasing enrolment for education.

However, there are a number of factors responsible for the participation of women in economic activities in India e.g. social group, household income, religion, general education, geographical regions (plain, hilly terrain), size of land holding etc. Labour Bureau Report underlines four factors determining women employment. First, the permanent and growing

¹⁰ Human Development Report (HDR) is published by the Human Development Report Office of United Nations development Programme (UNDP) annually. It takes four socio-economic indicators e.g. Health, Education, Living Standard and Income Disparity for ranking the countries of the world.

¹¹ Human Development Report, 2015

¹² Decent Work Team (DWT) for South Asia and country Office for India. It provides advices related to technical Excellency for all south Asian countries.

inadequacy of the income of the principle bread winner. Second, the temporary fall in the income of family due to accidental circumstances. Third, the death of the bread winner and fourth, women's desire for economic independence for securing a higher standard of living for the family (Verma and Bano, 1998). Participation of women in economic activities is an integral part of economic growth of any kind, and it is often believed that liberalization and globalization will provide impetus to feminization of labour force. In other words, the employment opportunities for women would increase as a result of opening of the market. The demand for women labour will increase as the new jobs in exporting sector tend to get impetus. But this evidently does not hold true in Indian context since the liberal economic policies were adopted in 1991, although, women participation in economic activities has continuously declined against the expectation. In fact, a lot of South Asian countries have witnessed increase in feminization of agriculture as men have left agriculture for higher wage-rates in the non-primary sectors.

The increasing technological use or mechanization in agriculture operation (field preparation, harvesting, winnowing, sowing, ploughing, weeding, threshing etc.) led by labour saving technology is decreasing employment opportunities for women in farming sector. Modern farm technology including the use of the farm machinery (tractor, harvester, cultivator, tube well etc) mostly displace manual labour from the farming sector (Chattopadhyay, M 1984, Toor et al, 2007, Singh, 1968; Singh and Singh, 1972; Sharma, A. C., 1976). At the same time restricted entry of women in the non-farm jobs due to low level of literacy, required skills and the social stigma associated with the outdoor work of women particularly for women from the upper caste households paves the way for higher level of unemployment and declining work force participation ratio (WPR) in comparison to their counterpart in rural as well as in urban areas. It is constrained by the social norms and lack of resources. However, education not necessarily increases women's participation and mobility. Sometimes it strengthens and changes the form of patriarchal norms and discourages women's participation (Abraham, 2013). Low growth in the agricultural sector from where majority of rural women are deriving their livelihood from further makes the employment opportunities scarce. Hence, it is to be analysed that what are the factors which make the difference in the women's work as reported by the Census and NSS.

2.2: Comparison of Work Force Participation between Census and NSS

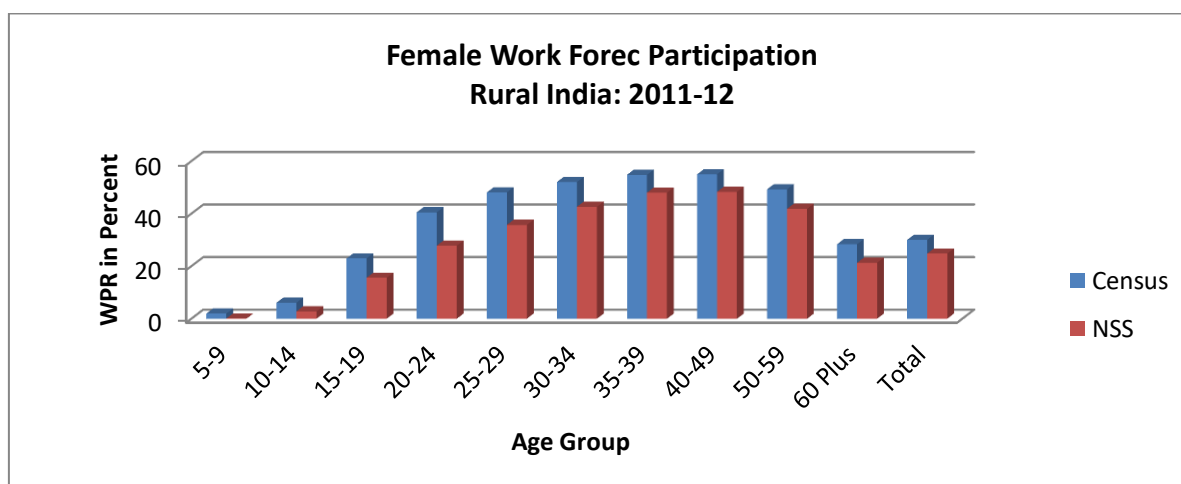
There has been great confusion regarding the data obtained from the Census and the National Sample Survey Office (NSSO) of total workers, cultivators, persons unemployed and male & female work force participation. And these are the major sources of data as far as the question of work is concerned in rural as well as in urban areas. Therefore, this chapter intends to carry out a comparison between two sources and an attempt to explain the differences.

Here work force participation means percentage of currently working women to total women's population in working age group (15 to 59 years of age). As far as the work of women is concerned in India, there are two important sources of data e.g. National Sample Organization (NSS) and Primary Census Abstract (PCA) in which former is more specialised regarding employment and unemployment condition while later provides complete households coverage and it is decadal in nature. These sources are widely used in research and inputs for policy formulation.

2.3: Work Force Participation of Rural Women

Women work force participation is an indicator of their mobility and social acceptability of women as the agent of development. It is the first step towards raising the economic decision making role. Work rescues women from social menace like seclusion and thus enhance social interaction.

2.1: Comparison of Women Work Force Participation from Census and NSS in Different Age Group: 2011-12

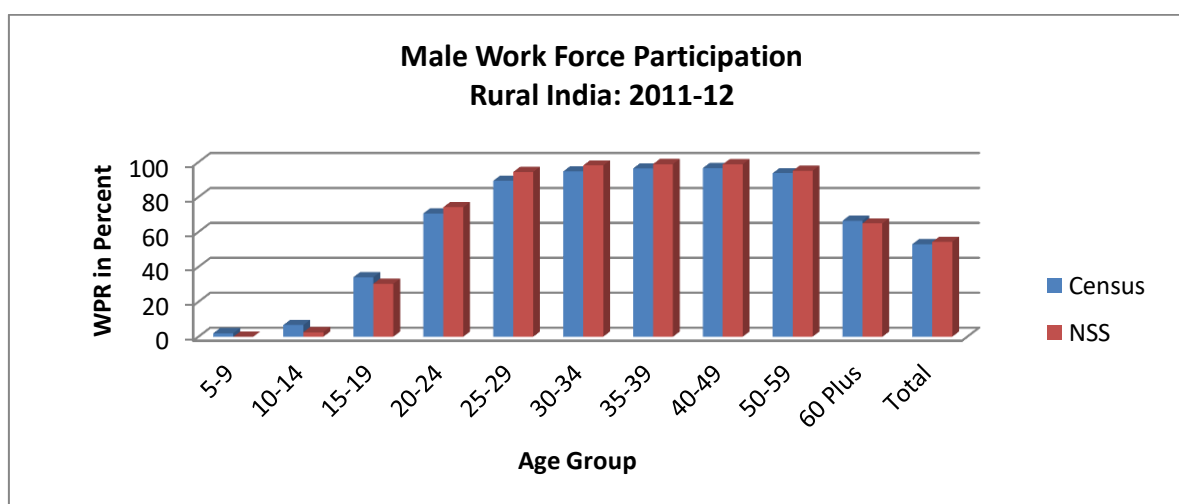


Figure, 1 source: calculated from Primary Census Abstract (PCA) and NSS, 68th round. (PS+SS)

Figure 2.12 tries to convey the difference in work force participation of women in rural India. It clearly shows that the Census reports women WPR higher than that of NSS during 2011-12. Women work force participation rate in all age group is 24.8 percent according to NSS while it is 30.02 percent as per the Census. It is interesting to note here that in 60 above age group, the difference becomes even higher as it is 21.3 percent (NSS) and 28.38 percent (Census). The gap between the Census and NSS widens especially in 15-24 age group. This age group is consisted of mainly school and college going girls. And in other words, girls of age group 15-24 are also called as new entering youths in the labour market.

There are definitional differences between data sources mentioned above. According to NSS, a person working less than 30 days in a financial year is not counted as worker while the Census counts a person as worker if he/she engages in any economically meaningful activity even less than 30 days. In other words, women who are working in marginal capacity or less than 30 days are not counted by NSS while this work force is included in marginal category by the Census. Hence the proportion of subsidiary workers must be higher as reported by the Census. Thus the difference in WPR of women in (PS+SS) status is inevitable to happen.

2.2: Comparison of Male Work Force Participation from Census and NSS in Different Age Group: 2011-12



Source: Census (2011) and NSS (2011-12).

However, the story is entirely opposite in the case of rural male work force, male WPR is higher as reported by Census only in the first three age groups, 5-9, 10-14 and 15-19 while it is lower than that reported by NSS in rest of the age groups. In all age group, the male WPR is 53.02 percent by Census but on the other hand, it is 54.3 percent as per NSS, a difference of 1.3 percent. Other thing must be noted here is that the WPR in 60 above age group is also

higher according to Census (Census-66.42 %, NSS-64.9%). Therefore, the dependent population of below 20 years and above 60 is working in marginal capacity or less than 30 days in order to augment family income. This phenomenon is hidden in NSS data while it is explicitly shown by the Census. There are fundamental differences in counting a worker as far as the question of the Census and NSS is concerned. Hence, the difference will disappear as we see the work force participation in main or principle status.

2.4: Work Force Participation in Main or Usual Principle Status

The people working as main workers in a economy shows true nature of work force because full time jobs are very essential as far as the question of sustainable livelihood is concerned. Increasing part-time jobs or increasing proportion of marginal workers in total work force is not a welcoming trend because it leads to underutilization of work force and increases the vulnerability against economic shock by declining family income. Although, it has been seen since 1991 that the marginalization¹³ of work force is taking place in urban as well as in rural areas for both the sexes. Marginalization has always been higher for female work force due to some socio-economic factors but increasing marginalization for male work force is a new trend (Census). Increasing the number of casual labour and contract workers will have adverse implications on the level of wages, stability of employment and social security of employees owing to the temporary nature of employment. The employers prefer part-time or contract workers over regular/formal in order to get rid of from pension, health insurance and job security.

2.1: Work Force Participation of Male (Rural & Urban) in Main or Usual Principal Status (PS)

Age Group	Rural		Urban	
	Census	NSS	Census	NSS
5-9	0.93	0.00	1.02	0.00
10-14	2.95	2.10	2.87	2.9
15-19	20.67	27.30	18.07	20.9
20-24	51.02	71.40	48.95	57.8
25-29	69.92	93.40	75.50	89.8
30-34	76.75	98.00	85.16	97.1
35-39	79.45	98.70	88.05	98.5
40-49	81.09	98.60	88.89	98.1
50-59	78.94	94.60	83.31	90.2
60+	52.95	63.80	40.99	35.8
Total	41.63	53.50	48.65	54.20

Source: calculated from Census (2011) & NSS (68th) round.

¹³ Here I have used the word 'Marginalization' as increasing the proportion of marginal or subsidiary workers in total workers. In other words, increasing the share of workers in part-time jobs has been termed as marginalization over here.

It is very important to note here that male WPR in main category is higher (NSS) than that of reported by the Census for rural as well as for urban areas in all age group. But on the other hand, there is a marginal difference of 1.5 percent in both the main and marginal category taken together. According to NSS, the male WPR in rural India is 54.3 percent in both the usual principle and subsidiary status (PS+SS) while it is alone 53.5 percent in principle status. It means that NSS reports very low presence of male work force working in subsidiary status. The participation of male in all age groups as Census depicts, is lower than that of reported by NSS except 5-9 and 10-14 in rural India. Thus the incidence of marginalization is more explicitly shown by the Census than that of NSS. The difference in work force participation in marginal category as reported by the Census and the NSS is obvious due to definitional difference. But the difference in the main work force participation rate is a question of debate because both the sources have same definition of main worker. The NSS is supposed to report lower incidence of marginalization as it does not count the persons working less than 30 days in a financial year but a huge gap in main or principle category is a question of debate and discussion. NSS takes samples while the Census is the full coverage of all households. It might be sample error that is showing higher work force participation in principle status. It is very important to note here that NSS does not specify any quantitative number for classifying a worker as a principal worker rather states simply as working major time. It means that if a person enters labour market and seeking/available for work since last seven months (for instance) but gets work after three months. And at the time of survey, out of seven months he/she worked for four months, thus according to NSS that person is to be reported as principle worker. But on the other hand, the Census gives clear cut difference between the marginal and main worker as a person working more than 180 days or six months is considered as main worker while less than six months is marginal workers. Therefore, this minor difference in the definition of principal worker makes huge difference in the proportion of male workers as reported by the Census and NSS. Hence it can be inferred from the above analysis that male workers are increasing in part-time jobs or less than six months. Scarcity of full-time jobs especially in rural areas is compelling male workers to participate in part time capacity. Although, this trend is not good for economy like ours as the country has huge proportion of youth population who need full-time work. Other factor which contributes in lower proportion of principal worker is that male workers have greater mobility from one economic activity to other. In other words, they can easily switch over to other work according to need of time. But on the other hand, women have lower mobility due to limited job opportunities and social stigma associated with outdoor work.

Other factor of higher participation of male and female in principal status than that the main category of Census shows reporting differences. NSS takes sample while the Census covers all the households. There is always a probability of sample error. It can be minimized but difficult to remove.

2.2: Work Force Participation of Female in Main or Usual Principle Status (PS)

Age Group	Rural		Urban	
	Census	NSS	Census	NSS
5-9	0.79	0.10	0.78	0.10
10-14	2.10	1.80	1.42	0.60
15-19	10.30	10.40	5.40	6.10
20-24	21.04	18.30	11.99	14.00
25-29	26.62	22.80	17.61	19.90
30-34	29.57	29.30	19.96	21.10
35-39	32.13	34.60	22.10	23.60
40-49	32.72	35.90	21.96	22.40
50-59	29.13	31.80	18.56	17.40
60+	16.30	15.80	8.33	6.70
Total	16.69	17.60	11.88	12.50

Source: calculated from Census (2011) & NSS (68th) round.

However, in the case of women work force participation, both the sources of data behave differently. The census reports higher female WPR in rural areas in age groups from 5 to 34 years and 60 above age group. While NSS reports higher participation than the Census female aged from 35 to 59 years age. In all age group, there is minor difference of 0.91 percent between the Census and NSS. While there is a difference of about 6 percent, as The census reports higher participation of women in rural areas in main plus marginal category. Again the Census is showing more prominently the problem of child labour in rural as well as in urban areas. Thus the higher women work force participation as reported by the Census in main plus marginal category is entirely led by higher concentration of rural women in marginal work or in part-time jobs. Women's presence in marginal category is obviously high as they have to take care of household chores which restrict them from participating in full-time work. The second reason for higher presence of work force in marginal category as reported is due to counting of workers working less than 30 days. Hence the Census reports higher participation of dependent population of under 15 and above 60 years in comparison to NSS in both the principal and subsidiary status separately and taken together. Other factor which might be responsible for little bit higher participation of women in principal category of NSS is that the definition of principal worker as reported by NSS is liberal than that of Census.

It can be inferred from the table above that the proportion of marginal workers to total workers is high for women as reported by both the sources but at the same time, NSS reports very low incidence of marginalization among male work force while Census reports increasing marginalization among male workers too.

2.3: Work Force Participation of Rural Male & Female

Round	Male		Female	
	PS	SS	PS	SS
50th	53.8	1.5	23.4	9.4
55th	52.2	0.9	23.1	6.8
66th	53.7	1	20.2	5.9
68th	53.5	0.8	17.6	7.2

Source: NSS various rounds, PS= Principle Status, SS= Subsidiary Status.¹⁴

According to NSS, the proportion of subsidiary male work force has not increased while in the case of women it declined first and again showing rising trend. But it is interesting to note here that male participation in principle status has almost been static with marginal change. It means that jobs for male in rural India are being generated almost equal as the population is increasing. But on the other hand, women are not getting employed as their population is increasing in rural India. In 1993-94, rural female's WPR was 23.4 percent in principle status that became 17.6 percent in 2011-12. Hence women are withdrawing from both the principal and subsidiary status.

2.5: Women's Work in Rural India a Regional Picture

There is range of socio-economic implications of women's work on the gender relations. There is need to see the women's work in the context of economic development and its impact on the gender relations. Last two and half decades' economic growth has not been inclusive termed as '*jobless growth*¹⁵ as far as the question of women employment generation is concerned. Only 61st round of NSS (2004-05) showed reverse trend from jobless growth. Employment opportunities were created in those sectors where women's accessibility to jobs is restricted because of lack of professional education, skills and social norms. The main resort of women is agriculture where their presence is 77.32 percent (Census, 2011) in rural India. However, agriculture grew at snail's pace since last two decades and increasing mechanization in farming practices further restricts the job opportunities and hence

¹⁴ 61st NSS round (2004-05) has not been included in the above analysis due to sudden rise in the WPR.

¹⁵ The term has been coined by the economists to imply a situation where the Gross Domestic Product (GDP) is growing without generating new jobs for increasing working aged population.

withdrawal of workforce from the farming sector is inevitable to happen as 8.5 million farmers have withdrawn from cultivation as source of livelihood in a decade (Census, 2001,2011). Women had been unable to shift from agriculture sector characterized by low wage and intermittent employment to non-farm sector. In the backdrop of neo-liberal policies, the phenomenon of participation of work shifted away from the houses which indirectly discouraged women’s participation in economically meaningful activities as social stigma is associated with outdoor work of women especially in rural India. An increase in the number of women workers was led by part time or marginal work. The decline in the availability of full time jobs for women in rural India clearly shows that the rural economic transformation has been androcentric¹⁶ in nature. It is evident from the fact that 5.3 million jobs were generated in regular and salaried category out of which 5.1 million jobs have been picked up by male only (NSS).

2.4: Work Force Participation of Rural India: Temporal & Spatial Trends (PS+SS)

	Male			Female		
	2011-12	1999-00	1993-94	2011-12	1999-00	1993-94
ANDHRA PRADESH	80.8	87.5	89.6	57.8	66.1	72.4
ARUNACHAL	72.6	66.2	77.8	40.9	48.7	63.4
ASSAM	79.6	81.4	80.9	16.9	23.2	23.9
BIHAR	76.3	85	85	8.2	28.6	26.9
GUJARAT	84.6	87.9	88	38.4	60	57.9
HARYANA	73.8	77.2	78.9	21.8	31.9	44
HIMACHAL	75.5	81	87.9	66.7	67.1	72.9
JAMMU & KASHMIR	75.2	82.2	85.4	35.5	47.3	59.7
KERALA	74.9	76.8	78.1	28.6	31.5	32.3
MADHYA PRADESH	82.8	86.3	89.2	35.8	61.3	63
MAHARASHTRA	78.7	82.3	84.9	51.5	63.6	70.5
MANIPUR	74.9	74	74.2	37.4	35.9	48
MIZORAM	86.3	86.8	81.5	58.3	64.2	47.9
NAGALAND	69.3	74.9	66.8	39.9	66.5	34.5
PUNJAB	77.7	80.9	83.2	31.3	41.1	32.4
RAJASTHAN	77.2	84.4	87.4	50.2	59.6	67.2
SIKKIM	79.2	77.1	84.5	67.4	37.1	28.1
UTTAR PRADESH	80.7	83.5	87.6	27.3	33.1	34.7
UTTARAKHAND	69.2	NA	NA	42.9	NA	NA
Chhattisgarh	82.8	NA	NA	61.1	NA	NA
JHARKHAND	83.9	NA	NA	29.4	NA	NA
KARNATAKA	81.6	87.7	88.6	38	55.3	61.3
MEGHALAYA	80.8	89.3	74.2	61.9	69.5	73.5
ODISHA	83.6	83.7	85.2	34	43.5	45.7

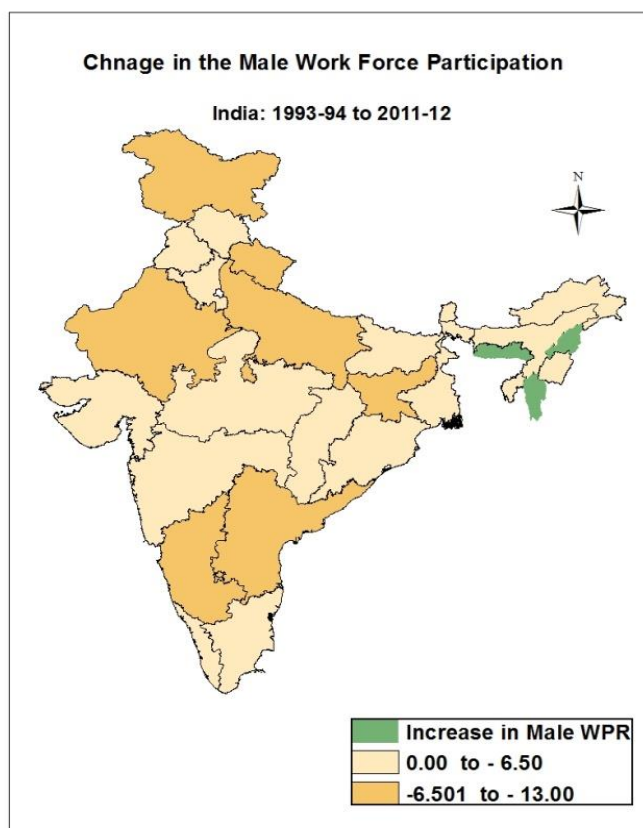
¹⁶ Development that is led by male only

TAMIL NADU	79.8	83.4	85.3	49.4	56.8	64.7
TRIPURA	80	79	81.4	30.5	10.7	19
WEST BENGAL	82.9	84	88.1	25.8	23.7	28.5
India	80	84.1	86.4	35.2	45.2	48.6

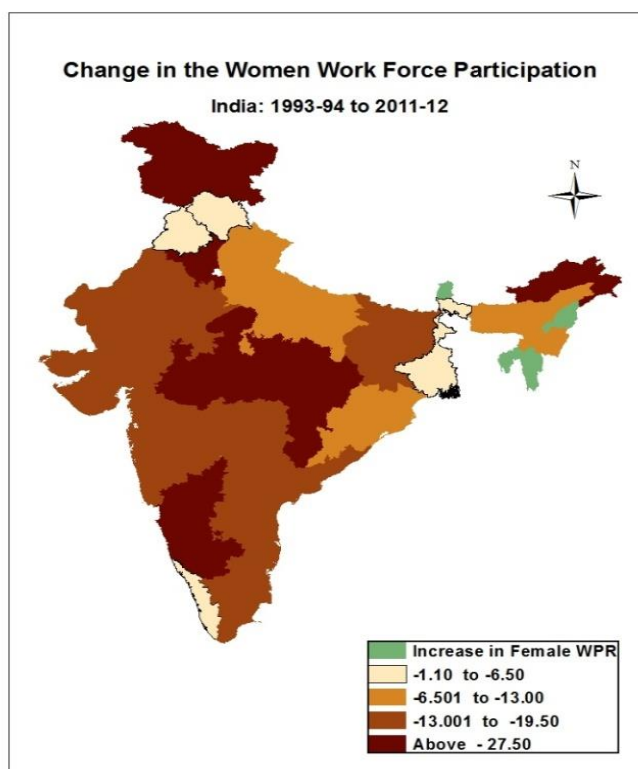
Source: calculated from various rounds of NSS.

The above table shows the work force participation rate of rural male and female in primary and subsidiary status taken together (NSS). At all India level, the WPR of both male and female is declining but the decline is more rapid in the case of women. The decline in the WPR of male is totally led by withdrawal of school going children or fewer than 24 age group boys while for women decline is in all age groups. However, the decline of women work force participation has been well debated in literature. There are four major hypotheses that explain the decline in women work force participation. Fast increasing attendants for education in schools and colleges (Planning Commission of India), rising family income (Mammen and Paxson, 2000), inability of data sources to report women work (Seth et al, 2011) and declining employment opportunities for women (Chowdhury, 2011).

2.1: Change in Rural Male Work Force Participation: 1993-94 to 2011-12

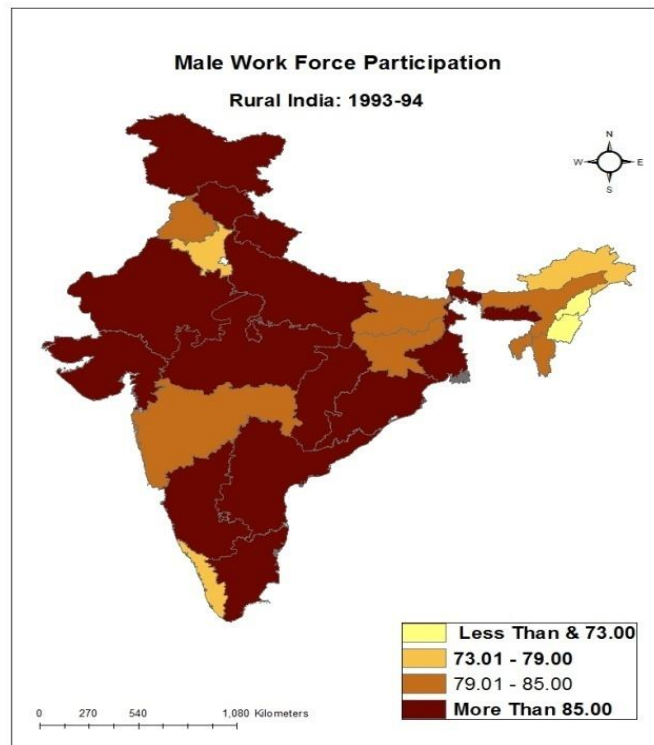


2.2: Change in Rural Women Work Force Participation: 1993-94 to 2011-12

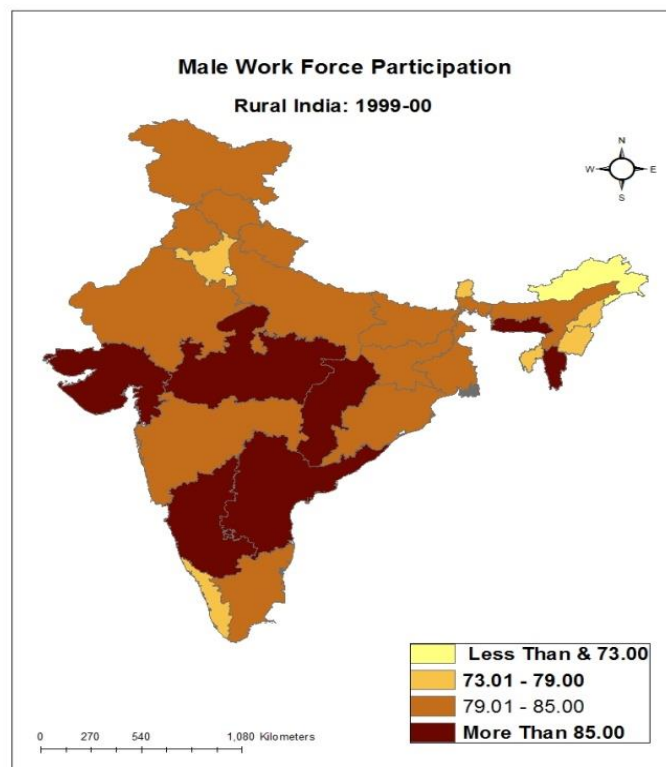


The above maps show the decline in male and female work force participation over a period of 18 years in rural India. All the states except some north-eastern states have recorded a decline in work force participation. Mizoram, Nagaland, Tripura and Sikkim have recorded an increase in women WPR while Mizoram, Meghalaya and Nagaland reported a rise in male WPR. However, the decline is more prominent in the case of female as 6.4 percent for male and 13.4 percent for female. The highest decline has taken place in the states like Madhya Pradesh, Karnataka, Arunachal Pradesh, Jammu & Kashmir, Haryana and Gujarat. It is to be understood that all the north eastern states are not uniform in terms of socio-economic and cultural setting as these are understood. Arunachal Pradesh has recorded one of the highest declines in women WPR. But the lowest decline in male WPR has been recorded in the central and western states like Madhya Pradesh, Gujarat, Maharashtra, Chhattisgarh and Orissa. However, Kerala and Tamil Nadu also have recorded low decline. But as far as the question of increase in women WPR is concerned, Sikkim has recorded a tremendous rise of 39.3 percent. And the symptoms of agriculture feminization have been traced (Chapter 4).

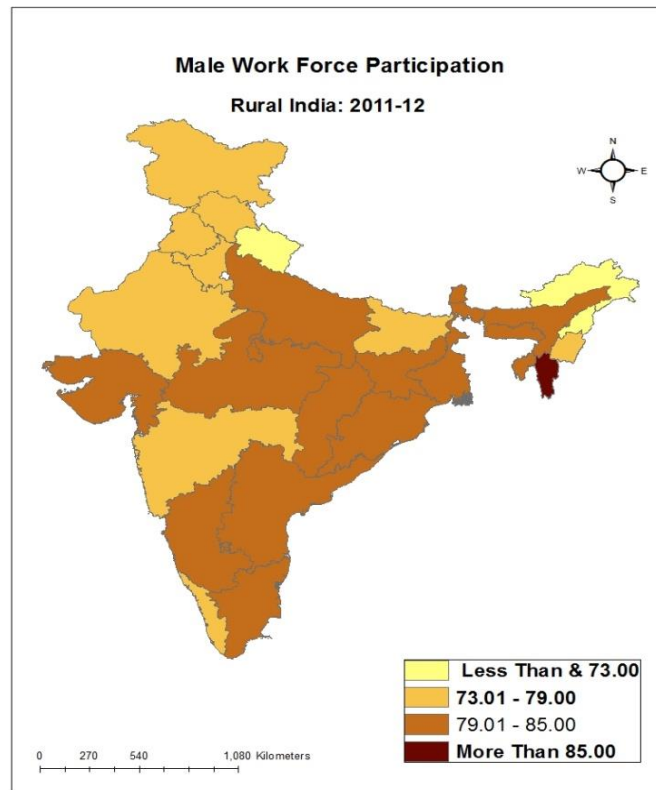
2.3: Patterns of Rural Male Work Force Participation: 1993-94



2.4: Patterns of Rural Male Work Force Participation: 1999-00



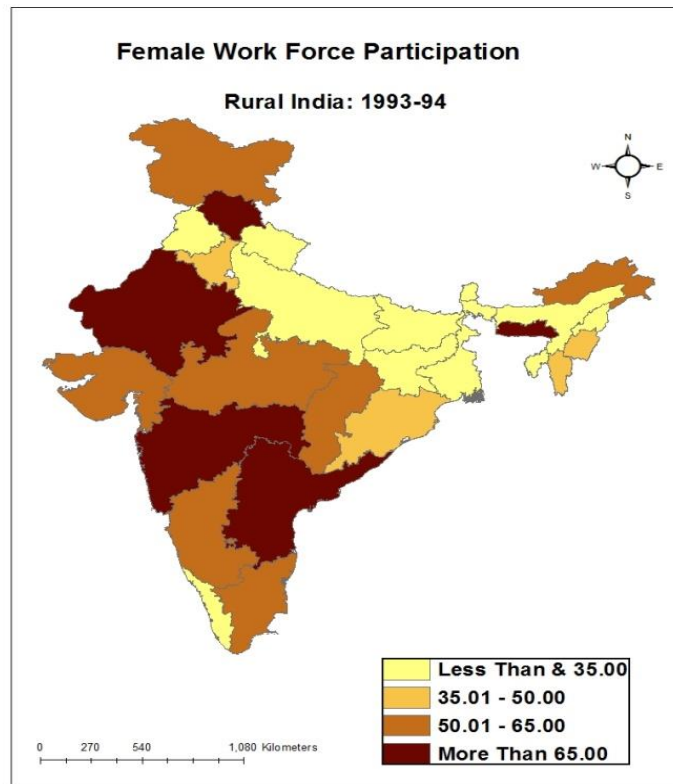
2.5: Patterns of Rural Male Work Force Participation: 2011-12



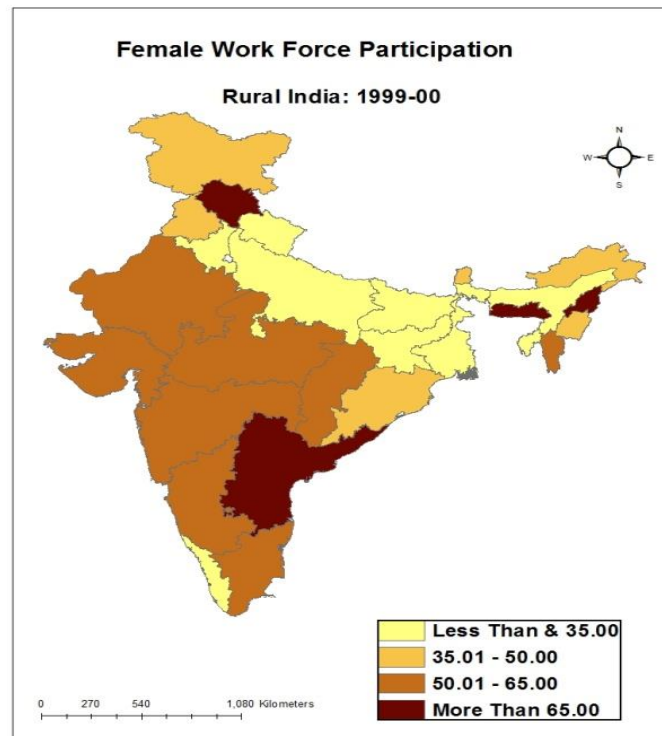
The work force participation rate in working age group is declining for both the male and female. Since 1993-94, an absolute decline of 6.4 percent has been take place while it has been declined from 48.6 percent in1993-94 to 35.2 percent in 2011-12 for rural female, an absolute decline of 13.4 percent (NSS). Major decline in male work force participation has taken place from north Indian states.

As far as the question of women work force participation in principal category is concerned then there is no much difference between the Census and the NSS in rural areas. An abysmal participation of 16.69 percent (Census) and 17.60 percent (NSS) in full-time work poses a question on the development process. However, women's WPR in principal status is declining at all India level. So it is very important to see the level of marginalization in different age group from both the sources.

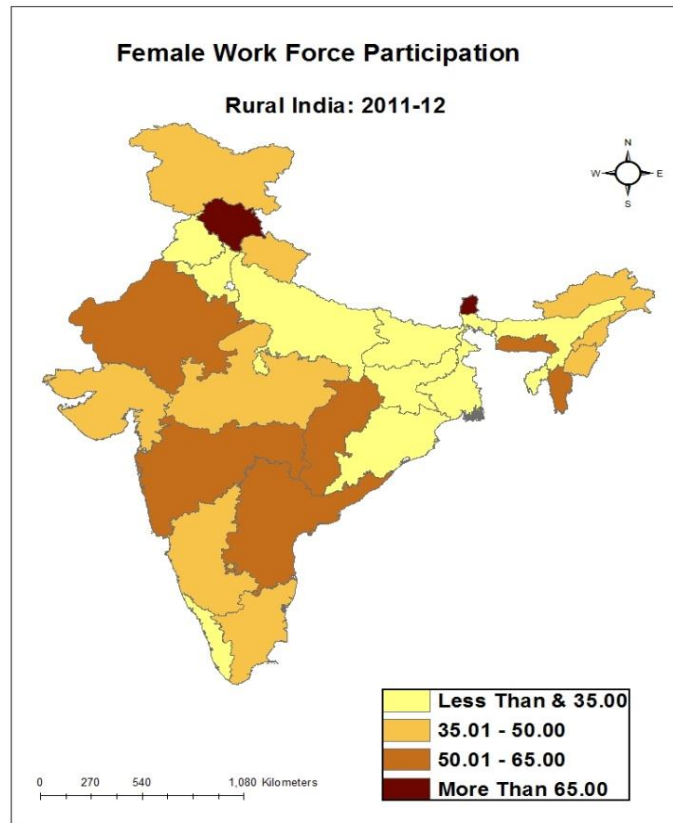
2.6: Patterns in Rural Female Work Force participation: 1993-94



2.7: Patterns in Rural Female Work Force participation: 1999-00



2.8: Patterns in Rural Female Work Force participation: 2011-12



In the case of female, there is huge interstate disparity as far as the question of work force participation rate is concerned while there is very narrow regional disparity for male work force participation rate. Northern and eastern states except Himachal Pradesh always have low WPR as compare to western states and southern states. North-eastern states except Meghalaya and Tripura have low WPR. Indo-Gangetic states, they are the mainly agricultural states having very low WPR even lower than that of national average.

It is of concern to inform here that the gap between the male and female work force participation in rural areas is widening. In 1993-94, the gender gap in WPR was 35.8 percent that became 38.9 percent in 1999-00 and further rose to 44.8 percent in 2011-12.

2.6: Male & Female Work Force Participation from the Census

The Census portrays entirely different scenario in WPR of rural population. NSS depicts continuous declining women WPR since 1993-94 while on the other hand, the Census shows that WPR of rural women increased in the last decade of 20th century (1991-2001) and then recorded a decline in the first decade of 21st century. It is very important to understand here

that the last decade of 20th century did not record any major increase in jobs for women (NSS). However, the Census reports an increase in the WPR of rural women in the same span of time. But on the other hand male WPR both the sources are showing declining trend since 1991.

2.5: Work Force Participation of Rural India: Temporal & Spatial Trends (Census), (Main + Marginal)

	Male	Male	Male	Female	Female	Female
State	2011	2001	1991	2011	2001	1991
ANDHRA PRADESH	79.03	84.53	87.12	58.91	60.31	61.23
BIHAR	76.97	81.43	82.05	32.56	33.00	26.31
GUJARAT	82.54	84.12	84.96	44.62	56.03	53.10
HARYANA	72.64	79.24	79.42	29.09	51.27	20.15
HIMACHAL PRADESH	78.52	78.50	78.40	60.67	64.09	54.72
JAMMU & KASHMIR	71.90	75.87	NA	30.93	39.24	NA
KERALA	71.32	69.24	69.65	25.94	21.33	23.76
MADHYA PRADESH	82.33	85.31	86.30	58.97	64.06	61.03
MAHARASHTRA	78.79	80.99	83.18	57.50	63.60	69.20
MANIPUR	74.34	72.11	72.42	59.69	59.92	66.28
MIZORAM	83.22	89.27	86.60	64.34	82.11	76.61
NAGALAND	80.52	70.72	72.08	74.50	63.64	67.72
PUNJAB	74.70	79.42	83.12	18.44	33.04	6.35
RAJASTHAN	80.04	83.70	83.74	63.57	63.14	52.20
SIKKIM	80.86	83.28	81.50	60.43	59.82	52.26
UTTAR PRADESH	74.07	79.75	83.46	27.50	30.98	22.81
UTTARAKHAND	72.89	73.75	NA	46.34	51.16	NA
ARUNACHAL PRADESH	74.49	82.15	86.16	60.83	67.73	67.82
ASSAM	78.97	77.60	80.06	34.89	34.50	38.33
CHHATTISGARH	83.20	85.07	NA	67.16	70.71	NA
JHARKHAND	79.71	82.04	NA	54.04	50.84	NA
KARNATAKA	81.42	84.36	85.30	51.88	56.38	53.91
MEGHALAYA	78.43	83.24	86.41	57.44	64.61	66.75
ODISHA	79.56	79.40	79.81	40.76	38.95	10.30
TAMIL NADU	79.62	82.00	84.43	53.50	55.87	54.05
TRIPURA	78.12	76.56	77.17	36.89	34.43	23.47
WEST BENGAL	79.58	82.34	82.91	26.71	31.03	20.48
India	78.10	81.23	83.16	43.10	46.34	40.80

Source: calculated from Primary Census Abstract (PCA).

In the table no 2.6, the states have been grouped into three categories based on the level of decline in the male & work force participation in rural areas. It is clearly apparent from the table below that the number of states is more in the category recorded more than 6 percent decline in women work force participation.

2.6: Decline in the Level of Work Force Participation of Male & Female Rural India: 2001-2011

Level of Decline in Male & Female WPR 2001-2011 (15-59) age group		
	Male, 2001-2011	Female, 2001-2011
Category	States	States
0-3 %	Uttaranchal, Sikkim, West Bengal Jharkhand, Chhattisgarh, Gujarat, Maharashtra and Tamil Nadu	Tamil Nadu, Andhra Pradesh, Bihar and Manipur
3.00-6.00	Karnataka, Andhra Pradesh, Madhya Pradesh, Meghalaya Bihar, Rajasthan, Punjab and Jammu & Kashmir Haryana, Uttar Pradesh,	Himachal Pradesh, Uttar Pradesh, West Bengal, Chhattisgarh and Karnataka
Above 6.00	Mizoram and Arunachal Pradesh.	Madhya Pradesh , Maharashtra, Gujarat, Meghalaya, Mizoram, Arunachal Pradesh, Rajasthan, Haryana, Uttaranchal and J & K

The gender gap in work force participation in rural India is widening. The gap between male female WPR was 37.8 percent in 1993-94, became 38.9 percent in 1999-00 and increased to 44.8 percent in 2011-12 in PS+SS taken together (NSS). But according to the Census the gap is declining. It is due to increasing the number of marginal workers in total workers. Increasing participation of women population fewer than 15 and above 60 in part-time jobs is reducing the gap between male and female participation. The interstate gap is very marginal in male WPR because all over the country males are considered as main bread winners. This tendency does not allow falling male WPR below a certain level. The influence of socio-economic and cultural factors on male WPR is not as significant as in the case of women.

2.7: The States that Recorded an Increase in the Level of Work Force Participation 2001-2011

Male	Female
Kerala (2.65%), Manipur (2.32%), Nagaland (10.49%), Assam (1.44%) and Tripura (2.02%)	Nagaland (11 %), Sikkim (0.75 %), Jharkhand (2.89 %), Orissa(1.98%), Punjab (31.8 %), Kerala (5.39%) and Tripura (2.28%)

Source: calculated from Census, 2001-2011

It is quite important here to see the states which have recorded an increase in the level of work force participation over a decade as against the trend. In male category, states like Kerala, Manipur, Nagaland, Assam and Tripura have recorded an increase in the work force participation rate. While on the other hand, states like Nagaland, Sikkim, Jharkhand, Orissa, Punjab, Kerala and Tripura have recorded an increase in female work force participation rate. Therefore, it is meant that jobs for male and female have been generated higher than that of population growth rate. However, majority of states have seen negative growth in the level of male as well as female WPR.

Both the sources of data e.g. the Census and NSS are showing different pattern in male & female work force participation rate. NSS shows that male and female WPR has declined since 1993-94 to 2011-12 but female withdrawal is more significant as compare to male. But according to the Census, female WPR had first increased from 1991 to 2001 but declined from 2001 to 2011. However, male work force participation has declined with same intensity as reported by NSS. Kapsos et al, (2014, p.) states "Despite very rapid economic growth in India in recent years, we're observing declining female labour force participation rates across all age groups, across all education levels, and in both urban and rural areas."

Therefore, it can be concluded from the above discussion that there are different factors working in different regions with varying intensity causing withdrawal of women from the work force and increasing the participation of women in economic activities in other regions.

2.7: Marginal or Subsidiary Workers to total Workers (PS+SS): Rural India 2011-12

Subsidiary workers are those persons who work more than 30 days in a financial year (NSS). But according to Census, all the persons working less than 180 days or 6 months are marginal workers. Hence the persons working less than 30 days are not counted by NSS while they are

included as marginal worker in work force. Therefore, the incidence of marginalization of work force is inevitable to be higher in Census as compare to NSS.

2.8: Share of Subsidiary Workers to total Workers (Age Wise)

Age Group	NSS	Census	NSS	Census
	Male	Male	Female	Female
5-9	0	54.9	0	59.8
10-14	19.2	56.0	35.7	65.7
15-19	9.9	39.4	33.3	55.1
20-24	3.8	27.7	34.2	48.1
25-29	1.1	21.7	36.1	44.6
30-34	0.1	19.0	31.2	43.2
35-39	0.2	17.6	27.9	41.4
40-49	0.2	16.1	25.7	40.5
50-59	0.5	15.7	24.0	40.9
60+	1.7	20.3	25.8	42.6
Total	1.5	21.5	29.0	44.4

Source: calculated from NSS (68th round) and Census (2011).

The above table shows the share of marginal or subsidiary workers to total workers in rural areas as reported by the Census and NSS. The percent of marginal workers to total workers in all age group is substantially high as reported by the Census for male workers. The difference between the Census and NSS is very high, 1.5 % (NSS) while 21.5 % percent (Census). In age group from 5 to 24, the proportion of marginal workers is very high among the rural male while NSS recorded highest marginalization in 10-14 age group that is 19.2 percent but overall the level of marginalization shown by NSS for rural male is insignificant, only 1.5 percent.

But on other hand, in the case of female work force, subsidiary workers to total workers is undoubtedly high as 29 percent (NSS) and 44.4 percent Census in all age group. It is important to note that the level of marginalization is comparatively higher in the early age group (5-24). However, as the age increases the level of marginal workers tend to decline. In other words, out of total women currently working in rural areas, about 45 percent work in marginal category. It means they do not have full-time employment. Definitional difference in the status of worker creates gap in the level of marginalization as reported by the Census and NSS.

The reason behind the high level of marginalization in the early age group is that children or school going students help their parents in self-employed work. And especially in rice growing regions, labourers of less than 20 years of age is preferred especially in

transplantation work. A worker has to bend to transplant a rice sapling and due to flexibility of back and low wage, the under 20 years of labourers are preferred. They do not work at regular basis. The season of rice transplantation is less than one month hence these workers cannot be captured by NSS. And again, the wage rate of young girls is even lower than their counterpart therefore; young girls are the most preferred in the above mentioned work. According to 68th round NSS, 54.5 percent male and 59.3 percent female work force are working in self-employed category. Agriculture is the major resource for self-employed workers. The children are generally employed in self-employed work at home. They help and learn from their parents. The domestic production is the major source of child labour in India.

2.8: Spatial & Regional Trend in the Level of Marginalization in Rural India

Here it becomes very important to see the regional and temporal trend in level of marginal workers to total workers because there are different factors working differently in different states. The states are passing through different stage of development and have diversity in social fabric.

2.9: Proportion of Marginal Workers to total Workers: Rural India

	1991		2001		2011	
State	Male	Female	male	Female	Male	Female
INDIA	1.11	30.15	13.85	44.95	20.80	43.78
JAMMU & KASHMIR	NA	NA	18.76	67.44	33.37	75.53
HIMACHAL PRADESH	2.62	44.97	20.55	51.27	30.05	59.19
PUNJAB	0.19	50.46	8.84	38.15	11.16	41.31
UTTARANCHAL			20.84	40.32	22.54	40.83
HARYANA	0.53	48.90	14.59	52.38	15.97	52.32
RAJASTHAN	1.33	54.24	11.55	48.61	18.30	50.92
UTTAR PRADESH	0.60	40.67	16.53	63.51	26.68	57.42
BIHAR	0.56	33.55	13.93	52.70	32.59	57.91
SIKKIM	0.56	5.88	9.28	30.36	17.83	41.00
ARUNACHAL PRADESH	0.41	5.10	8.48	20.64	14.02	23.84
NAGALAND	0.37	1.74	12.02	20.31	16.75	24.83
MANIPUR	2.04	13.80	18.20	45.47	15.80	35.21
MIZORAM	4.28	14.16	8.53	26.50	6.00	21.51
TRIPURA	1.14	28.48	11.15	51.43	16.67	59.72
MEGHALAYA	0.84	12.54	13.94	32.53	17.42	31.68
ASSAM	2.12	42.92	15.03	53.94	18.05	53.30
WEST BENGAL	1.48	32.93	14.37	55.82	22.57	57.63
JHARKHAND			24.67	62.98	44.09	68.61
ORISSA	1.11	33.47	19.33	66.27	28.48	69.13
CHHATTISGARH			14.43	44.41	24.44	49.59
MADHYA PRADESH	1.08	30.83	13.08	48.12	21.27	46.88

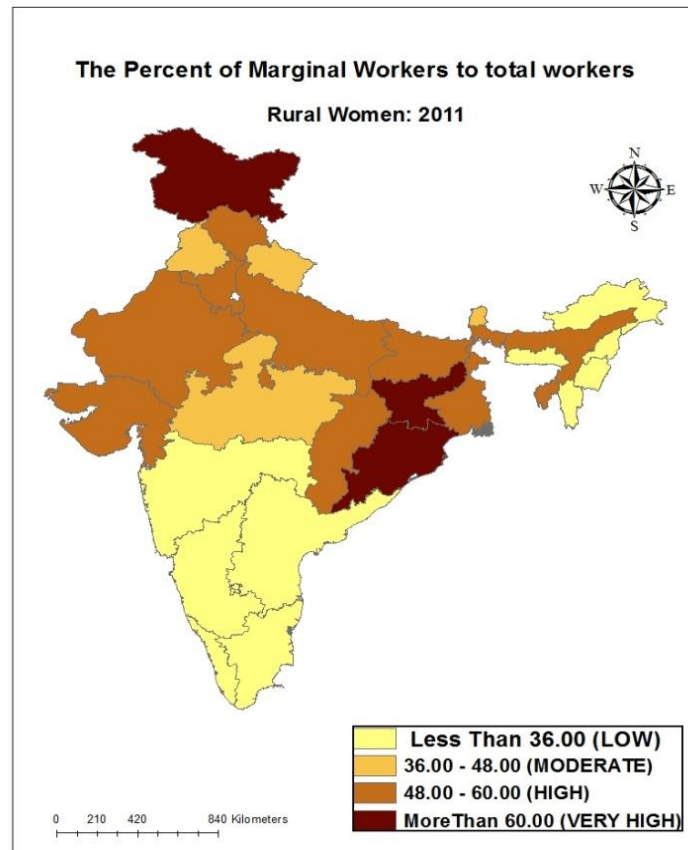
GUJARAT	0.69	50.19	8.44	50.35	9.58	48.92
MAHARASHTRA	1.65	21.04	11.06	29.34	9.21	18.88
ANDHRA PRADESH	0.52	13.14	10.64	27.95	11.28	23.63
KARNATAKA	0.87	24.87	9.41	37.14	11.23	29.40
KERALA	6.16	20.85	18.37	31.82	16.86	35.15
TAMIL NADU	0.56	16.95	12.53	26.88	14.63	24.13

Source: Calculated from Primary Census Abstract (PCA), Table 1. (15-59)

It is very fundamental to provide full time and decent jobs to the rural women in order to raise family income and consumption. Increasing the ratio of part time jobs is not a good trend as it can be observed from the table that the percentage of women marginal workers to total women workers in rural India was 30.15 percent in 1991 and after recording a tremendous growth it became 44.95 percent in 2001. While recording a marginal decline it is 43.78 percent in 2011. But at the same time, the percentage of male marginal workers was 1.11 percent in 1991, 13.85 percent in 2001 and became 20.80 percent in 2011. The rising trend of part-time jobs for both the sexes is not desirable as the country's GDP is growing at adequate growth rate. The condition is very miserable in the case of women as near about half of the working women do not have full time employment. Underutilization of work force leads to low labour productivity thus declining return from the labour force. However, there are acute regional differences as far as the question of part-time job is concerned. In 2011, there are 11 states which have more than 50 percent women who are working in marginal capacity e.g. Jammu & Kashmir (75.53%), Orissa (69.9%), Jharkhand (68.6%), Tripura (59.7%), Himachal Pradesh (59.2%), Bihar (57.9%), West Bengal (57.6%), Uttar Pradesh (57.4%), Assam (53.3%), Haryana (52.3%) and Rajasthan (50.9%). These all states are agriculturally dependent and high percentage of households living below poverty line except Haryana. But relatively economically better off states like Maharashtra, Andhra Pradesh and Tamil Nadu have low percentage of women engaged in part-time work. Gender relations also play a crucial role in women's participation in economic activities. There might be three reasons for lower participation of women in full time work; first women's responsibility is to take care of children and elderly at home thus household work does not allow them to participate in full capacity. Hence they voluntarily withdraw themselves from full-time job. Second, high concentration of women in farming sector because agriculture is major source of women's marginal and unpaid work and third unavailability of proper full-time jobs compels women to work part-time to augment family income in order to maintain minimum consumption level. But at the same time, according to the Census 2011, about 37 percent

women working in marginal capacity in rural India in age group of 15 and above are seeking full time employment.

2.9: Women Rural Marginal Workers to total Workers: 2011

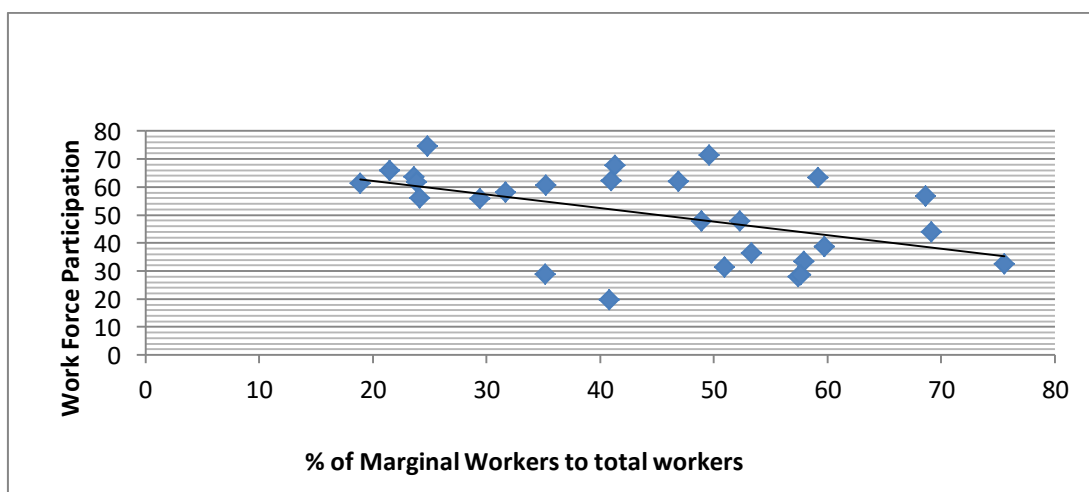


It is interesting to note over here that the states which have very high percentage of women working in marginal capacity also recorded high level of women unemployment. Marginalization is positively correlated with unemployment means higher the women marginalization and higher the unemployment. However, the correlation is moderate (r value 0.407) when it is seen in all state but the correlation becomes very strong for eight north-eastern states ($r= 0.892$) when run separately. It can be inferred from the above correlation that women are seeking employment in rural areas but not getting regular work and some get jobs in marginal capacity. However, women generally are engaged in non-paid work in self-employed category as part time workers helping their spouses in agriculture and household industries. All the states which have reported high percentage of women working in marginal capacity are north Indian states where the gender gap is highest in every walk of life. The patriarchal norms are strong enough to restrict women's participation in outdoor work. Thus it can be safely concluded that it is the unavailability of jobs along with strong patriarchal

norms that compels women to work in marginal capacity. This tendency has increased rapidly since 1991 onwards. Hence, it can be inferred from the figure below that a good number of women working in marginal capacity are willing to have full-time job. Hence it is a good sign that women are willing to work and the acceptability of women as worker is increasing. But unavailability of full-time employment compels women to linger in part-time job. It should be noted over here that the jobs have been generated in those sectors where women have low accessibility.

The notion that the states having low work force participation, the women may be better employed in those states is not proved. The relation between the level of marginalization of work force and the work force participation rate are negatively correlated with r value -0.50 for all states. But if we run correlation separately for north-eastern states it is -0.892 strongly negatively correlated. By and large, north Indian states have low women work force participation but high percentage of marginal women workers to total workers. Incidence of high marginalization especially in those states reporting low women work force participation clearly depicts that the women are willing to work but due to unavailability of proper jobs they are still seeking. It is interesting to note here that the incidence of marginalization is low in south Indian states while unemployment rate is high. The women in southern states of Kerala, Karnataka, Tamil Nadu and Andhra Pradesh and western states of Maharashtra are not willing to work in marginal or part-time work rather they are seeking full-time jobs. Hence, the unemployment rate is higher compare to northern states.

2.3: Relation Between the Degree of Marginalization and Work Force Participation of Rural Women: 2011



The work force participation and the percent of marginal workers to total workers are negatively correlated with r value -0.498. It shows that the percent of marginal workers to total workers is lower in those states where the work force participation rate is higher and higher in those states where the WPR is low. In other words, women want to work in full capacity in those states where the WPR is already low but due to unsuitability of jobs they are unable to find out new full-time job. The job opportunities for women are shrinking in those sector where they are employed predominantly e.g. agriculture but without a commensurate increase in other employment opportunities. Hence women prefer to work nearby in part-time job. Thus majority of women have withdrawn from work force due to scarcity of suitable jobs for women.

2.10: Multivariate Regression for Level of the Marginalization of Rural Women

Level of Marginalization	Coef.	Std. Err.	t	P>t	[95% Conf. Interval	
Rural Female Literacy	-0.6606	0.3177	-2.08	0.05	-1.321	3E-05
Proportion of Marginal Landholdings	0.2925	0.1169	2.5	0.021	0.049	0.536
Rural Poverty	-0.1204	0.3124	-0.39	0.704	-0.770	0.529
Development Index	0.4396	29.6078	0.01	0.988	-61.133	62.012
constant	85.8225	23.3994	3.67	0.001	37.161	134.484

R-squared= 0.4604, Adjusted R-squared = 0.3319. (Dependent V is Marginalization of Female Work force rural India).

The table shows the result of regression model where the dependent variable is the level of women work force marginalization in rural India and rural female literacy, percent of marginal landholding, rural poverty and “Development Index¹⁷ are the independent variables. The greater p value of rural poverty and development index show that there is no effect on the dependent variable of these variables. But on the other hand, the rural literacy is negatively correlated and it is significant at 90% level and the percent of marginal landholdings is positively correlated with 95% significant level. Coefficient shows that with 1 percent rise in the level of female literacy leads to 0.66 percent decline in the level of women marginalization and 1 percent rise in marginal landholdings increase 0.29 % level of

¹⁷ The development Index has been made by taking composite value of per capita income (rural), percentage of rural work force employed in non-farm activities and the ratio of total employed persons to population.

marginalization. Hence rural literacy is the important factor in declining marginalization. As the level of education amongst the women rises, they tend to withdraw from the part-time work especially in agriculture and domestic industries and they try to find full-time job in formal sector. However, marginal landholding does provide full-time work and small piece of land is not able to sustain family until other source livelihood is sought. Therefore, women have to take part in part-time work in farming operations in order to augment family income. Higher proportion of marginal landholdings increases the probability of women working in marginal capacity because they are the main handler of small piece of land.

There has been recorded decline in the work force participation of both the male and female in rural areas. Women should not be seen in isolation rather there is broader trend in declining WPR in rural areas. As far as the issue of regional pattern in decreasing WPR is concerned, there is no pattern in declining of male work force participation. Decline has been recorded almost in all states while in the case of women withdrawal is more pronounced in the south Indian states. It is of course, new trend as southern and western states have high women WPR except Kerala. This is due to mismatch between the work force withdraw from agriculture and employed in non-agriculture work in countryside. But the decline in the case of women is more sharpen then that of male. It is very important to understand that states where agriculture is recording growth and still accommodating new work force, women WPR is not declining for instance Maharashtra. It is, of course true that the discrepancies have been found out in the conceptual framework of work, principal and subsidiary worker between the Census and NSS. The definition of worker is more liberal as adopted by the Census as against the NSS which does not count parson working less than 30 days. Thus the incidence of marginalization tends to be high in Census. But male WPR in principal status is quite higher as compare to the Census because NSS does not take into account a year rather it puts a worker into principal and subsidiary status based on the months since he/she is seeking/available for work. However, the incidence of marginalization among the women work force is more pronounced in the northern and eastern states which are mainly in agrarian states. Hence, literacy rate and work force participation rate have been found negatively correlated with the incident of marginalization. While on the other hand, prevalence of marginal landholdings as positively correlated.

Thus it has been proved that WPR is declining with increasing the proportion of part-time work. Now, it is important to analyse the changing work force composition in women work force. The notion has been put forward that women are withdrawing from low wage or low

quality work. Hence, it is expected that the women who are currently working would be better employed. Therefore next chapter seeks to analyse the quality of women work by calculating employment diversification Index and its impact on their work and different factors influencing the quality of women work in rural areas.

Chapter: 3

The Employment Diversification and its Impact on Women's Work

3.1: Introduction

Gender-segregation of work force is the feature of India labour market. It has been seen that women are confined at the lower ladder of work force. It has been already stated that about 75 percent rural women work force is still engaged in farming sector (NSS 68th round) where they are employed as unpaid own account worker. Undoubtedly, their share in agriculture is declining albeit with slow pace. It is expected as the economy is growing and has grown since the economic reforms was done in 1991, women would get upper mobility as far as the condition and quality and quantity of work is concerned in rural and urban areas as well. It has been observed that the economic development has improved the educational attainment of women but could not provide better jobs (Abraham, 2013; Sharma, 1984). It cannot be denied that women's occupational choice is constrained by the social patriarchal norms. But in spite of all socio-cultural restrictions, women are seeking jobs. It is evident from the fact that the incident of unemployment is mounting since 1991 onwards especially among women (Primary Census Abstract).

Liberal feminist, Marxian and socialist feminist all emphasises that in the process of development women get marginalized (Baruah, A, 2016). All the supporters of U-shaped pattern of women of labour force participation with economic development or industrialization state about the downward section of U showing marginalization while upward moving depicts the modernization. Easter Boserup (1970) in her seminal work "The role of Women in Economic Development" emphasises upon the declining role of women in the production processes as the economy modernizes because the production shifts away from home which discourages women's participation due to socio-cultural norms. But on the other hand Standing, G (1989) challenged the U-shaped feminization and underscored the feminization of work force as the economy modernizes. However, since last two decades, the women labour force participation rate is continuously declining except during 1999-00 to 2004-05. Women have also withdrawn from the farming sector with varying degree in different states. Although, it is supposed to happen with high rate but withdrawal is slow due to limited opportunities for women in non-farm sector. Underdevelopment of non-farm sector in the rural areas is one of the factors that could not provide sufficient jobs for rural women

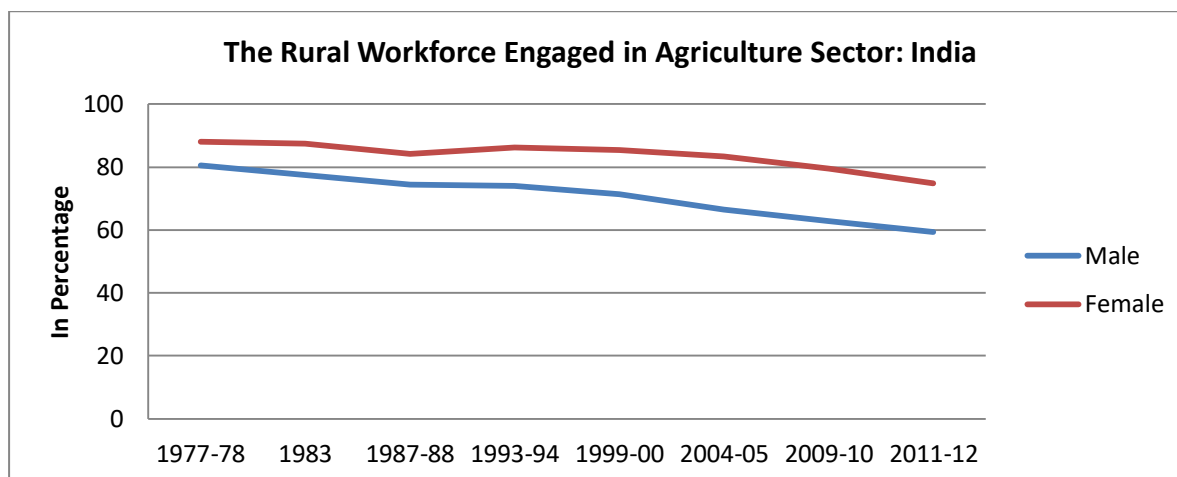
so that they could engage in these activities after withdrawing from the farming sector. It is very important to understand here that outmigration of women for employment is very limited. By and large, male members of family tend to migrate to urban areas in order to access better employment opportunities as there are very few non-farm jobs in rural areas.

Therefore, this chapter seeks to analyse the impact of livelihood diversification on work force participation of male and female work force. It is important to look into the association between employment diversification that is considered a healthy indicator of employment, economic development and its impact on WPR in rural as well as in urban areas. Increasing employment diversification is good for inclusive development but at the same time declining work force participation especially of women is topic of debate. Therefore it is to be seen what the impact of women employment diversification is on gender relation and women's place in the society?

3.2: Work Force in Agriculture and its Withdrawal

As the pressure is increasing on the limited land resources to provide employment opportunities for rural work force then it becomes very important that agriculture must have a substantial growth rate in order to accommodate more workers. But it has been seen that the farm sector could not grow at required growth rate. Therefore, the withdrawal of work force from agriculture is inevitable and essential too. Low crop diversification is also responsible for declining employment in the farm because in monoculture the machines are used very intensively thus replacing manual labour. Crops like vegetables, fruits (horticulture) and gardening offer more manual jobs especially for women.

3.1: Change in the Male & Female Agriculture Participation: 1977-78 to 2011-12



Source: from various rounds of NSS.

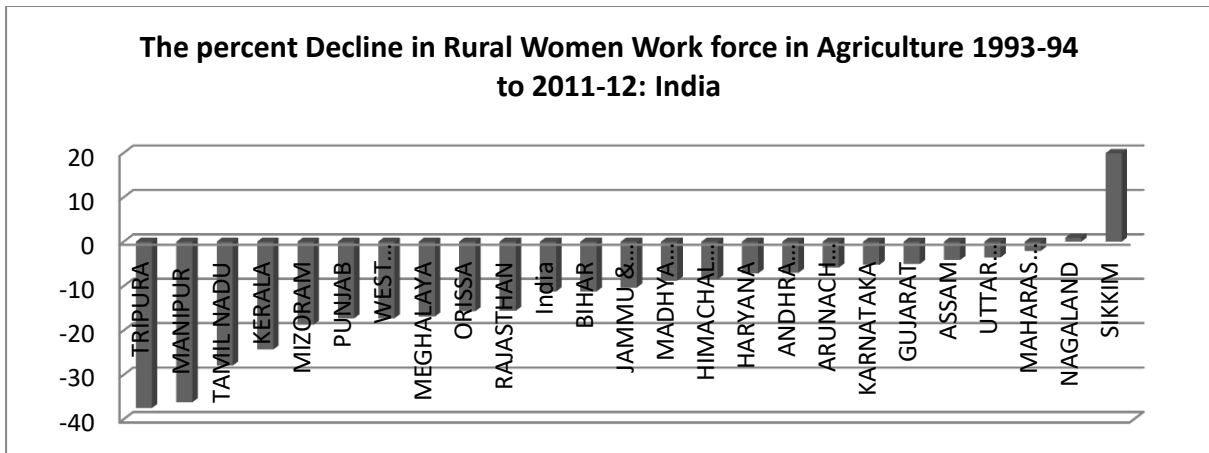
At macro level it can be seen that the percentage of rural work force engaged in agriculture is declining for both the sexes. The women's rural work force engaged in farming activities has declined from 88.1 percent in 1977-78 to 74.9 percent in 2011-12. While in the case of male it has reduced from 80.6 percent to 59.4 percent in 2011-12. In 1977-78 the gap between male and female work force engaged in farming sector was narrow but it widened with the passage of time. In other words, male work force has withdrawn faster than that of female from the farming sector that makes women's presence more dominant in farming sector. However, it is expected to decline faster as alternative jobs are available for women in non-farm sector because it provides better jobs and wages as compare to farm sector.

“There was a sharp decline in female workforce participation rate from 41 per cent in 1999-2000 to 32 per cent in 2011-12. This decline was sharper in rural areas (from 48 per cent in 1999-2000 to 37 per cent in 2011-12), and can be primarily attributed to massive contraction of employment opportunities in agriculture, which was not compensated by rising employment opportunities in rural non-farm sector” (Rawal and Saha, 2015, p.p.5).

Gender selective migration of work force from the rural areas also enhances the role of women in farming activities. Generally males migrate to the big cities in search of livelihoods leaving behind female at home for looking after the marginal and small landholdings. The remittances from the cities are not regular hence women have to take in farming operations for wage in order to survive in the absence of bread winner. Other argument that is generally put in explaining high presence of women in farming activities is that in the time of limited jobs opportunities in non-farm sector or high wage jobs, male workers pick up these jobs and pushing women in low wage works. Sometime, women perform agriculture operations at home like winnowing, threshing the paddy, storing the produce etc. It is difficult to report as society does not recognise these works as economically meaningful. It becomes the part of household work like making food and caring infant and elder members of family. It makes the highest proportion of rural women in self-employed category without any wage.

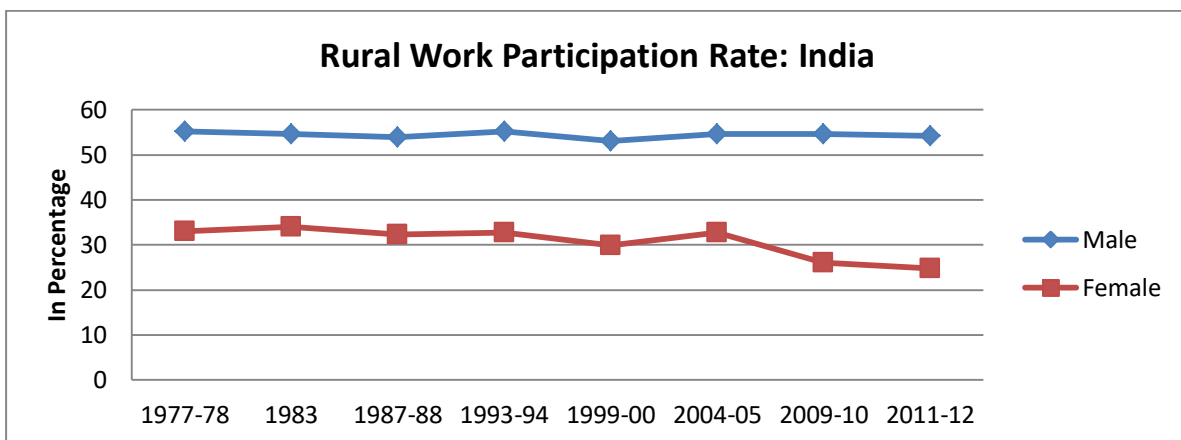
However, the states having better linkages between the farm and non-farm sector provide good job opportunities for rural women in non-farm activities. Although, the male work force has also withdrawn from farming activities but the decline from farm sector is compensated by the employment opportunities for male in construction work.

3.2: Decline in Women Agriculture Participation (state wise): 1993-94 to 2011-12



The above figure 3.02 shows the change that has taken place in the percentage of women's workforce engaged in agriculture about over period of two decades. All the states have recorded negative growth in women's workers in agriculture except Sikkim and Nagaland. Since 1993-94 to 2011-12 a decline of 11.26 percent has taken place, from 86.2 percent in 1993-94 to 74.1 percent in 2011-12 at All India level. There are nine states which have recorded a decline more than national average e.g. Manipur (36.2%), Tamil Nadu (28%), Kerala (24.3%), Mizoram (18.7%), Punjab (17.3%), West Bengal (17.3%), Meghalaya (16.8%), Orissa (15.7%) and Rajasthan (15.6%). However, it is to be seen that in those states where women have withdrawn from agriculture sector in substantial number, have they been absorbed in non-farming activities?

3.3: The Trend in Work Force Participation of Male & Female in Rural India: 1977-78 to 2011-12



Source: from various rounds of NSS.

As far as the question of women work force participation rate in rural India is concerned, there has been continuous decline except the 61st round (2004-05) but in the case of male; it is almost flat with marginal increase and decrease. It is interesting to note here that the decline in the women work force participation is entirely led by withdrawal from the agriculture and increasing attendance of girls in the schools which is a positive development. Women's withdrawal from the farm work is obvious due to increasing mechanization, change in cropping pattern and at last very low growth in the sector. But the inability of women to enter the non-farm employment is a cause of concern. However, the surplus workforce in the agriculture sector should be shifted to non-farm sector so that it can be used in more value added activities. Hence, limited job opportunities in non-agriculture work in rural areas create unequal competition between males and females thus displacing women from work force.

3.3: Women's Work in Farming and Non-farming Activities

Indian states are passing through different stages of development. Geographical diversity also plays crucial role in deciding the nature of economy for instance the states which have very small arable land. It is inevitable for them to drive livelihoods from non-agriculture activities like tourism, services and construction. On the other hand, states having enough arable land tend to have high work force engaged in agriculture sector e.g. Uttar Pradesh, Bihar, and Assam etc.

3.1: Distribution of Rural Women's Work force in Farming and Non-farming sector

	1993-94	1993-94	1999-00	1999-00	2011-12	2011-12
State	Farm	Non-Farm	Farm	Non-Farm	Farm	Non-Farm
India	86.2	13.8	85.4	14.8	74.94	25.06
ANDHRA PRADESH	83.7	16.3	84.3	15.7	76.66	23.34
ARUNACHAL PRADESH	96.2	3.8	95.1	4.9	90.37	9.63
ASSAM	83.2	16.8	79.4	20.6	79.04	20.96
BIHAR	91.9	8.1	85.7	14.3	80.64	19.36
GUJARAT	90.6	9.4	92	8	85.55	14.45
HARYANA	93.2	6.8	92.1	7.9	86.02	13.98
HIMACHAL PRADESH	95.5	4.5	95.1	4.9	86.98	13.02
JAMMU & KASHMIR	95.4	4.6	93.5	6.5	85.05	14.95
KARNATAKA	84.6	15.4	87.8	12.2	79.37	20.63
KERALA	63	37	59.8	40.2	38.69	61.31
MADHYA PRADESH	93.9	6.1	91.6	8.4	85.1	14.89
MAHARASHTRA	91.2	8.8	93.9	6.1	89.12	10.88
MANIPUR	60.3	39.7	69.6	30.4	24.12	75.88
MEGHALAYA	90.5	9.5	87.3	12.7	73.62	26.38
MIZORAM	93.4	6.6	87.5	12.5	74.69	25.31

NAGALAND	89.3	10.7	91.9	8.1	90.17	9.83
ORISSA	85	15	80.4	19.6	69.31	30.69
PUNJAB	92.7	7.3	90.6	9.4	75.4	24.6
RAJASTHAN	93	7	91.9	8.1	77.39	22.61
SIKKIM	65.7	34.3	70.1	29.9	85.64	14.36
TAMIL NADU	78.5	21.5	75.9	24.1	50.59	49.41
TRIPURA	56.6	43.4	49.1	50.9	19.12	80.88
UTTAR PRADESH	90	10	87.5	12.5	86.43	13.5
WEST BENGAL	58.9	41.1	54.1	45.9	41.61	58.39

Source: calculated from various rounds of NSS (all age group and PS+SS status).

Table X shows that women's presence in non-farm sector is increasing. In 1993-94 only 13.8 percent rural women were engaged in non-farm sector that rose to 25.06 percent in 2011-12. The last decade of 20th century has recorded very marginal increase in women's work force in non-farm activities. This period is (1993-94 to 1999-00) also called as 'jobless growth' in economic parlance. No major shift of farm work force has taken place. But at the same time, the first decade of 21st century has recorded comparatively better growth in non-farm jobs for women in rural area. It is apparent from the table X that the percentage of women in non-farm jobs was 14.8 percent in 1999-00 that rose to 25.0 percent in 2011-12. The states like West Bengal, Tripura, Punjab, Manipur, Mizoram and Rajasthan have recorded high increase in women's employment in non-farm activities. On the other hand states of Sikkim and Nagaland have seen the withdrawal of women from non-farm activities against the trend. During the last decade Sikkim has experienced an impressive growth in farming sector led by market based vegetable crops. Thus women from the pithy non-farm work have shifted to farm because the vegetable crops are labour intensive where majority of work is done by women. Generally, non-farm work is considered better than farm employment. Workers tend to be inclined towards non-farm work if there is availability of job opportunities in non-farm sector. It is interesting to note here that in the states like Kerala, Tripura, Manipur, West Bengal and Tamil Nadu have more than 50 percent rural women work force engaged in non-farm activities. Thus women must have better livelihoods, greater role in decision making and gender inclusive economic empowerment in the above mentioned states. The states that have more than 50 percent rural women's work force engaged in non-farm activities also recorded high per capita income (PCI) (CSO, 2011-12). But it does not mean that there is a relation between high percent of women in non-farm and per capita income however, there are states having low per capita income and very high percent of women work force engaged in non-farm activities like Manipur and Tripura.

3.4: Rural Male Work Force in Non-Farm Sector

Male work force is better employed quantitatively and qualitatively as well in non-agriculture sector. They have better mobility and choices of occupation. While, on the other hand, women have both constraint of occupation and lack skill required.

3.2: Rural Male Workers in Non-Agriculture Sector to Total Male Workers

	1993-94	1999-00	2011-12
State	Male	Male	Male
India	25.9	28.8	40.64
ANDHRA PRADESH	20.8	25.6	36.02
ARUNACHAL PRADESH	20.8	24.4	28.89
ASSAM	21.8	35.3	41.4
BIHAR	18	21	40.6
GUJARAT	28.9	28.6	30.08
HARYANA	39.1	40.4	49.5
HIMACHAL PRADESH¹⁸	34.2	46.2	60.2
JAMMU & KASHMIR	38.7	33.1	64.1
KARNATAKA	21.2	21.1	34.08
KERALA	46.8	57.2	71.82
MADHYA PRADESH	12.8	15.8	24.78
MAHARASHTRA	24.7	26.2	30.26
MANIPUR	34	22	44.06
MEGHALAYA	17.5	14	39.2
MIZORAM	13.4	16	23.51
NAGALAND	31.5	29.5	31.28
ORISSA	21.3	23	40.74
PUNJAB	31.9	36.3	56.46
RAJASTHAN	30.4	32.5	50.09
SIKKIM	43.3	43.1	37.66
TAMIL NADU	36	37.8	48.4
TRIPURA	54.5	54.7	64.85
UTTAR PRADESH	23.7	28.2	50.4
<i>WEST BENGAL¹⁹</i>	35.3	33.6	43.15

Source: same as table 1

The pattern in the shift of work force from farming to non-farming is same for male as in the case of female. Undoubtedly, men's work force is better employed as compare to women in rural as well as in urban areas. About 41 percent male rural work force is engaged in non-farm employment as against women 25 percent in 2011-12. There are seven states which have more than 50 percent rural work force working in non-farm activities e.g. Kerala, Jammu & Kashmir, Himachal Pradesh, Tripura, Punjab, Rajasthan and Uttar Pradesh. The

¹⁸ The states which have been highlighted bold, these have more than 50 percent male rural work force engaged in non-agriculture activities.

¹⁹ It is very interesting to note here that West Bengal is the only state in the country where women rural work force employed in non-agriculture sector is higher than that of their counterpart. It is 43.15 percent for male while 58.39 percent for women.

main activities in non-farm where male are engaged in are manufacturing, construction, wholesale & retail trade and transport and storage in rural areas. About 38 percent rural male workers are engaged in construction in Tripura, Jammu & Kashmir (28%), Himachal (25%), Rajasthan (24%), Punjab (22%), Kerala (21%), and Uttar Pradesh (17%). Manufacturing and construction are two important resort of livelihood for rural male. There is lack of livelihood diversification. Majority of work force is confined in aforesaid activities. Kerala is the most diversified state in terms of livelihood options in rural as well as in urban areas. There is range of activities in non-farm sector right from a street vendor to government employee. Hence, the jobs in non-agriculture sector do not always mean better employment.

However, it is very important here to see that the percent increase in the non-farm employment of rural male and female is real or relative as the work force is declining from the agriculture activities therefore, it might be possible that withdrawal from farm sector makes relative share of non-farm activities higher especially of rural women.

3.3: Number of Rural Workers in Non-Agricultural Activities: Rural India (In Millions)

NSS Rounds	Male	Female
1993-94	48.61	14.44
1999-00	57.19	15.64
2004-05	73.33	20.7
2009-10	86.26	21.52
2011-12	95.34	25.51

Source: various rounds of NSS

3.4: Growth in the Rural Workers in Agricultural Activities: India

NSS Rounds	Male	Female
1993-94 to 1999-00	17.65	8.31
1999-00 to 2004-05	28.22	32.35
2004-05 to 2009-10	17.63	3.96
2009-10 to 2011-12	10.52	18.54

Table, xii shows absolute number of rural male and female workers in non-farm activities (PS+PP) in million and table xiii shows the percent change in male and female work force in

non-farm activities from 50th NSS round to recent 68th round. First thing the table xii, makes clear is that number of workers in non-farm sector is increasing in rural areas. Highest increase has been recorded between period 1999-00 to 2004-05 for both male and female even they have recorded higher percentage of growth in non-farm as compare to their counterpart. Women have recorded very marginal increase in the non-farm jobs during 2009-10, only 0.82 million jobs were generated for rural women in India over a span of five years. While on the other hand, 12.93 million jobs were generated for rural male over same span of time. But 68th round shows an increase of about 4 million jobs for rural women only within two years. Therefore, it can be safely concluded from the above tables that the percentage of non-farm jobs in total rural work force as well as the absolute number of work force engaged in non-agricultural activities is increasing for both the sexes. If the whole study period is divided into two parts, the last decade of 20th century has not recorded any major shift from farming to non-farming while the first decade of 21st century has seen an absolute increase of 38.15 million new jobs for rural males and 9.87 million for females in non-farm sector. The implementation of Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) expanded to whole country in 2008 whose work is considered as non-farm jobs also contributed in rising the number of rural workers in non-agriculture activities especially women who were the main beneficiary of the programme. Thus on an average, 9 lakh jobs were generated in rural areas for women in non-farm sector while for male 3.46 million per year. In other words, the increase in the share of non-farm employment of males is more regular and steady while for women it is sporadic with high fluctuation.

The construction sector is labour intensive and has high “employment elasticity”²⁰. It has been able to absorb highest number of male and female workers who entered non-farm sector.

3.5: Composition of Rural Work Force

It is important to mention here that all non-farm jobs are not same in terms of wages and job security. There is wide range of activities right from government official to sweeper in non-farm sector. For the analysis convenient the work force is divided into three broad categories especially in rural areas e.g. Agriculture, Secondary, and Tertiary sector.

²⁰ Employment elasticity means the percentage change in employment associated with a 1 percentage point change in economic growth.

3.5: Sectoral Composition of Rural Male & Female Work Force

NSS Rounds	Sectoral Distribution of Rural Work force					
	Agriculture		Secondary		Tertiary	
	Male	Female	Male	Female	Male	Female
50th, 1993-94	74.1	86.2	11.2	8.4	14.7	5.4
55th 1999-00	71.2	85.4	19.4	9	9.4	5.8
68th 2011-12	59.36	74.94	21.99	16.68	18.65	8.38

Source: calculated from various round NSS (PS+SS) all age group.

Table xiv shows the sectoral distribution of rural work force and the changes that has taken place over a span of two decades. Broadly speaking, the agriculture is the main resort for livelihoods followed by secondary and tertiary sector. However, it is to be noted that the period 1993-94 to 1999-00 has recorded very small transformation of rural work force. In other words, no major shift has taken place from farming sector to secondary and tertiary activities, even a decline has been recorded in the percent of male workers in the tertiary sector and the share of male workers in the secondary activities increased from 11.2 percent to 19.4 percent. Due to very marginal increase in jobs opportunities, this period is termed as ‘jobless growth²¹’. The period 1993-94 to 1999-00 (50th round 55th round of NSS) has been stagnant as far as the question of women’s employment and transformation of women work force is concerned. In the case of women more than 10 percent work force has moved from the farming sector that resorted to secondary sector followed by tertiary activities. Hence according to 68th round of NSS, 8.38 percent rural women work force is engaged in tertiary activities that are very low in comparison to male (18.65 percent). Difference is not so high as far as the question of secondary sector is concerned but here also women are employed in the low value added activities mainly home based. Tertiary activities require higher level of education and skills that rural women widely lack. There is wide gender disparity as far as the question of education and skill in rural areas is concerned. The gap is narrow in urban areas.

²¹ Note: It is meant that the economic growth has taken place without generating jobs.

3.6: Total Number of Workers, Male & Female and Rural & Urban

Number of Workers in India (UP+SS) (in Million) all age					
Category	1993-94	1999-00	2004-05	2009-10	2011-12
Rural Male	187.7	198.6	218.9	231.9	234.6
Rural Female	104.7	105.7	124	104.5	101.8
Urban Male	64.6	75.4	90.4	99.8	109.2
Urban Female	17.2	18.2	24.6	22.8	27.3
Rural Persons	292.4	304.3	342.9	336.4	336.4
Urban Persons	81.8	93.6	115	122.6	136.5
All Persons	374.2	397.9	457.9	459	472.9

Source: NSS, various rounds. (Ruchika Chaudhari and Sher Verick, 2014).

It is interesting to note here that between 50th round (1993-94) and 55th round (1999-00), only one million jobs were generated for each rural and urban women in India. The growth rate of employment for rural women is less than 1 percent over a period of six years. But the next five years (1999-00 to 2004-05) has recorded a tremendous increase in rural women workers from 105.7 million to 124.0 million, an absolute increase of 18.3 million. This sudden rise in women employment is termed as distress driven increase in women work force participation. Then a decline of 19.5 million women workers from the work force is a surprising over a short span of time. And a marginal decline of 2.7 million women workers has been recorded from 2009-10 to 2011-12. Male and female above 60 are considered as reserved army of work force, hence in the time of distress or when the family income falls below a certain level then they tend to participate in economic activities in order to augment family income. However the period 1999-00 to 20004-05 has recorded very low growth rate in the farming sector and termed as distress in rural economy. Stagnancy in the agriculture sector has been the reason for sudden decline of women work force participation in rural areas (Abraham 2009; Himanshu 2011; Klasen and Pieters 2012; Neff et al 2012; Thomas, 2012). “In terms of the first perspective, increased participation of women is often observed during times of economic crisis, mainly in response to a declining household income on account of unemployment in the household (the so-called “added worker effect”) (Abraham, 2009; Attanasio et al., 2005; Bhalotra and Umana-Aponte, 2010).”²² When women’s presence in work force increases sharply, they tend to employed in low-paid and low value added jobs (ILO, 2011). “Thus, the widespread entry of women into the labour market is not always a

²² Chaudhary,R and Verick,S (2014), Female labour force participation in India and beyond.

desired situation, as it may be distress-driven and does not reflect an increased access to decent jobs.”²³

But the first decade of 21st century has seen a dramatic transformation in the rural work force especially male as compare to last decade that had not recorded major shift from farm sector. The male work force in the farming sector has declined from 71.2 percent to 59.36 percent (a decline of 11.84%), the share of tertiary sector has jumped from 9.4 percent to 18.65 percent (an absolute increase of 9.25 %) and secondary sector has not recorded any major progress, it became 21.99 percent from 19.4 percent. Thus the rural male work force that has shifted from the farming activities found livelihood options in tertiary sector bypassing the secondary activities. Thus it is clear from the above table that the increase in the female’s presence in non-farm activities is not driven by the any major absolute rise in the number of women workers in non-farm activities rather it is relative increase. The women’s withdrawal mainly has taken place from the farming sector thus decreasing denominator hence that increases relative percentage of women workers in non-farm sector.

3.6: Employment Diversification of Work Force:

Employment or livelihood diversification is a measure to see the level of balanced distribution of work force in different economic activities. More even distribution of work force, better the index value and vice-versa. High value of index depicts the better access to different type of works for women.

²³ Gaddis and Klasen, (2014) ,Economic development, structural change, and women’s labor force participation.

3.7: Classification of Economic Activities by NIC: 2008: India: 2011-12 (PS+SS)

S.no	NIC-2008 Classification of Activities	Urban		Rural	
		Male	Female	Male	Female
A	Agriculture	5.64	10.91	59.36	74.94
C	Manufacturing	22.37	28.7	8.13	9.79
F	Construction	10.65	3.95	13.01	6.59
G	Whole sale and retail trade, repair of motor vehicles	21.97	10.04	6.99	2.45
H	Transport and storage	9.07	0.72	4.06	0.11
I	Accommodation and food services activities	4.02	2.77	1.04	0.5
J	Information & Communication	2.65	2.02	0.17	0.05
K	Finance and Insurance activities	2.56	2.23	0.42	0.13
N	Administration & support Services	2.05	1.08	0.3	0.05
O	Public Administration	4.49	2.63	1.01	0.29
P	Education	3.56	13.34	1.82	2.64
Q	Human Health and social work	1.58	4.62	0.38	0.67
S	Other Services	3.33	5.85	1.81	0.85
T	Activities of Households for own use	0.85	8.32	0.18	0.51
Z	Other activities	5.21	2.82	1.32	0.43
	Total	100	100	100	100

Source: NSS, 68th round (PS+SS all age group).

Table xvi shows the further classification of secondary and tertiary activities in rural and urban areas as per the 68th round 2011-2012. Barring farming sector in rural areas major activities where male work force is engaged are construction (13.01%), Manufacturing (8.13%), wholesale and retail trade, repair of motor vehicle (6.99%), Transport and storage (4.06%) and Education (1.82%). But in the case of female work force, there are engaged in four major non-farm activities e.g. manufacturing (9.79%), Construction (6.59%), Education (2.64%) and wholesale and retail trade (2.45%). Here it is very important to focus on construction sector, in 1993-94 only 3.2 percent rural male work force was engaged in construction that became 4.5 percent in 1999-00 and after recording a dramatic rise in the first decade of 21st century, the proportion of construction in total male work force in rural areas became 13.01 percent in 2011-12. However, the same trend has been observed for rural female also. Their presence was 0.9 percent in 1993-94 that became 1.1 percent in 1999-00 and in 2011-12 it is 6.60 percent. Therefore, it can be inferred from the trend that construction has been the main driver of jobs in rural as well as in urban areas.

In transport and storage women's presence is very low as compare to male because women are seen as physically less capable in carrying out these activities. But at the same time it is important to note here that women's share is higher in education as compare to their counterpart. In our masculine and patriarch society, women are looked upon physically inferior therefore they are encouraged to enter into soft activities like education (teacher) and

health (nurse). The word “nurse” is synonymous with women. The difference is even higher in urban areas, only 3.56 percent male are in education while 13.34 percent women’s urban work force is engaged in education. Women are generally employed in those non-farm activities where comparatively less education and skill is required e.g. construction, manufacturing, wholesale & retail trade and education. The women who acquire education are generally preferred to be a teacher or in health care due to socialization and social support. Women’s presence in public administration and transportation & storage is abysmal due to gender preferences.

However, as far as the question of women’s urban work force is concerned, it is more diversified as compare to rural one. As 8.32 Percent women are engaged in household activities producing goods for own use in urban areas. The gender segregation of work force succinctly established but is more apparent in rural areas. The gender difference is higher in activities like construction, transport & storage, whole sale and retail trade and public administration where male outnumbered female while activities like agriculture, education, human health and social work and household work for self consumption where female outnumbered their counterpart. It is interesting to note here that even in urban areas women are predominantly employed in those activities where value addition is low or low wage rate. Thus the job preference of women cannot be explained in terms of wage rate only because their job choices are not determined by solely economic reasons rather social construction, cultural values play a crucial role. For instance, education, health and social services and household works are the most preferred jobs for women as it can be seen in table xvi.

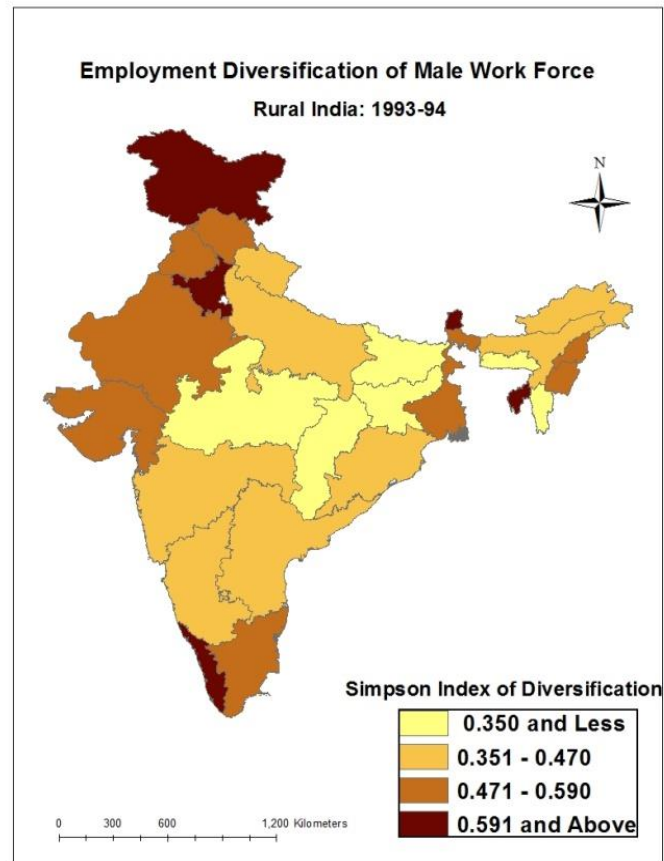
3.7: Spatial and Temporal Trends in Employment Diversification:

India is a country of diversity not only in terms of culture, faiths and geography but the gender relations, social norms, economy and the role of women in socio-economic development varies from region to region. Although women are not uniform social group rather their role in society differs from one social group to other. Work is considered the first step toward socio-economic empowerment and enhances women’s participation in community. But it is very important here to see the quality of work where women are engaged in. Merely high level of participation is not sufficient because with quantity, quality also matters.

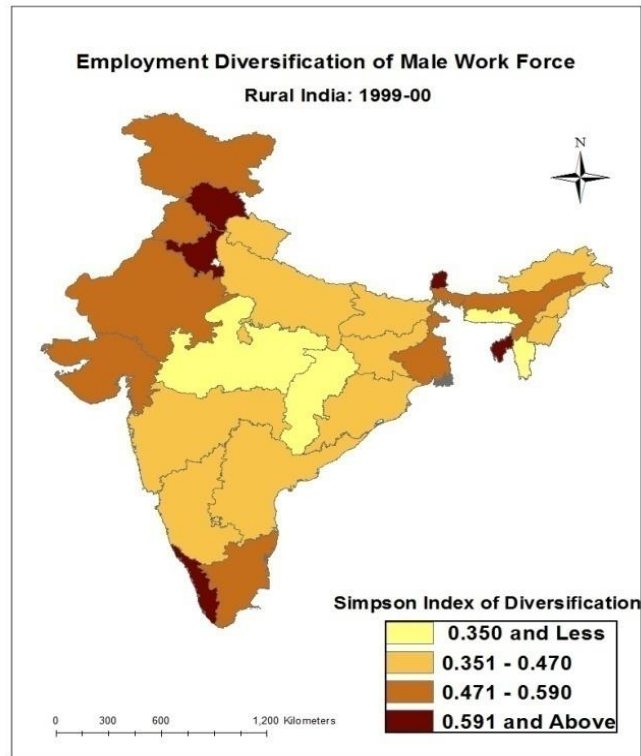
Thus in order to see level of employment diversification especially amongst the women in rural as well as in urban areas, the Simpson Diversification Index has been calculated. It

ranges from 0.0 to 1.0, where 1.0 show fully diversified work force while 0 indicates that whole work force is employed in single activity.

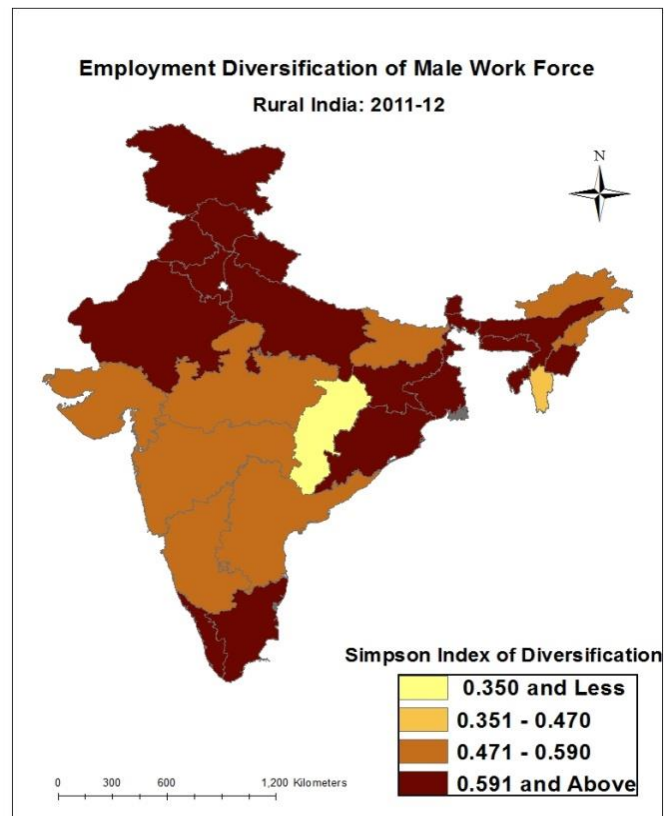
3.1: Spatial Trend in the Level of Employment Diversification for Rural Male: 1993-94



3.2: Spatial Trend in the Level of Employment Diversification for Rural Male: 1999-00

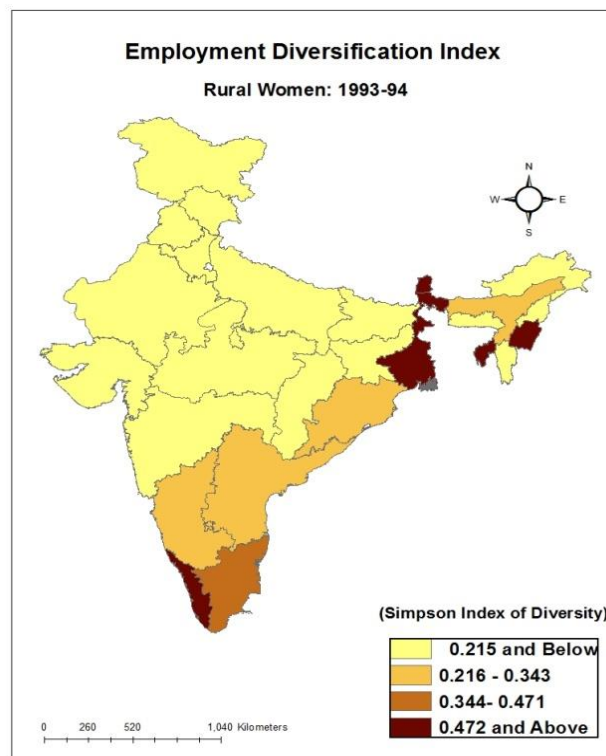


3.3: Spatial Trend in the Level of Employment Diversification for Rural Male: 2011-12



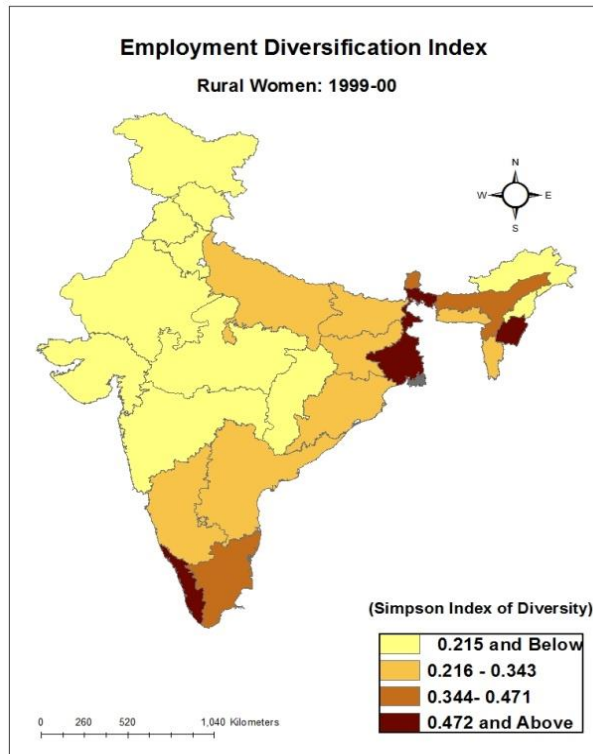
The change in the level of employment diversification is even more robust in the case of male work force. The period 1993-94 to 1999-00 has not recorded any major change in level of diversification rather Jammu & Kashmir even recorded concentration of male work force. Only Himachal Pradesh moved into high diversification category. But the last decade has reported high diversification in employment options for male work force. North Indian states like Jammu & Kashmir, Himachal Pradesh, Uttaranchal, Punjab, Haryana, Uttar Pradesh and Rajasthan and eastern states like Jharkhand, Orissa and West Bengal, in north-east Assam, Meghalaya, Tripura, Sikkim and Manipur and in the south Kerala and Tamil Nadu are highly diversified as far as the question of male employment options are concerned. Thus central and some western industrial states like Maharashtra and Gujarat, Karnataka and Andhra Pradesh in the south and Madhya Pradesh and Chhattisgarh in central India are showing moderate level of diversification. Thus the industrial states like Maharashtra, Gujarat, Karnataka and Andhra Pradesh along with Madhya Pradesh, Chhattisgarh and Bihar have recorded low level of employment diversification. All these states have high percentage of rural male work force engaged in farming sector. Hence concentration of work force in farm sector does not allow livelihood diversification. Marginal decline has been recorded in the share of male work force engaged in farming sector in the states of Maharashtra and Gujarat.

3.4: Spatial Trend in the level of Employment Diversification for Rural Female: 1993-94



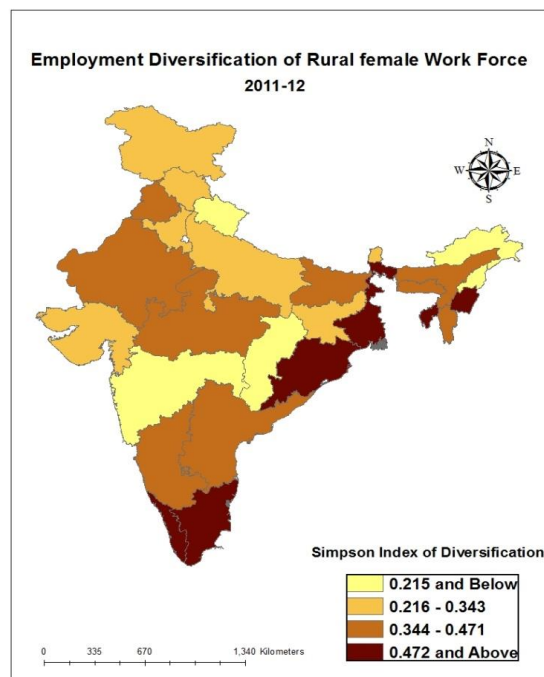
3.5: Spatial Trend in the Level of Employment Diversification for Rural Female: 1999-

00



3.6: Spatial Trend in the Level of Employment Diversification for Rural Female: 2011-

12



The above diagram 3.21 depict the level of employment diversification of rural women over period of three rounds e.g. 50th , 55th and 68th round of NSS. In 1993-94, there were states of Kerala, West Bengal, Sikkim, Tripura and Manipur in high diversified category while Tamil Nadu was the only state in moderate category. It is very interesting to mention here that in 1999-00, no major employment diversification took place rather concentration of work force has taken place in the states of Sikkim and Tripura. In other words, the share of women work force increased in farming sector as against the popular trend. During this period Uttar Pradesh, Bihar and Jharkhand had recorded a marginal increase in the level of diversification in the rural women work force. As it has been seen in the previous section that the period 1993-94 to 1999-00 had not recorded any major increase in women work force, only one million jobs were generated for women in rural India. However, non-farm sector provided 1.2 million jobs for women. One million women workers enter into non-farm activities while only 2 lakh women who left agriculture as livelihood option, absorbed in non-farm sector. Thus it can be said that only 0.2 million women had shifted from farm to non-farm work in rural India over a period of 5 years.

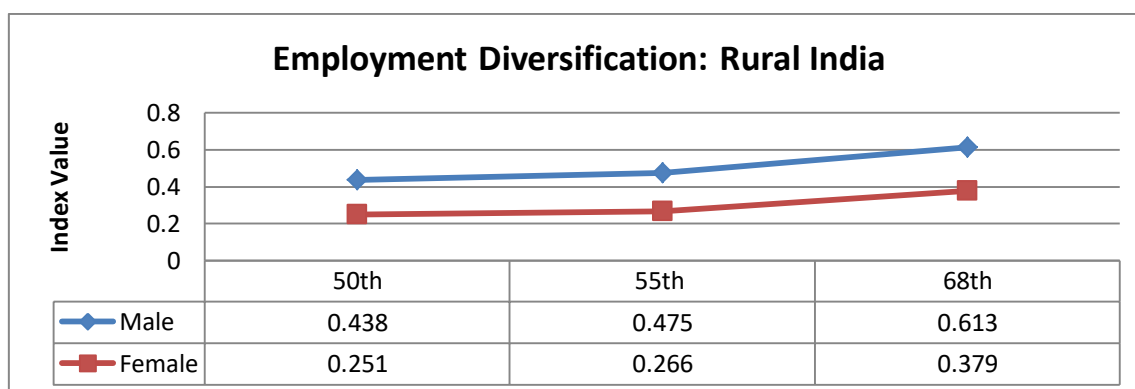
But on the other hand, the first decade of 21st century has seen an impressive rise in the level of employment diversification as compare to last decade of 20th century. New states like Orissa, Tamil Nadu and Tripura have entered into high diversified category and most of north Indian states have recorded an increase in level of diversification. The states of Karnataka, Andhra Pradesh, Rajasthan, Madhya Pradesh, Punjab, Bihar, Assam, Meghalaya and Mizoram are approaching towards high diversification. Over the last the decade, 3.9 million women have withdrawn from the rural work force while 9.87 million female rural workers joined non-farm activities in India. It means 13.77 million women workers have left agriculture as source of livelihood and out of 13.77 million women workers; 9.87 million have shifted to non-farm activities. In rural India 3.9 million women those have withdrawn from the farming activities confined themselves to family chore (see table xii & xv).

Increasing employment diversification in rural areas especially in women work force clearly conveys the fact that decreasing the share of farming sector at the same time increasing women workers in non-farm activities is helping to diversify the women work force. The share of agriculture work force in total work force is decreasing in relative and absolute terms as well. But at the same time, it is also important here to focus on increasing women's work force participation rate in rural as well as in urban areas.

3.8: Transformation of Agriculture Work Force to Non-Agriculture Sector

Between 50th and 55th round, 10.9 million workers got employed in rural India, out of it 8.58 million engaged in non-agriculture activities while 2.32 million engaged in farming activities. While, between 1999-00 to 2011-12, 36 million new male workers entered the rural work force. At the same time, 38.15 million workers joined non-agriculture sector for livelihood. Thus it means that 2.15 million male workers had withdrawn from the farming sector and shifted to non-farm economic activities. Therefore according to NSS (various rounds), withdrawal of women from farming sector is more pronounced as 13.77 million women workers have left agriculture against 2.15 male workers. Therefore, it can be inferred that males are not withdrawing significantly from agriculture rather their relative percentage of workers in farm is declining due to fast increasing proportion of non-farm workers in total workers.

3.4: Employment Diversification of Rural Work Force: 1993-94 to 2011-12



Therefore the period between 55th and 68th round has reported an increase in the level of employment diversification for both male and female. The other reason behind rapid rise in the level of diversification is that the gap between 50th and 55th round was only 7 years while between 55th and 68th round, the gap was of 12 years. However, the major withdrawal of male and female work force from agriculture has been taken between the 55th and 68th round. Thus declining the share of agriculture work force in total work force and at the same time, growing job opportunities in non-farm activities provide an impetus to the employment diversification of rural work force during first decade of 21st century. While, during the last decade of 20th century, no major decline in the agriculture work force had been recorded and at the same time, jobs in non-agriculture activities grew with snail's pace.

3.8: States Having More Than 10 percent Work Force in Major Non-Farm Activities: 2011-

12

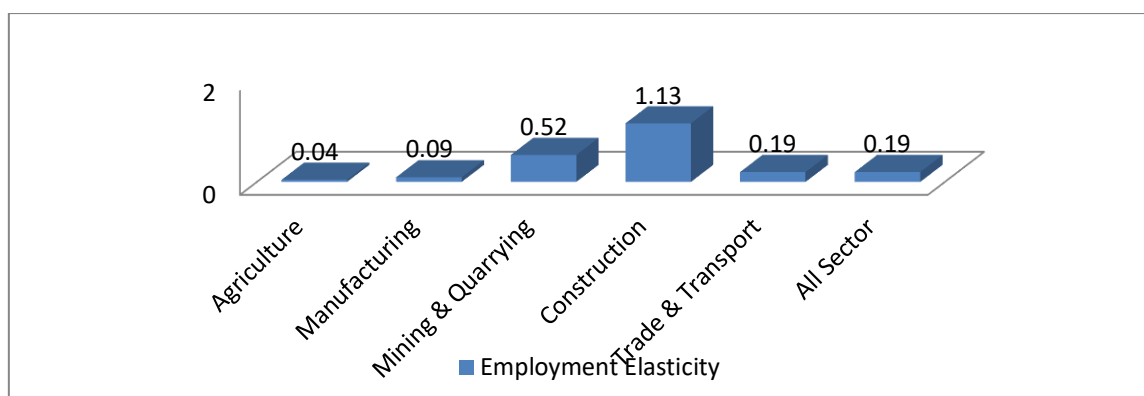
Major non-farm Activities	Male	Female
(1) Manufacturing	Tamil Nadu (14), W Bengal (13)Haryana (12), Karnataka (10), Kerala (10) Punjab (11)	Karnataka (10), Tripura (10),Punjab (11), Orissa (15), Tamil Nadu (17), Kerala (18), Manipur (18) and W. Bengal (42).
(2) Construction	Tripura(38), J & K(28),Himachal(25), Jharkhand(24), Rajasthan(24), Punjab(22), Kerala(21), Uttaranchal(20), UP(17), Haryana(17), MP(14),Orissa(14),Manipur(14), Bihar(11), Tamil Nadu (11), West Bengal (10).	Tripura (60), Manipur (40),Tamil Nadu (22), Rajasthan (15), Kerala(10),Mizoram (13) and Madhya Pradesh (10).
(3) Wholesale & retail Trade and repair of motor vehicle	Assam (14), Kerala(14), Tripura (11) and Uttaranchal (10).	No state
(4) Transport &Storage and Info-Communication	Kerala (12) and Uttaranchal (10).	No state

As far as the question of non-farm activities is concerned, majority of work force is engaged in four-five activities e.g. manufacturing, construction, wholesale & retail trade and repair of motor vehicle and transport & storage and information-communication. The above table shows the non-farm activities where more than 10 percent work force is engaged in. There are regional differences in terms of significance of any activity.

After agriculture, the manufacturing is the major source of employment for women in rural areas. They are mainly concentrated in self-employed own account workers category. The household based work like weaving domestic production is the main work for women. They are not employed in skill intensive manufacturing work like automobiles, pharmaceuticals etc. The states where more than 10 percent women’s work force engaged in manufacturing activities are economically well off except Orissa.

The construction sector emerged as a major jobs provider in the first decade of 21st century. In Tripura 60 percent of women work force employed in construction followed by Manipur (40%) and Tamil Nadu (22%). On an average 13 percent of male work force in rural areas is employed in construction activities while 6.60 percent female work force. Tripura (38%), Jammu & Kashmir (28%), Himachal Pradesh (25%) and Jharkhand (24%) have share of construction in male livelihood. The first decade of 21st century witnessed huge construction work in private (houses, factories etc.) and public sector (roads and infrastructure) that provided employment opportunities to unskilled work force. The wages are better in construction than the farming activities and the most important thing is that manual work in agriculture has declined. However, the employment in agriculture is of seasonal type but construction work provides better wages and employment round the year. It does not need any special skill therefore, workers who left agriculture as a means of livelihood could easily absorbed in construction work. However, the proportion of women in other non-farm activities could not increase especially those where special skills are needed like automobiles, pharmaceuticals etc. hence, it is very essential to know why new jobs could not be generated even though the Indian economy had been recorded high growth rate over last two decades.

3.5: Level of Sectoral Employment Elasticity: 2011-12



Source: 12th Five Year Plan, Planning Commission.

Agriculture has the lowest employment elasticity amongst the sectors mentioned above. Hence, the employment elasticity of agriculture is abysmal low from where majority of women derive their livelihood. Except construction sector all the activities are not showing any major impact of growth on employment generation. Therefore, in spite of recording high economic growth there is no significant jobs creation in the economy.

It is important to mention here that the work like wholesale & retail Trade and repair of motor vehicle and Transport & Storage and information-communication, no state in the country has at least 10 percent of women work force employed in these activities. Therefore, it is clear from above table that the presence of women tends to decline in jobs where high skill and education is needed especially in rural areas.

3.9: Simpson Index of Diversification: 1993-94 to 2011-12

Round	Rural		Urban	
	Male	Female	Male	Female
1993-94	0.438	0.251	0.822	0.759
1999-00	0.475	0.266	0.812	0.779
2011-12	0.612	0.379	0.846	0.825

Source: various rounds of NSS

3.18: Discussion

As far as the question employment diversification in urban areas is concerned, there is very marginal gender gap. And this too is narrowing with increasing education, skill and new job opportunities. However, urban areas have very low women work force participation. It means that those women who are working in urban areas belong to better off families and have education and skill. Volunteer unemployment of women is higher in urban areas because high family income can support them and thus they can afford to be unemployed. Therefore it can be said that female work force participation in urban areas is not distress driven rather urban women are employed as a means to economic independence and for social status production. Migration is also a responsible factor in rising employment diversification of women in urban areas. Generally after employing in formal sector, workers tend to shift to nearest city in order to get urban facilities because our villages do not have basic urban amenities like electricity, water supply etc. But on the other hand, the gender gap is not narrowing in rural areas as it is clear from the above table that the gap is persistent since 1993-94 to 2011-12. The nature of women employment in rural areas is entirely different from urban space. Work force participation of women tend to decline with increasing land holding size and family

income in rural areas while it rises as the family income increases in urban areas. Thus the participation of women in rural areas is not development driven rather it is mainly distress driven. The WPR is highest for the households in marginal and small land holdings (NSS). Therefore, above diagrams depict clearly that employment diversification is increasing for both the male and female work force in rural India. It is fast and more succinctly apparent for male while for female the process is slow due to declining women work force participation especially in rural areas. Hence it is very important here to analyse the impact of increasing employment diversification on women work force participation. According to the common logic, the employment diversification should be high in those states where women work force participation rate is low.

3.10: Multivariate Regression for Employment Diversification

Diversification Index	Coef.	Std. Err.	T	P>t	[95% Conf. Interval	
Female Work Force Participation	-0.00466	0.002472	-1.88	0.073	-0.0098	0.000481
Development Index	0.327098	0.355013	0.92	0.367	0.41119	1.065387
Female Literacy Rate	0.006835	0.00398	1.72	0.101	0.00144	0.015112
Poverty in Rural Households	0.002164	0.003809	0.57	0.576	0.00576	0.010085
Marginalization	0.000044	0.002291	0.02	0.985	0.00472	0.004809
Constant	-0.10533	0.357702	-0.29	0.771	0.84921	0.638556

R-square = 0.3219, Adjusted R-squared = 0.1605

In order to see impact of different factors on employment diversification of women in rural areas, regression has been run. Here the employment diversification value is dependent while female work force participation, development index; female literacy rate, rural poverty and the percentage of female marginal workers to total workers are independent variables. It is clear from the above table that all the variables do not have any impact on women employment diversification except women work force participation that too at 90 % significance level. Therefore, the notion that lower female WPR, better they would be employed has been proved here. The Coefficient value -0.00466 shows that one percent rise in women work force participation rate will decrease 0.00466 value of employment diversification index. The high WPR in Indian states is not driven by quality work or better employment opportunities for women. Economically well off states like Gujarat, Karnataka,

Uttaranchal and Andhra Pradesh have high women work force participation but at the same time employment diversification is low. It is important to mention here that there states like Tamil Nadu, Manipur and Meghalaya which have high women WPR and high employment diversification. It means in these states women are better employed in rural areas.

To sum up, first section of this chapter tries to find out the whether the increase in proportion of non-agriculture jobs in rural areas is real or relative. Study shows that withdrawal of women from agriculture is strong as compare to their counterpart. Data shows that since last decade, jobs for women in non-farm activities have risen significantly from 15 to 25 percent in a decade. Although, the main reason behind this increase is that women work force is declining on the one hand, but on the other side some jobs have been generated in non-agriculture work. Thus declining absolute number of women workers in rural India is making relative proportion higher of women working in non-agriculture work. But on the other hand, the absolute number male workers are not declining as in the case of women and no major decline of male work force has taken from agriculture. Thus rapid increase non-farm jobs for male is causing relative decline in the proportion of workers in agriculture. But it is a good sign that employment diversification of rural and urban women work is improving. Undoubtedly, women WPR has declined but their presence in non-farm activities is increasing.

The problem of unemployment is mounting but it has been ignored in the literature on the gender issue. And women participation in agriculture is still significant; therefore chapter 4 deals with the issues of women unemployment and feminization and de-feminization of Indian agriculture.

Chapter: 4

Problem of Unemployment among the Rural Women and De-Feminization of Agriculture

4.1: Introduction

There are a number of socio-economic implications of unemployment as an unemployed person is prone to commit crimes. He/she has to waste labour force that can be used in productive and creative activities. The problem of unemployment is mounting all over the world as the labour saving technologies are being used e.g. robotics and automation in the productive process of manufacturing at assembly line. Even the developed country like America is facing the same menace. But the problem is quite grim in Indian context as it has huge youth population in working age group. Hence, in present scenario providing jobs to all is herculean task. Hence, it is very important here to look into the issue temporally and spatially so it could be addressed in time.

However, majority of studies on the unemployment of women were done based on NSS data which has always under reported unemployment rate, less than 3 percent. But at the same time, all the agencies like Labour Bureau, Census and others continuously reporting prevalence of high unemployment especially among the women in rural as well as in urban areas. Rajeev Gowda in his paper titled “Unremarkable in the Time of Crisis” in The Hindu dated 2nd Feb 2017 emphasized that according to recent Labour Bureau Report less than 1.5 lakh jobs were created in 2016 and unemployment rose to 13.2 percent from 12.9 percent in 2014. There is huge gap between the entering the youths in labour market and the jobs generated. Labour intensive sector like manufacturing (textile, leather, and food processing and small industries) is not growing as expected rather “Index of Industrial Production²⁴ (IIP) is showing downward trend. Distress in farming sector is a topic of intense debate and farmers’ suicide is the manifestation of the aforesaid phenomenon.

However, growth in women employment during the period of 2004-05 (NSSO, 61st Round) has been led by part-time jobs in *self-employed* category. This trend is the manifestation of declining the number of paid-jobs for women and increasing underemployment. Whenever,

²⁴ Index of Industrial Production is a composite index which provides important information about the growth of various sectors such as electricity, Manufacturing and mining etc over a specific period of time. It is compiled and published by Central Statistical Organization (CSO).

there is shortage of paid-jobs in the labour market for the women, they tend to engage in unpaid-self-employed work. Thus in order to augment family income, women had to take part in part-time jobs while there was recorded a decline in the full time work in 2001. And it is interesting to be noted here that about 65 percent rural women seeking/available (unemployed) for work of the age 15 years and above responded that they are seeking job for supplementing family income (NSS,68th round,2011-12). Therefore, women's willingness to participate in full capacity is a good sign because it will enhance their social participation and role in decision making.

4.2: Changing the Level of Unemployment

But rising level of unemployment is under reported in NSS data whereas according to Primary Census Abstract (PCA) the unemployment rate is increasing very fast since 1991 onwards. The number of unemployed women in 1991 was 2.5 million only that rose to 12.24 million in 2001 and in 2011 there were 21.54 million unemployed women in age group of *15 years and above* in rural India. On the other hand, the number of male unemployed too were 2.5 million in 1991, became 10.5 million in 2001 and rose to 13.7 million in 2011 (Primary Census Abstract). Thus on an average, 1 million women have been adding in *seeking/available for work* category per year in working age group. Hence in last decade (2001-2011) only 2.2 million male workers have been added in seeking/available category while in the case of female 9.3 million unemployed workers added in women labour force. During the last decade of 20th century (1991-2001) only 2.9 million jobs were created in rural India for women (Census). Therefore, the job opportunities for women in rural areas have drastically reduced in the first decade of 21st century. It is clear from above data that the number of unemployed women is higher than that of their counterpart male. But it is interesting to note here that female labour force participation rate is very low as compare to male. Hence it makes unemployment rate higher for women. Thus increasing number of unemployed women in rural areas is in itself one of the reasons for withdrawing women from the work force. It is called as “discouraged worker effect”²⁵. In other words, unemployment has negative impact on women work force participation.

“The census thus on the whole is a much more reliable source of information with regards the ‘work force participation rate’ in the country than the NSS employment surveys since it

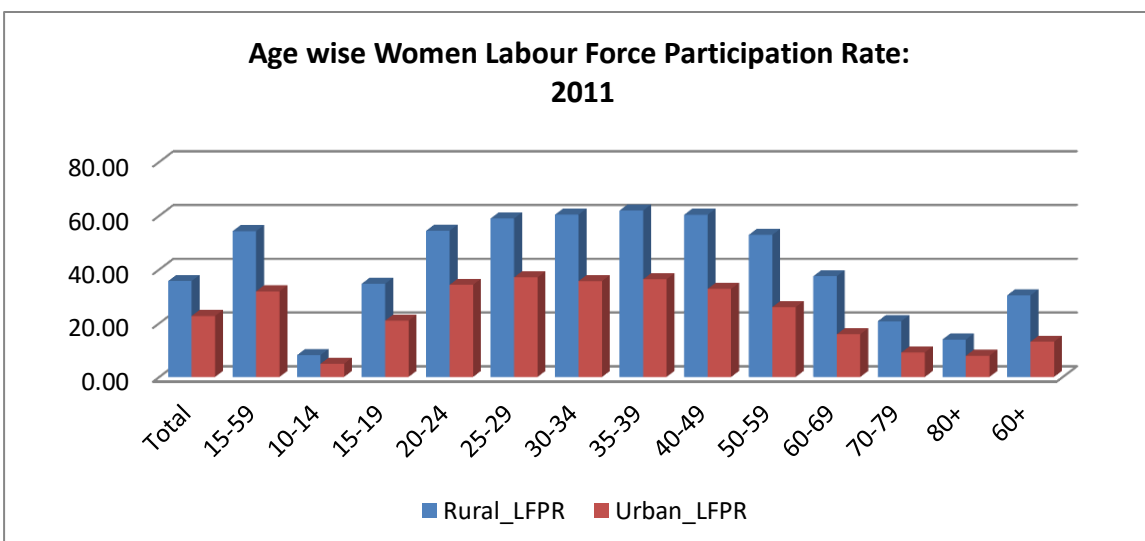
²⁵ When women linger for a long period of time as unemployed, they tend to withdraw from the labour market. In process, they lose the hope of getting job hence it has negative impact on other women also who were planning to enter labour market.

has a much larger and comprehensive coverage of the population in relation to the NSS sample based estimates and therefore is closer to the actual picture (Thorat, A, 2004 p. 12). The underreporting in the case of women worker is the cause of concern as far as the question of NSS is concerned. But at the same time, there is very marginal difference in the case of male workers. Hirway, I (2002) finds out that women work is underestimated in the NSSO than that of man because of women predominant as unpaid workers those are difficult to be reported. R, Nilakantha (2001) observes that NSSO is unable to measure properly the underemployment in the rural India.

4.1: Unemployment Rate among Rural & Urban Women in Different Age Group: 2011



4.2: Labour Force Participation of Rural & Urban Women in Different Age Group: 2011



Age specific unemployment shows clearly the concentration and dimensions of socio-economic and cultural aspects. Generally, work force participation of married women is lower than that of unmarried because married women are expected to follow social norms more strictly that restrict women's mobility and participation. The unemployment rate is highest in age group of 15-19 years and it declines as we move upward and downward. Same pattern can be observed in labour force participation rate as well. The LFPR is lower in urban areas but the unemployment rate is higher in comparison to rural areas. The age specific LFPR of women resembles like inverted-U shape. The LFPR is higher in middle of the age group while unemployment is higher in the initial working age group (15-19). Thus it can be concluded from the above diagram that there is demand and supply mismatch at the initial working age group. "High unemployment rate in the initial years (15-19) could be due to the mismatch between job expectations and availability of jobs."²⁶ Labour force participation rate is low while the unemployment rate is high, it means that there is scarcity of jobs or the jobs are not up to the mark as per the expectations of youth women in rural as well as in urban areas. Other interpretation might be possible that after marriage women tend to withdraw from the labour market due to social norms and for *status production*. The social stigma is associated with outdoor work of women especially married one. However LFPR declines after age group of 35-39, it may be due to increasing household responsibilities of child caring. Generally, the average marriage age in rural areas is about 18 years; therefore at the age of 40, there is possibility that new youths would have joined work force for supplementing the family income. That is how the family income intended to rise and providing a space for women to withdraw from the survival strategy or distress work.

4.3: Conception Differences in the Definition of Unemployed (Census vs NSS)

There are definitional differences between the Census and NSS. NSS asks what you do. If any person replies that he/she is studying then it does not ask any further question and put these respondents in non-working category or as student. But at the same time, Census asks one more question to student that you are seeking/available for work. If respondent replies in affirmative then according to Census he/she is counted as unemployed. And the definition by the Census of a worker is more liberal and includes the persons working even less than 30 days. The Census covers large population therefore the incidence of unemployment tends to

²⁶ Sanghi,S, Srija, A(2014): Youth Unemployment in India.

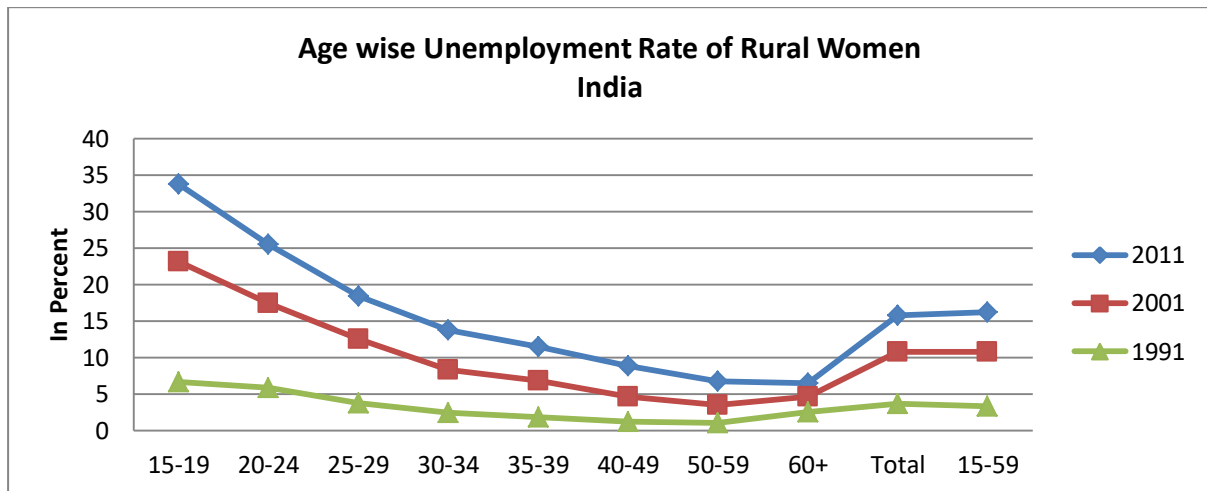
high. It is complete survey visiting each and every household in the country. NSS may suffer from sample error.

However, in rural areas people have low family income and in such condition a student cannot afford to be unemployed for long period of time. Thus students after passing 12th standard, they seek job. Since last two decades, the literacy rate has gone up substantially thus increasing the number of 12th passed out and graduated students in countryside. Thus increasing the number of students led to decline work force participation for both the sexes but the rising level of unemployment as per the Census. It has been seen that students who have graduated start applying for various jobs as they become eligible for majority of jobs in the country. But due to scarcity jobs and lack of required skills for the post, they find it difficult to get through. Hence, most of the students do not drop out rather they enrol themselves in distance or in regular master courses in order to enhance their qualification so that they could apply for the posts where masters' degree is required. It happens very frequently in the case of 12th passed students especially in rural areas. Here I intend to convey the idea that they are not willing to study further as their small family income from agriculture does not allow them to be unemployed but they linger for a long time as student. It is clearly depicted by the diagram 4.1; the unemployment rate is highest in age group 15-19 and 20-24. After age of 20-24 unemployment rate starts declining.

4.4: Temporal Trends in the Level of Unemployment (Age Wise)

However, it is very good and desirable that the problem of child labour is coming under control. The women work force participation rate in the age group of 10-14 years of age is 8.15 percent while for urban areas it is 4.92 percent. But there is space for improvement in rural areas as well. However, it should be kept in mind while talking about child labour that the unemployment is quite high in age group of 10-14 that means, they are still seeking work. Therefore, there is urgent need to augment household income of the poor through government intervention so that women children could be sent back to schools.

4.3: Unemployment Rate of Rural Women in Different Age Groups (1991, 2001 & 2011): India

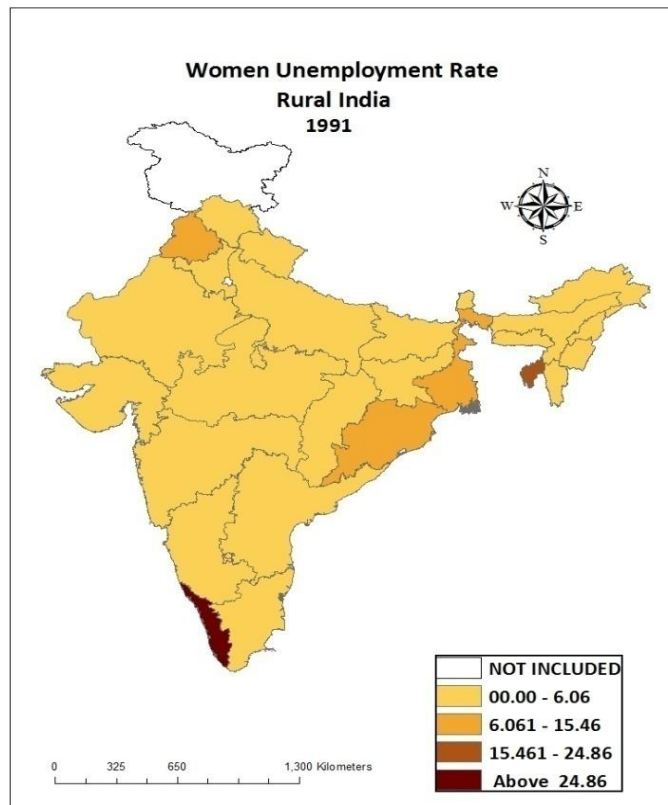


Source: calculated from Primary Census Abstract (PCA) 1991, 2001 & 2011.

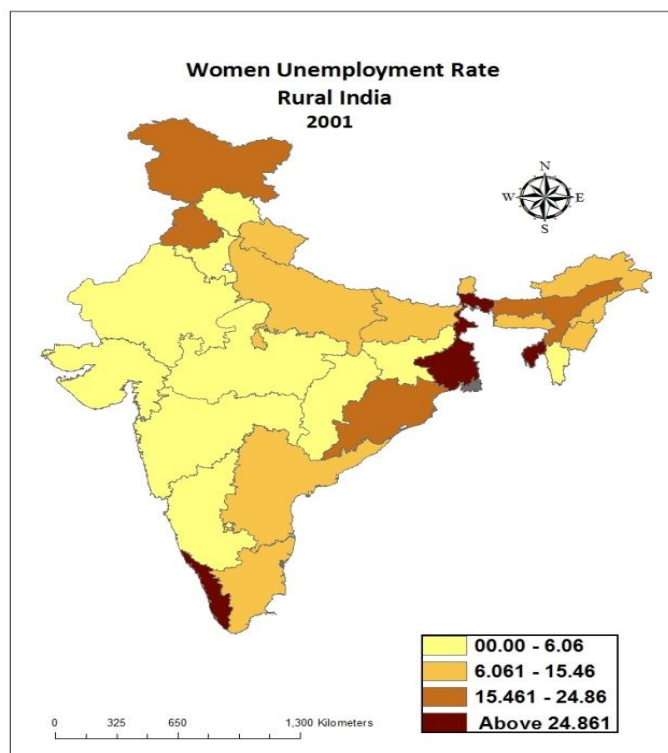
The diagram 4.3 shows the change that has taken place since 1991 in age wise unemployment rate of women in rural India. It overtly explains that unemployment rate of rural women has gone up in all age groups. But it is interesting to note here that unemployment has increased more rapidly in entering age group. However, in higher age groups too unemployment has risen but not as rapidly as in initial age of entering labour market. In other words, women in age group 15-19, 20-24 and 25-29 are more available for work.

It is showing positive trend that women are willing to participate in the economy but it is also a grim situation having not enough jobs suitable for rural women thus mounting the unemployment rate. Unemployment rate tends to decline as women's age increases. It is lowest in 60 plus age group. There is more strict social code of conduct for married women than that of unmarried one.

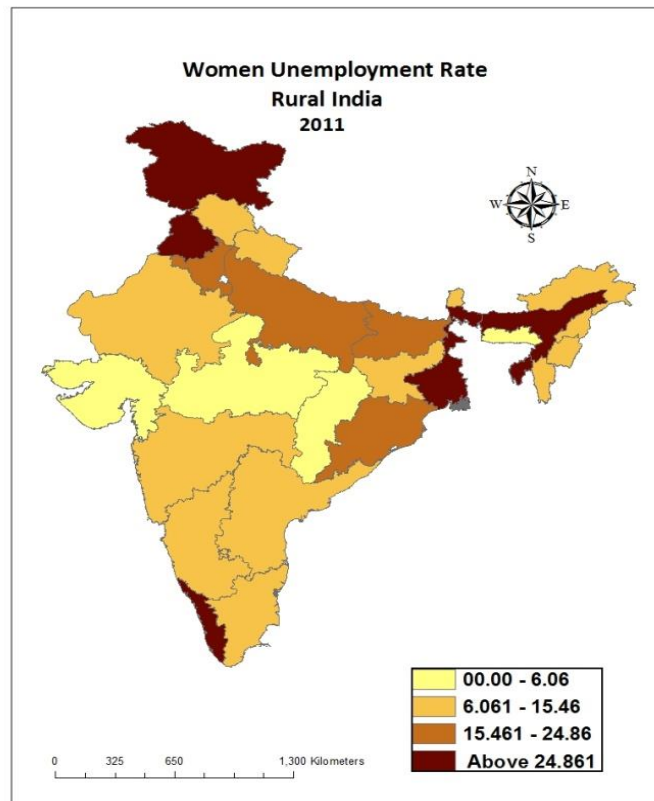
4.1: Spatial Pattern in the Level of Unemployment of Rural Women: 1991



4.2: Spatial Pattern in the Level of Unemployment of Rural Women: 2001



4.3: Spatial Pattern in the Level of Unemployment of Rural Women: 2011

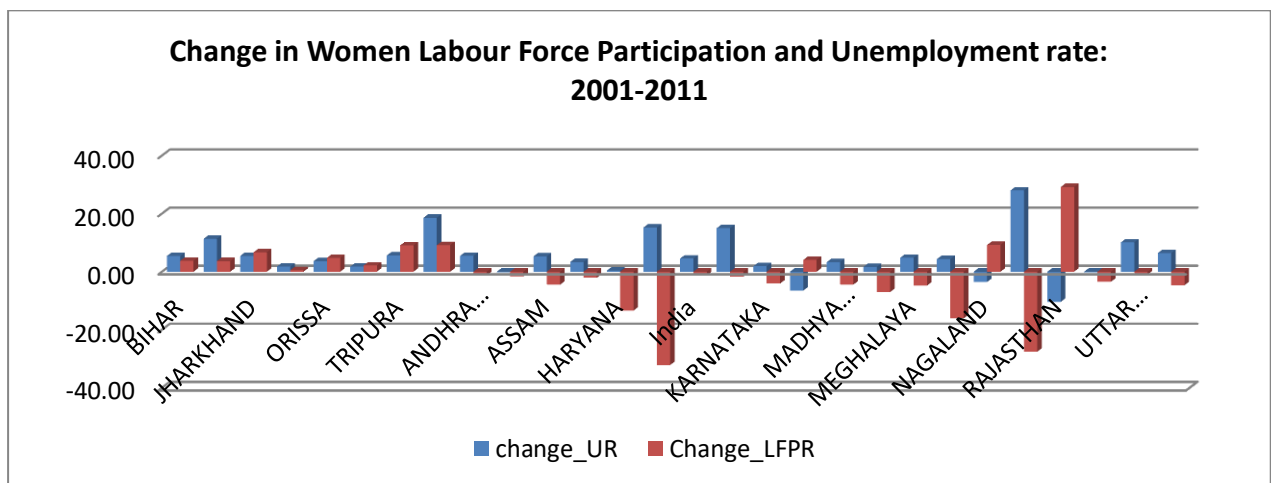


The regional pattern as far as the unemployment rate is concerned is higher in northern and the eastern states. And in the south, Kerala had always recorded high unemployment rate. Central and western states have low level of unemployment while high Labour Force Participation (LPR). But the problem of unemployment is spreading over western states too. Except Jammu & Kashmir, all the states including Punjab, Haryana, Uttar Pradesh, Bihar, West Bengal, Assam and Orissa are densely populated. The states like Punjab, Haryana, Uttar Pradesh, Bihar, West Bengal and Assam are largely agriculturally dependent and geographically plain areas. And the states of Gujarat, Madhya Pradesh and Chhattisgarh have remained with low women unemployment. Higher share of tribal population in Madhya Pradesh and Chhattisgarh may be probable reason for high WPR and low unemployment rate. There might be entirely different factors responsible for prevalence of high unemployment in the states of Jammu & Kashmir, Punjab, Kerala and Assam. High unemployment in Kerala and Punjab is of volunteer type induced by the higher aspirations of women to engage in white collar jobs. In other words, unavailability of jobs for women in white collar jobs may be the possible reason. It is very important to be noted here that the states of Punjab, Kerala and followed by West Bengal have very high percentage of rural women working in non-

farm sector which shows better off family's income as compare to return from the farm. Thus women in these states can afford to be unemployed and continue their study but the story is different for Jammu & Kashmir and Assam. J & K by and large, has strict code of conduct for women. Outdoor work is not encouraged and recognition as well as reporting of women work is underreported. Assam on the other hand, has medium women WPR (34.89%) and high unemployment rate (28.91%) which shows desire to participate in the work. Majority of women drive their livelihood from the farming thus the transformation from the farm to non-farm is very slow. Women are not getting employed in non-farm sector. But any kind of generalization cannot be made because women are not homogeneous social group. Their role in family & society and mobility varies with varying socio-economic and cultural settings and economic status. Therefore, each region has its own peculiar characteristics for women's work participation and prevalence of high unemployment.

4.5: Discussion

4.4: Change in Women Labour Force Participation and Unemployment Rate: 2001-2011



It is to be noted down that overall the labour force participation rate of rural women declined from 55.46 percent in 2001 to 54.24 percent in 2011. But the states like West Bengal, Tripura, Sikkim, Punjab, Orissa, Nagaland, Jharkhand, Bihar and Assam recorded an increase in labour force participation in working age group women. However, majority of states have shown a decline in the level of women LFPR. Rising unemployment rate along with women labour participation is a symbol of unemployment led withdrawal from the labour market. Hence the state of West Bengal, Tripura, Punjab, Orissa, Nagaland, Jharkhand, Bihar and

Assam reported the rising level of both the unemployment rate and labour force participation rate over period of a decade. However, the states reporting a decline in labour force participation of women and increasing unemployment rate, the increase in the level of employment might be due to declining numerator that is total labour force. Therefore the main focus is on the states which have recorded an increase in both the level of unemployment and labour force participation.

Although, it is a good sign that women are willing to work if available in rural as well as in urban areas. But on the other hand, unavailability of suitable jobs for women is a cause of great concern as far as the issue of women empowerment is concerned. It is interesting to note here that the jobs have been generated in those sectors where women's accessibility was already low like service sector. Traditionally agriculture has been the main resort for women's livelihood in rural areas from where withdrawal of women has taken place as the mechanization in agriculture increased.

4.1: Change in Labour Force Participation of Rural Women (15-59): 2001-2011

Table No. XVIII	2011	2001	Change
India	54.24	55.46	-1.22
ANDHRA PRADESH	68.13	69.71	-1.58
ARUNACHAL PRADESH	70.35	74.81	-4.46
ASSAM	51.83	48.06	3.78
BIHAR	41.23	37.57	3.66
CHHATTISGARH	75.54	77.65	-2.11
GUJARAT	50.84	64.25	-13.41
HARYANA	53.93	58.58	-4.66
HIMACHAL PRADESH	70.81	72.06	-1.25
JAMMU & KASHMIR	48.65	50.32	-1.67
JHARKHAND	63.51	56.82	6.69
KARNATAKA	59.73	63.82	-4.09
KERALA	52.69	48.62	4.08
MADHYA PRADESH	66.33	70.79	-4.46
MAHARASHTRA	64.70	71.69	-7.00
MANIPUR	70.91	70.39	0.52
MEGHALAYA	66.13	70.94	-4.82
MIZORAM	70.22	86.30	-16.09
NAGALAND	80.25	71.03	9.23
ORISSA	54.84	50.10	4.73
PUNJAB	72.24	43.08	29.16
RAJASTHAN	38.38	70.55	-32.18
SIKKIM	69.20	67.07	2.13
TAMIL NADU	62.81	66.31	-3.50
TRIPURA	64.86	55.80	9.07

UTTAR PRADESH	34.71	35.67	-0.96
UTTARANCHAL	30.39	57.95	-27.56
WEST BENGAL	58.51	49.37	9.13

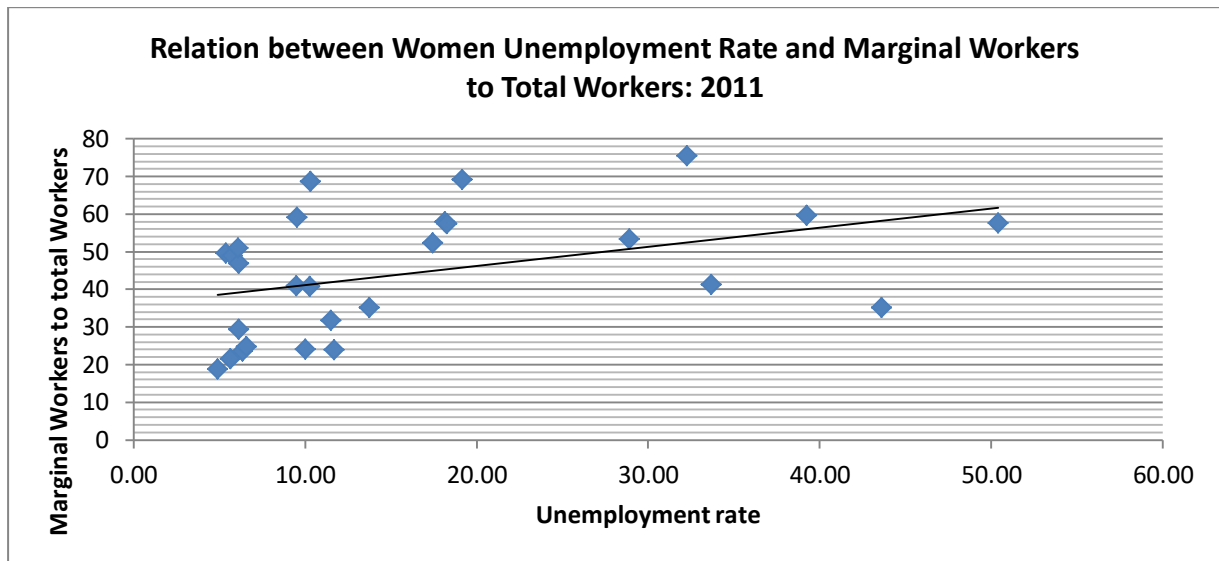
Source: calculated from Census (2001-2011).

Therefore, it can be concluded from the above discussion that women's withdrawal from the rural work force is mainly unemployment driven. In other words, women have to withdraw from the work force because of unavailability of jobs. Ghose, J (2001) reveals that the decline in the workforce participation has been associated with a rise in unemployment rates. "It should be remembered that in countries like India, open unemployment rate is very poor indicators of the actual levels of job availability, because in view of material circumstances and absence of any public social security systems most workers have little choice but to find some employment, however unremunerative it may be."²⁷ Underutilization of women labour force is one of the serious hurdle in eradicating poverty and malnutrition. About 45 percent women are working in marginal capacity and 37 percent women working in marginal capacity are seeking full-time work. Ghose, B (1984) emphasises upon the *sex substitution*²⁸ effect on the women workers. In other words, the displacement of female by male, the economic change in India might have caused the technological and occupational structure has undergone a transformation in favour of male. Those sectors where women have relative advantage had seen a smaller expansion. It is a matter of debate. But on the other hand, increasing the number of women seeking/available for work is really a cause of great concern because here they are willing to work but they are not getting proper employment. This phenomenon discourages women to enter the labour market and gives back seat to the women's economic empowerment that ensures the decision making and enhances capabilities or freedom. The high Labour Force Participation rate does not convey anything. Generally it is considered as the model of economic development states that there should be linear relationship between the growth in output and the employment generation. But it could not be proved in Indian context because more than 50 percent workforce is engaged in farming sector which is not affected by the growth in the domestic output. Employment elasticity is very low for sectors like agriculture and manufacturing. Economic growth does not leave major impact employment generation.

²⁷ Ghose, J (2001): Urban Indian Women in Informal Employment: Macro Trends in the Nineties.

²⁸ Employing male workers in the place of women of the preference is given to male workers over female.

4.5: Relationship between Women Unemployment Rate and Level of Marginalization: 2011



The above scatter diagram makes it clear that the women’s unemployment rate and the ratio of women working in marginal capacity are positively correlated. Moreover, it is moderately correlated with r value 0.408. In other words, the unemployment rate is higher in those states where they do not have full-time job opportunities. If there are job opportunities for women in the non-farm sector then the women work force participation rate might increase up to considerable extent. The incidence of high unemployment along with high percentage of marginal workers in total workers is not favourable for the reaping the benefits of *demographic dividend* in developing country like India where the labour productivity is already low. The combining effects of unemployment and underemployment restraining India from utilizing her huge labour force where she has comparative advantage. Paul,S (1993) states that the problem of underemployment is more serious among the female than that of male workforce. According to the recent data on employment and unemployment (NSSO, 68th round, 2011-12) rural women in all age group 59.3 percent are engaged as *self-employed*, 35.1 percent as *casual labour* and followed by *regular wage/salaried employees* 5.6 percent while in the case of male it is 54.5 percent, 35.5 percent and 10.0 percent respectively in principal & subsidiary status. There is not much difference as far as the question of casual employment is concerned but women are employed lesser in regular wage/salaried jobs and higher in self-employed category. Thus the increasing reliance on the part-time jobs clearly implies that the search for subsidiary sources of income as part of the survival strategies of poorer households. The main resort of part-time work is agriculture

where majority of women are employed. In all the above states except Tripura and West Bengal the high percent of women workers are engaged in farming sector. All the north-eastern states except Tripura and Assam have recorded low percent of women workers engaged in marginal capacity and Sikkim in category moderate. Thus it can be safely inferred from the above discussion that one of the main factors responsible for underemployment of women is code of conduct that is expected from women, not going outside, preference to indoor work, household burden and obviously gender based discrimination at work place. And it cannot be denied that unavailability of suitable jobs or stagnancy in the sectors where women are preferred has not generated substantial jobs. But at the same time, women who are working in marginal capacity are seeking full employment. It is positive sign and reflects the acceptability of women in the society as an active economic agent. However, there are regional variations as Tripura (63%), West Bengal (58%), Orissa (46%), Kerala (46%), Andhra Pradesh (43%), Chhattisgarh (43%) and Jharkhand (43%) where women are seeking full-time employments who are currently working in marginal capacity. Thus the notion that women's unwillingness for outdoor work is a limitation on their employment, it is cancelled out in all the above mentioned states because half of the women working in marginal capacity are seeking work in full capacity.

Way out: in order to address the problem of high unemployment among the women the government should strive to provide skills, easy credit facilities and encourage self-entrepreneurship so that women could participate in socio-economic development of the country. Gender sensitization at the place of work, family and in educational institutions is equally important. The bridge should be made by providing skills in order to transfer women from the distress ridden farm to non-farm sector. The diversification of livelihood is very essential. It needs a demand for non-farm goods and services in rural areas in order to diversify the economic activities. Self-help groups (SHGs) can prove very useful in providing micro-finance credit facilities for rural women to increase their participation in economic activities, creating avenues of livelihoods for women. Nandita et al, 1994 stressed on the credit facility provided by the government will affect women self-employed work.

4.6: Declining Role of Women in Indian Agriculture

While talking about women's work, the agriculture cannot be ignored because of its immense significance in rural life. Overall women's work force participation is declining mainly led by major withdrawal from farm work. There has been a debate regarding feminization and de-

feminization of women workforce in rural India. In other words, increasing women's work force proportion in agriculture is called feminization of agriculture while de-feminization is opposite phenomenon. Women are getting concentrated in low paid and intermittent agriculture work while males are withdrawing faster as they are able to find other livelihood options in non-farm sector. Therefore, women's work in agriculture can be divided into two broader categories e.g. self-employed and wage labour. Therefore, this chapter seeks to analyse the relation between the women's work force in agriculture and their participation.

It is very crucial here to look into the type of work from where women are withdrawing. Agriculture activities broadly can be divided into two categories e.g. self-employed and wage labour. Generally women work in their small and marginal piece of land as self-employed in order to save wage that has to be given to the workers employed in field operations. However, marginal landholdings are not able to sustain family hence women have to take part as wage labour in order to augment family income. Agriculture does not provide full-time employment. It is mainly seasonal or intermittent in nature. Hence, here it is important to analyse the women workers in agriculture to total population.

4.2: Percent of Workers (PS+SS) in Agriculture as Proportion of Population, by type of Employment: Rural Women (15-59) age.

Table No. XIX	1999-00			2011-12		
	Self-Employed	Wage Labour	Agriculture	Self-Employed	Wage Labour	Agriculture
ANDHRA PRADESH	22.6	37.1	59.7	19.4	27.7	47.1
ARUNACHAL PRADESH	45.3	1.2	46.5	36.6	1.6	38.2
ASSAM	11.2	8.7	19.9	10.1	4	14.1
BIHAR	10.7	14.8	25.5	6.7	4	10.7
GUJARAT	35.8	24.1	59.9	21.4	12.9	34.3
HARYANA	28.7	3.8	32.5	16.5	3.5	20
HIMACHAL PRRDESH	66.4	0.5	66.9	59.6	0.6	60.2
JAMMU & KASHMIR	44.9	0.1	45	31.9	0.1	32
KARNATAKA	23.1	28.3	51.4	16.2	16	32.2
KERALA	13	6.9	19.9	5.5	5.1	10.6
MADHYA PRADESH	32.2	26.7	58.9	24.1	14.6	38.7
MAHARASHTRA	27.7	36.1	63.8	27.5	22.7	50.2
MANIPUR	24.3	1.6	25.9	6.8	1.1	7.9
MEGHALAYA	54.5	8	62.5	38	7.2	45.2
MIZORAM	58.7	0.2	58.9	44.7	0.1	44.8
NAGALAND	61.4	0	61.4	35.6	0	35.6

ORISSA	15	22.4	37.4	17.1	7.3	24.4
PUNJAB	38.3	2.2	40.5	21.4	3.4	24.8
RAJASTHAN	54.9	4.3	59.2	38.3	2.8	41.1
SIKKIM	24.7	2.7	27.4	59.2	0.3	59.5
TAMIL NADU	14.2	31.3	45.5	7.4	17.6	25
TRIPURA	2.2	3.5	5.7	4.4	1.6	6
UTTAR PRADESH	23.5	7	30.5	20.9	3.3	24.2
WEST BENGAL	6.2	7.8	14	4.1	7.8	11.9
India	22.8	18.1	40.9	17.7	9.9	27.6

Source: calculated from 55th & 68th round NSS.

Above table xx shows the proportion of women in agriculture to population in working age group. Women are employed in agriculture in two categories e.g. self-employed (farmer) and wage labour (agriculture labourer). According to 55th round, about 41 percent women population in working age group was engaged in agriculture but it reduced to 27.6 percent in 2011-12. However, the population growth rate for women aged (15-59) had been 18.88 percent during the last decade 2001-2011 (Census).

Here it is very interesting to look here that women are employed as wage labourer in high percent in the states which are industrially developed and have better per capita income. Andhra Pradesh, Gujarat, Karnataka, Maharashtra and Tamil Nadu have high proportion of women workers engaged in wage labour while there are Madhya Pradesh and Orissa they have also recorded high percentage of women as wage labourers though they are economically poor states. It might be due formalization of agriculture operations where land is used very intensively and thus requiring more labourers. But at the same time, the states like Himachal Pradesh, Sikkim, Arunachal Pradesh, Mizoram, Maharashtra, Jammu & Kashmir and Nagaland, the proportion of self-employed women in agriculture is high. Horticulture is the main resort of livelihood in Himachal Pradesh, Sikkim, Jammu & Kashmir and north-eastern states. Maharashtra is known for commercial crops. The land is not concentrated in hilly regions; hence the size of majority of landholdings is small and marginal. However, hilly terrain does not allow land to be concentrated. Therefore, women work in their small piece of land. It is also important to note here that the horticulture is labour intensive where majority of work is done by women manually. However, women work as wage labourer in agriculture in those states where the farming is of commercial type like Maharashtra, Tamil Nadu, Andhra Pradesh and Gujarat. Women mainly grow food crops while males are generally engaged in market oriented crops. Other factor responsible for increasing women wage labourers in agriculture is due to limited access to land and reducing

the size of landholdings. And destruction of home based industries also gave rise to wage labour in agriculture. The number of women waged labourers in agriculture tends to increase due to globalization, high value agriculture production and agriculture processing for export. However, vegetable crops require up to five times more labour than that of cereal crops (ILO).

4.7: Factors Affecting Agriculture Participation of Women in Rural Areas

In countryside the agriculture is not merely means of livelihood but it is the way of life. There are number of festival associated with the sowing and harvesting of various crops in the country. Therefore, there must be some factors influencing women participation in agriculture as there are regional differences in socio-economic and cultural setting of the society. The nature of farming e.g. subsistence farming or commercial also influence women work in agriculture. Ahmed S (2004) highlights the presence of certain castes and tribes in increasing proportion of women work force in farm work. Distress migration of male workers from certain region also increases the presence of women in farm (Unni 1992 and Bardhan 1985). There are variety of factors determine women participation in agriculture. “besides agro-climatic conditions, many factors such as the type of crop grown (food or cash crops, wheat, rice or coarse cereals), availability of irrigation, type of agriculture (market or subsistence) the technology used, extend of mechanization as well as socio-economic factors such as poverty, backwardness, incidence of landlessness, caste, class and cultural norms of social mobility and seclusion determine the extent of women’s participation.²⁹ Hence in order to analyse the influencing factors for agriculture participation of women, the regression model has been run by taking some social indicators as independent variables.

4.3: Multivariate Regression for Women’s Participation in Agriculture

Agriculture ³⁰ Participation of Female	Coef.	Std. Err.	t	p>t	[95% conf. Interval]	
Literacy Rate	-.8921206	0.371406	-2.4	0.026	-1.6668	-0.11738
Marginal Landholdin	-.3630456	0.152312	-2.38	0.027	-0.6807	-0.04533
Rural poverty	-.2333625	0.349301	-0.67	0.512	-0.9619	0.495267
Constant	160.2764	29.75573	5.39	0.000	98.207	222.3457

Note: **R-Squared = 0.3820 and Adj R-Squared = 0.2893.**

²⁹ Krishnaraj, Kanchi, (2008),” *Women farmers of India*” pp. 62-63.

³⁰ Agriculture Participation of rural women is the dependent variable while women rural literacy rate, percent of marginal landholdings to total landholdings and rural poverty are the independent variables.

The above table shows regression where the agriculture participation of women has been taken as dependent variable while rural women literacy rate, percent of marginal landholdings and rural poverty as independent variables. It is significant at 95% coefficient interval. Hence, the women literacy rate and women marginal landholdings leave negative impact on the agricultural participation of women while the rural poverty does not have any impact. It is very much true that educated women seldom participate in farm operation because it provides mainly manual work with low wage rate and that too intermittent in nature. In India agriculture work is informal in nature where majority of work is done manually and corporate farming is still not popular feature of farming. But on the other hand, high percent of marginal landholdings also leave negative impact on farm participation because marginal landholdings are not able to sustain family. Therefore, majority of households lease out their marginal landholdings and then work in non-farm activities in order to augment family income to sustain family. However, there are a number of other cultural and religious factors influencing agriculture participation of women which cannot be proved statistically. In the tribal communities the gender divide is least as compare to mainstream communities so women's participation in farm in those communities must be high.

4.8: Feminization of agriculture is a Myth

There has been intense debate among the scholars pertaining to the feminization of agriculture. In other words increasing agriculture participation of women and replacing males from the farm work. Undoubtedly male workers are withdrawing from the agriculture as they are having better job opportunities in non-farm sector. It is to be noted that the sectoral mobility of males is far better than that of women. However, agriculture has already ridden with the problem of disguised unemployment thus low labour productivity. Standing, G (1989) talks about two conditions for the feminization of work force, increasing women work force participation and replacing male work force from the work where males were traditionally employed. So it is to be seen that is agriculture getting feminized or de-feminized with the passage of time?

4.4: Changes in Agriculture Work of Women

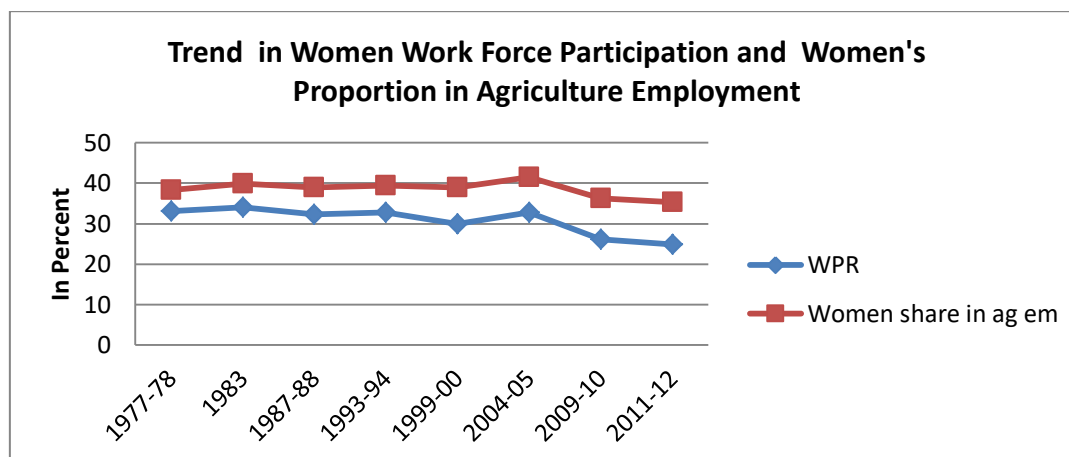
NNS Round	WPR of Women (PS+SS)	Agriculture WPR ³¹ of Women	Women's share in Agriculture employment
1977-78	33.1	88.1	38.4
1983	34	87.5	39.9
1987-88	32.3	84.7	39.0
1993-94	32.8	86.2	39.3
1999-00	29.9	85.4	38.9
2004-05	32.7	83.3	41.5
2009-10	26.1	79.3	36.3
2011-12	24.8	74.94	35.3

Source: taken from various rounds of NSS.

But it does not prove true in the context of Indian labour market. Table no. 4.4 clearly depicts the change that has taken place in women work force participation in agriculture, their share in agriculture to total work force in rural areas and work force participation. Women WPR is continuously declining since 1977-78 except it recorded an increase in 2004-05. It was 33.1 percent in 1977-78 that reduced to 24.8 percent in 2011-12. Same trend has been observed in the case of agriculture participation of women, in 1977-78, 88.1 percent women's rural work force was engaged in agriculture for their livelihoods but after recording a dramatic decline, it reduced to 74.9 percent women participate in agriculture in 2011-12. However, the most important measure that rejects the notion of feminization of agriculture is the women's share in agriculture employment. There has been minor rise and fall in the women's proportion in the agriculture employment. But in 2004-05, women's employment in agriculture recorded a dramatic increase from 38.9 percent to 41.52 percent. Same trend has been recorded in women work force participation. Hence the 61st round of NSS (2004-05) was the exception which indicated the trend towards the feminization of agriculture but in succeeding rounds it proved to be unrealistic. Still 64.7 percent agriculture work force is male; hence we cannot term Indian agriculture as feminized where majority of agriculture work force is male.

³¹ Work Force Participation Rate. Agriculture Work Force Participation rate means proportion of total rural women work force engaged in Agriculture.

4.6: Trend in Women Work Force Participation and Women's Agriculture Employment: 1977-78 to 2011-12



The diagram 4.23 shows the trend in women work force participation and women's proportion in agriculture employment over a period of 34 years. It is quite long span of time to analyse the feminization and de-feminization of rural work force in general and agriculture in particular. It is interesting to be noted here that women's share in agriculture employment followed the women WPR, it means the rise women WPR came from increased women agricultural employment. In other words, agriculture has been the main driver of increasing and decreasing women WPR in rural areas. Agriculture recorded sluggish growth rate thus closing way for new job opportunities. The public investment in agriculture declined as it was 1.92 percent to Gross National Product (GDP) and reduced to 1.70 percent in 2004-05 (Central Statistical Organization). As a result, the private investment rushed into the agriculture that reached its zenith, 82.90 percent in 2003-04. Thus as a result of it, the cost of cultivation has drastically shot up, reducing the return from the farming.

4.5: Women Work Force to Total Work Force (Male & Female)

Women Work Force to total Force (male female)			
Year	Rural	Urban	All
1993-94	35.8	21.02	32.57
2011-12	30.26	20	27.29

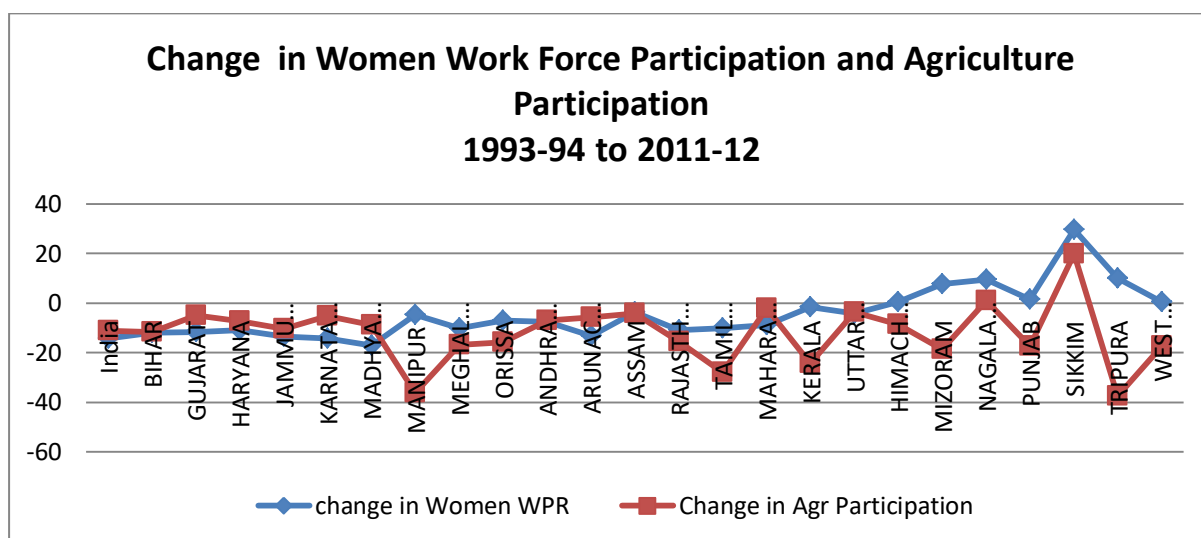
Source: calculated from NSS rounds

4.9: Discussion

However, as far as the question of rural work force feminization is concerned, table no. xxii depicts the change in the share of women work force to total force in rural as well as in urban areas. In 1993-94, the share of women work force to total work force was 32.57 percent in both rural and urban taken together that reduced to 27.29 percent in 2011-12. Hence at all India level women's share in total work force is declining. But the decline is more rapid in the case of rural work force where it reduced from 35.8 percent to 30.26 percent. However, the decline has not been so rapid in urban areas. About 1 percent decline has been recorded in the proportion of women work force in urban areas. Therefore, broadly speaking neither rural work force has feminized nor the agriculture work force. But on the other hand, the work force is getting de-feminized in general and rural areas especially.

However, it is to be seen at states level the trends in agriculture participation of women in rural areas because socio-economic and cultural diversity of the country makes it very difficult to generalize any phenomenon. It might be possible that at macro-level there is no sign of feminization of agriculture but at micro-level it might be true.

4.7: Change in Women Work Force Participation and Agriculture Participation: 1993-94 to 2011-12



The diagram 4.24 depicts the change that has taken place in women work force participation and agriculture participation since 1993-94 to 2011-12. It is, of course true that some states have recorded an increase in women WPR e.g. West Bengal, Tripura, Sikkim, Nagaland and

Mizoram but here the WPR was already very low. Thus a minor increase in WPR cannot be termed as feminization of rural work force because it is still less than 50 percent of total women population in rural area. But on the other hand, agriculture participation of women has increased only in the states of Sikkim and Nagaland. In Nagaland 90.2 percent and in Sikkim 85.2 percent rural women work force is engaged in agriculture. But the male agriculture participation is also high in these states.

Sikkim is interesting case over here where 29.6 percent women WPR and about 20.0 percent agriculture participation have increased over span of 18 years. In 1993-94 (50th round), the rural women work force in Sikkim was very much diversified as mining & Quarrying(2.2%), manufacturing(4.2%), construction(4.1%), wholesale & retail trade(4.3%) and in services(19.7%). Hence, about 35 percent women work force was engaged in non-agricultural activities while about 65 percent in agriculture. But in 2011-12, there was only 14.8 percent women work force in non-agriculture out of which wholesale & retail trade (3.53%), construction (3.44%), education (3.0%) and manufacturing (1.44) and in other services. It should be noted that major withdrawal of women has been taken from services. Sikkim has recorded reverse trend as women withdrew from secondary and tertiary sector and absorbed in agriculture. Sikkim is well known for organic farming. Its economy is mainly agrarian where crops are grown on terrace fields. Horticulture is one of the major economic activities of the people of Sikkim. Large Cardamom, ginger and turmeric are the principal crops while Mandarin orange, guava, mango, banana and so on are the principal fruits grown in the state. Therefore, it can be inferred from the above discussion that terrace farming does not allow intensive use of machines in farm operation. Most of the farm operations are done manually. Thus agriculture could absorb the work force which withdrew from non-agriculture sector.

Hence, it can be said that feminization of agriculture is taking place in Sikkim while at macro level there is no sign of feminization rather de-feminization is taking place. In other words, women are withdrawing from agriculture. Male work force is equally withdrawing from farm activities. There is broader trend in declining work force participation of both the sexes but in the case of women, it is more succinct. There are number of factors influencing women participation in agriculture but women literacy rate and marginal landholdings proved to be negatively correlated. As far as the proportion of agriculture women workers to total population is concerned, it is also rapidly declining. It has been proved that the incidence of unemployment is rising for both the sexes but women more rapidly. As far as the regional

pattern is concerned, it is higher in northern and eastern states. It has been found higher in those states which have high incidence of marginalization.

Chapter 5

Conclusion

In this dissertation I intend to deal with different issues concerning women's work in rural areas and various gendered patterns in changing socio-economic scenario of the country. It is an open secret that the significance of agriculture is diminishing in the economy and women who are deeply associated with it, bound to face challenges offered by structural changes. Although, it is quite essential for women to withdraw from agriculture because they are mainly engaged as unpaid own account worker. So this sort of work does not provide any type of purchasing in their hand. Hence the question of economic empowerment does not arise. Hence, it is desirable for women to withdraw from unpaid work and shift to paid jobs. India's economy is shifting from mainly agrarian to services based where the work force engaged in agriculture is inevitable to withdraw. However, agriculture still has significant role to play in the rural economy where it is the major source of livelihood especially for rural populace.

Work force participation has been shrinking since last two decades for working age population in rural areas however, it is quite rapid for women. However, India's neighbour countries like Bangladesh and Pakistan have recorded an increase in work force participation of women. But in India, the problem of unemployment and underemployment is getting deeper roots. India has recorded very high population growth during the last two decades of 20th century thus making huge population in the working age group. But at the same time, rising use of capital intensive machines leads to declining need of human labour. It is, of course important to mention here that labour intensive sectors like manufacturing could not expand. Post-reform growth mainly came from the service sector and that has been androcentric in nature. It seems quite difficult to provide jobs to all youths because the employment elasticity is very low of the sectors which have been main harbinger of growth after reforms. However, employment opportunities have been diversified for both the rural and urban work force since last two decades. India is passing through a stage where the jobs opportunities are shrinking and the quality of women's work is not improving. The quality of work and jobs opportunities especially for women should have been enhanced as Indian economy's growth has been one of the highest among the countries of the world. Declining women work force participation and at the same time improving quality of work is not proper solution of problem because work force participation rate in India is already very low.

5.1: Main findings

There has been recorded decline in the work force participation of both the male and female in rural areas since 1991 (study period, the Census & NSS). However, women should not be seen in isolation rather there is broader trend in declining WPR in rural areas. Although the interstate disparity in male WPR is very narrow. As far as the issue of regional pattern in decreasing WPR is concerned, there is no pattern in declining of male work force participation rather decline has been recorded almost in all states while in the case of women withdrawal is more pronounced in the south Indian states. It is of course, new trend as southern and western states have high women WPR except Kerala. This might be due to mismatch between the work force withdraw from agriculture and employed in non-agriculture work in countryside. So the decline in the case of women is sharper than that of male. It is very important to understand that states where agriculture is recording high growth and still accommodating new work force, women WPR has not declined for instance Maharashtra. Thus the increase in women WPR has been recorded only in those states where agriculture could absorb work force and decline in women WPR has been recorded mainly in those states where the withdrawal from agriculture has been higher and non-agriculture sector could not offer new jobs for women. It can be stated in other way round that the jobs which have been created in non-agriculture sector were unsuitable for women. But on the other hand, the conceptual differences in counting a person as worker and putting him/her into main or marginal category has created huge differences in the total number of principal and subsidiary workers. It was necessary to reveal the underlying factors which cause difference in outcome in data that has been taken from the Census and NSS. These are the major sources of data in the country for obtaining information about the situation of employment and unemployment. NSS is a sample based survey and more specialized in nature as far as the issue of employment & unemployment and work is concerned. But it hides the prevalence of child labour especially those who work in part-time capacity. Hence NSS is not able to capture those children who help their parents in household industries and seasonal workers especially engaged in transplantation of paddy due to its strict definition of workers. The transplantation season of paddy is less than 30 days.

Differences in age wise work force participation in principal and subsidiary status clearly reveal high discrepancies in WPR. As far as the question of marginal or subsidiary WPR is concerned, it is quite clear but in the case of principal category, there are hidden differences between the Census and NSS. Census succinctly demarcates the criteria for main worker

(who works more than 180 days or 6 months) but NSS, on the other hand, does not specify any number of days. It simply defines principal worker as working relatively longer period of time.

“A person may be engaged in a relatively long period during the last 365 days in some economic (non-economic) activity and for a relatively short period (but not simultaneously), which is not less than 30 days (not necessarily for a continuous period), in another economic activity (any economic activity). The economic activity, which was pursued for a relatively short period was considered as his/her subsidiary economic activities.” (NSS, Report of 68th 2011-12, p. 19).

Therefore, if a person has been seeking and available for work since last 7 months and he/she find job after 3 months, then the persons worked for 4 months. Hence according to definition he/she has worked relatively longer period of time, 4 months out of 7 months. So, NSS reports higher participation of male and female in principal category in comparison to the Census. The difference is higher in the case of male work force due to higher sectoral mobility of males.

Hence, it has been found that number of marginal workers to total women workers is quite high as reported by the census in comparison to NSS and since 1991 it has been showing rising trend for both the sexes. But in the case of women, it is very high. Northern and eastern states have more severe problem of increasing proportion of part-time workers in total workers. Factors like women literacy and work force participation leave negative impact on the marginalization of women work force. Hence it can be inferred from the regression model that increasing women literacy and work force participation will check the rising trend in part-time jobs. But on the other hand, the number of marginal landholdings is positively correlated with the incidence of work force marginalization of rural women. Thus education is the best preventive factor against the increasing marginalization of women work force. Usually educated persons seek fulltime employment. Marginalization of worker is the indicator of survival strategy where person engages in part-time work in order to augment family income. Therefore in such situation, it is very fundamental to increase women participation in economic activities by providing them skills, credit and social support.

However, it becomes very important here to look into the work force composition of rural areas. It is equally desirable to know about employment scenario of the country. Undoubtedly, it has been proved that work force participation in non-agriculture sector is

increasing for both the males and females but in the case of male the increase is more pronounced. It is very surprising to know that male workers withdrawal from the agriculture is slow as compare to female work force. As it is evident from the fact that during the last decade (1999-00 to 2011-12) 2.15 million rural male workers withdrew from the agriculture while on the other hand, 13.77 million women workers left agriculture as means of livelihood. However, agriculture participation of women declined slowly in comparison to their counterpart due to absolute decline in the total number of women workers that kept proportion of women workers still higher in agriculture. During the same span of time, 9.87 million rural women workers joined non-agriculture sector for their livelihoods while 38.15 million male workers opted non-farm work for their livelihoods. Thus it can be inferred from the above numbers that women are withdrawing from agriculture work more rapidly than that of male workers however, males are able to shift easily from farm to non-farm activities but in the case of women the process is very slow and have various limitations on occupational choices. This changes all the dynamics of work force composition and hides the real picture. If it is to be seen broadly, then in percentage terms the share of male agriculture work force has declined sharply as compare to women because at one side in non-agriculture work males are getting transformed and on the other hand slow withdrawal from agriculture. It makes the relative proportion of agriculture work force lesser. It is of course, true that male work force participation has declined but the absolute number of male workers did not decline. However, in the case of women work force, there has been recorded an absolute decline.

But as far as the question of employment diversification is concerned, there has been recorded an increase in the level of employment diversification for male and female work force as well. However, increase is more robust in the case of male while very slow for women in rural areas. Gender and regional disparity are very acute in rural employment diversification. Differences are narrow in urban spaces in terms of gender and regional perspective. And with the passage of time, the gender gap in employment diversification in urban areas is getting further narrow down. However, the last decade of 20th century did not record any significant rise in the level of employment diversification in rural women work force. Hence in order to analyse the factors influencing employment diversification (ED) regression has been run by taking independent variables e.g. women WPR, Development Index, female literacy, rural poverty and share of marginal landholdings in total landholdings and level of employment diversification as dependent variable. The impact of women WPR on ED is negatively significant while other factors do not have any bearing on the level of

women ED in rural areas. Hence the notion, lesser women WPR is, it would be better employed has been proved true. International Labour Organization (ILO) remarks that higher women work force participation of women does not mean better or quality employment. It might be distress-driven rise in the level of women WPR mainly concentrated in pity work in order to sustain by augmenting family income.

It has been discussed in the above paragraphs that India has been recorded high economic growth but new jobs are not being generating. It has been found that the sectors which have been the main drivers of economic growth in the country have very low employment elasticity except construction sector which has been the major work force absorber of unskilled work force withdrawing from agriculture. In other words, the sectors which provide employment to the largest percentage of population like agriculture and manufacturing have very low employment elasticity 0.04 and 0.09 respectively thus, leaving negligible effect of growth on employment. Increasing use of labour saving technologies like automation and robotics may be responsible for declining relative need for human labour.

However, it is of course, desirable to analyse the problem of unemployment especially among the rural women. The agriculture cannot be ignored because it is still significant source of livelihood for rural work force in India. Thus after analysing the issue of unemployment, it has been found that the problem of unemployment is spreading very rapidly all over the country since 1991 onwards. It is very important to understand here that the incidence of unemployment is quite higher in early age group (15-24) while labour force participation rate in middle age group. Hence it proves the notion of mismatch between the youths enter the labour market and jobs provided. It might be due to definitional difference between the Census and NSS Data for unemployment has been taken from the Census which counts a person as worker if he/she works even 30 days in a year. And second reason might be due to conceptual difference as NSS asks, "What are you do? If respondent replied that he/she was studying then NSS puts them into student's category or non-worker and does not further ask question related to employment and unemployment situation. But on the other hand, the Census asks a further question to students, are they seeking / available for work? If he/she replies in affirmative then they are counted as unemployed. Hence the incidence of unemployment as reported by the Census inevitable to be higher than that of NSS. Even if the definition and conceptual framework of the Census is more liberal then the trend is not welcoming. The persons are seeking part-time work more readily. This in itself is a matter of concern. As far as the regional pattern in women unemployment is concerned, it is higher in

northern and eastern states and rising in western states where unemployment rate has always been low. However, in the central India, it is still low. It may be due to high proportion of tribal population. The states have been found out that have recorded an increase in the level of unemployment and labour force participation rate e.g. West Bengal, Tripura, Punjab, Orissa, Nagaland, Jharkhand, Bihar and Assam. The notion of unemployment driven withdrawal from the work force has been proved in the context of above mentioned states. These states have been recorded an increase in the level of unemployment along with LFPR. And there has been found positive correlation between the unemployment rate and proportion of women marginal work to total workers. It can be inferred that if the suitable jobs are available for women in these states then women work force participation can be increased. Therefore, women are not withdrawing themselves from work force voluntary or due to patriarchal norms but due to unavailability of suitable jobs.

The factors influencing agriculture participation of women have been analysed by running multivariate regression. The independent variables like rural poverty, women literacy and share of marginal landholdings to total landholdings have been taken. Thus women literacy and marginal landholdings have negative impact on the agriculture participation of women.

However, agriculture work of rural women cannot be ignored; hence the notion of agriculture feminization has been discarded. Women WPR was 33.1 percent in 1977-78, agriculture participation 88.1 percent and women's share in agriculture employment 38.4 percent however, these reduced to 24.8 percent, 74.94 percent and 35.3 percent respectively. And proportion of women agriculture workers to total population in working age group has also declining from 40.9 percent in 2001 to 27.6 percent in 2011. Then how we can say that feminization of agriculture and rural work force is taking place at macro-level. But at micro-level, Sikkim seems to have experienced feminization of agriculture. The women work force from the non-agriculture activities like service, manufacturing, construction, wholesale and retail trade have withdrawn to join agriculture. Agriculture participation has increased dramatically from about 65 percent in 1993-94 to 85.2 percent in 2011-12.

5.2: Limitations of Work

This dissertation is totally based on the secondary data that has been taken from the Primary Census Abstract (PCA) and National sample Survey (NSS). Data from both the sources is not comparable due to definitional differences. However this dissertation provides the macro picture about the employment and unemployment situation of the country. Hence this work

cannot be applied on making any generalization at micro-level. The analysis has been made between the period 1993-94 to 2011-12 from the NSS and 1991-2011 from the Census. Therefore, it does not talk about the pre 1991 and post 2011 employment and unemployment situation. However, there are a number of definitional and conceptual differences between the Census and NSS but in this dissertation limited comparisons have been made in order to meet need of the study. It would need a detailed study to have complete comparison between the data sources.

5.3: Future Scope for Research

There is enough scope for further research especially dealing with the menace of unemployment in the country because there is no reliable source of information about the problem of unemployment. Various sources give entirely different scenario of problem. There is no similarity in the definition of worker, non-worker and unemployed. Therefore field survey can be better option to capture real picture. An interesting study can be done on the problem of unemployment among the students by conducting the primary surveys in central and states universities.

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Appendix:

A1: Sectoral Composition of Rural Work Force, 2011-12

	68th round Agriculture		Secondary		Tertiary	
	Male	Female	Male	Female	Male	Female
India	59.36	74.94	21.99	16.68	18.65	8.38
ANDHRA PRADESH	63.98	76.66	16	14.68	20.02	8.66
ARUNACHAL PRADESH	71.11	90.37	7.63	1.38	21.26	8.25
ASSAM	58.6	79.04	13.35	6.78	28.05	14.18
BIHAR	59.4	80.14	24.24	10.82	16.36	8.54
GUJARAT	69.92	85.55	14.97	8.7	15.11	5.75
HARYANA	50.5	86.02	28.65	8.38	20.85	5.6
HIMACHAL PRADESH	39.8	86.98	35.03	6.58	25.17	6.44
JAMMU & KASHMIR	35.9	85.05	38.25	9.3	25.85	5.65
KARNATAKA	65.92	79.37	15.61	11.38	18.47	9.25
KERALA	28.18	38.69	32.23	31.25	39.59	30.06
MADHYA PRADESH	75.22	85.12	14.53	10.65	10.25	4.24
MAHARASHTRA	69.74	89.12	14.86	5.37	15.4	5.51
MANIPUR	55.94	24.12	17.38	59.02	26.68	16.86
MEGHALAYA	60.8	73.62	14.69	6.31	24.51	20.07
MIZORAM	76.49	74.69	7.22	14.16	16.29	11.15
NAGALAND	68.72	90.17	5.74	3.83	25.54	6
ORISSA	59.26	69.31	22.49	22.96	18.25	7.73
PUNJAB	43.54	75.4	34.87	11.76	21.59	12.84
RAJASTHAN	49.91	77.39	32.77	17.4	17.32	5.21
SIKKIM	62.34	85.64	16.02	5.08	21.64	9.28
TAMIL NADU	51.6	50.59	25.79	39.47	22.61	9.94
TRIPURA	35.15	19.12	43.03	70.36	21.82	10.52
UTTAR PRADESH	49.59	86.43	27.64	8.5	22.76	5
WEST BENGAL	56.85	41.61	22.93	44.64	20.22	13.75

A2: Sectoral Composition of Rural Work Force, 1999-00

	55th round	Agriculture		Secondary		Tertiary
	Male	Female	male	Female	Male	Female
India	71.2	85.4	19.4	9	9.4	5.8
ANDHRA PRADESH	74.4	84.3	9.7	7.5	15.9	8.2
ARUNACHAL PRADESH	75.6	95.1	10	3.8	14.4	1.1

ASSAM	64.7	79.4	8.4	8.5	26.9	12.1
BIHAR	79	85.7	8.8	9.1	12.2	5.2
GUJARAT	71.4	92	14.1	4.4	14.5	3.6
HARYANA	59.6	92.1	19.8	2.8	20.6	5.1
HIMACHAL PRADESH	53.8	95.1	25.9	1.6	20.3	3.3
JAMMU & KASHMIR	66.9	93.5	15.3	4.1	17.8	2.4
KARNATAKA	78.9	87.8	8.3	6.7	12.8	5.5
KERALA	42.8	59.8	24.4	22.8	32.8	17.4
MADHYA PRADESH	84.2	91.6	6.6	5.7	9.2	2.7
MAHARASHTRA	73.8	93.9	11	3.1	15.2	3
MANIPUR	78	69.6	3.6	20.4	18.4	10
MEGHALAYA	86	87.3	4.8	0.6	9.2	12.1
MIZORAM	84	87.5	2.8	1.8	13.2	10.7
NAGALAND	70.5	91.9	3.4	0.6	26.1	7.5
ORISSA	77	80.4	10.3	14.9	12.7	4.7
PUNJAB	63.7	90.6	16.6	2.6	19.7	6.8
RAJASTHAN	67.3	91.9	19.5	5.8	13	2.3
SIKKIM	56.9	70.1	12.1	4.9	31	25
TAMIL NADU	62.2	75.9	20.5	16.1	17.3	8
TRIPURA	45.3	49.1	12.1	10.9	42.6	40
UTTAR PRADESH	71.8	87.5	13.1	6.9	15.1	5.6
WEST BENGAL	66.4	54.1	14.1	36.5	19.5	9.4

A3: Sectoral composition of Rural Work Force, 1993-94

	Agriculture 50th round 1993-94		Secondary		Tertiary	
	Male	Female	Male	Female	Male	Female
India	74.1	86.2	11.2	8.4	14.7	5.4
ANDHRA PRADESH	75.6	83.7	10.1	8.5	10.7	7.8
ARUNACHAL PRADESH	79.2	96.2	5.8	2.4	15	1.4
ASSAM	78.2	83.2	3.5	8.8	18.3	8
BIHAR	82	91.9	5.8	4.1	12.2	4
GUJARAT	71.1	90.6	16.2	5.7	12.7	3.7
HARYANA	60.9	93.2	13	1.8	26.1	5
HIMACHAL PRADESH	65.8	95.5	18.2	2.2	16	2.3
JAMMU & KASHMIR	61.3	95.4	17.7	1.7	21	2.9
KARNATAKA	78.8	84.6	8.7	10.1	12.5	5.3
KERALA	53.2	63	19.6	21.8	27.2	15.2
MADHYA PRADESH	87.2	93.9	6.1	4.5	6.7	1.6
MAHARASHTRA	75.3	91.2	10.8	4.4	13.9	4.4

MANIPUR	66	60.3	8.2	27	25.8	12.7
MEGHALAYA	82.5	90.5	4.3	2.1	13.2	7.4
MIZORAM	86.6	93.4	2.6	0.4	10.8	6.2
NAGALAND	68.5	89.3	3.5	1.4	28	9.3
ORISSA	78.7	85	9.2	9.6	12.1	5.4
PUNJAB	68.1	92.7	12.4	1.4	19.5	5.9
RAJASTHAN	69.6	93	18.6	4.9	11.8	2.1
SIKKIM	56.7	65.7	11	10.7	32.3	23.6
TAMIL NADU	64	78.5	17.3	16.6	18.7	4.9
TRIPURA	45.5	56.6	11.8	14.5	42.7	28.9
UTTAR PRADESH	76.3	90	10	4.9	13.7	5.1
WEST BENGAL	64.7	58.9	14.7	31.8	20.6	9.3