The Academic
International Journal of Multidisciplinary Research

An Online Peer Reviewed / Refereed Journal
Volume 4 | Issue 10 | October 2026
ISSN: 2583-973X (Online), SJIF IF(2026): 5.6
Website: www.theacademic.in

An Analysis of Employment Trends in Agriculture sector of Rural Odisha and Other States: A Comparison

Badal Swain

Lecturer In Economics, Sarala Mohavidyalaya, Rahama, J.S.Pur,Odisha

Email-Badalswainjsp@Gmail.Com

DOI : https://doi.org/10.5281/zenodo.24492638

ARTICLE DETAILS

Research Paper

Received: 01-11-2026

Accepted: 08-11-2026

Published: 20-11-2026

Keywords:

Employment, Rural area ,Odisha ,Agriculture sector,Work Force,Trend.

ABSTRACT

Agricultural sector is an important sector in Indian Economy because around it contributes 18% of GVA and around 45% of the employment in the economy. It is observed that in Indian economy the employment in agricultural activity has a declining trend. Here the following paper is based on the secondary data collected from various reports of NSSO rounds such as (50th NSSO ROUND, 52th NSSO ROUND ,53th ,54th, 55th ,59th NSSO ROUND ,60th ,61th ,62th NSSO ROUND,64th ,66th and 68th round)and PLFS (Such as PLFS 1,PLFS 2,PLFS 3 and PLFS 4). So in the following study it is analyzed that the magnitude of decrease of employment in agricultural sector in rural area of across several major states. And it is found that the employment in agricultural sector in rural area of Andhra Pradesh and Madhya Pradesh n shows a less declining trend than other states. In Odisha it is found a sharp declining trend in employment of agricultural sector in Odisha. And the study also finds that West Bengal has the highest 79.2% of labour force engaged in the farming or agriculture sector in its rural area whereas Punjab has a lowest 49.3% of human resource engaged in the farming sector in countryside or in the rural area.

INTRODUCTION

Disclaimer: The opinions, interpretations, conclusions, recommendations, analyses, and statements expressed in this research article are solely those of the author(s) and do not reflect the views, policies, or positions of the Publisher, Chief Editor, Editors, Editorial Board, Reviewers, or their affiliated institutions. The author(s) are solely responsible for ensuring the originality, authenticity, and integrity of the manuscript and for ensuring that it is free from plagiarism, AI-generated content, copyright infringement, data falsification, and any other form of academic misconduct.

Agriculture is the practice of cultivating plants and livestock and it was the key element of development human civilization. Over one-third of worlds worker are employed in agriculture and in India agriculture sector also provides employment to major portion of rural people. India is global agriculture product power house. This is because of India's climatic condition. India is the world's biggest producer of various pulses and milk ,different spices as well as largest area under cultivation of wheat , rice along with cotton. Which indicating in Indian economy agriculture sector has an important role . Odisha‘s economy is also an agriculture based economy as it provides major financial support and employment opportunity to rural people of odisha.

Over one-third of world’s workers are employed in agriculture. IN India agriculture sector provided employment to around 43.45 % workers (23.27 cores). (ES 2021) .The figures are 61.4 % and 22.3 cores out of a total 36.3 cores in rural areas of the country. (ES 2021) .In Odisha 44.1 % workers were in agriculture in the year 2020 (OES 2021) .

Crop production represented the largest slice of the nation’s agricultural sector at nearly 54% employed in 2018 and with employment over175000 .The fruit and tea nut farming industry had the most employment in the crop production .in fact , this industry also had the highest employment within the agricultural sector .

For some countries the average long term trend in an agriculture labor force declining by about 3-4 % per year ,this is because in agriculture sector there is increasing labor saving technology such as combine harvesters , tractors ,milling machines etc. due to this farm employment is reduced massively. The shift in employment structure in the economy away from agriculture is very significant with sharp change in subsectors.

MOTIVATION

Agriculture is the most important foundation of global economy and most of developing countries larger rural population depends on it. Similarly , Odisha‘s major rural population also depends upon agriculture for their livelihood. So it motivated us to study the employment trend of this sector for Odisha’

OBJECTIVES

In this study I have taken two objectives such as 1.To study the trends of employment in agricultural sector of rural Odisha and 2.To compare the employment in agricultural sector of rural Odisha and other selective states.

RESEARCH QUESTION

Here we have two research questions that is 1 . Has the share of agricultural employment been falling over the recent years? 2. If yes , Whether the pattern is uniform across the selected states? By taking these objectives we have analyzed the data.

REVIEW OF LITERATURE

Nurkse (1953) The paper reflects that lowly turnip made possible a change in crop rotation which did not require much capital, but which brought about a tremendous rise in agricultural productivity. As a result, more food could be grown with much less manpower. Manpower was released for capital construction. The growth of industry would not have been possible without the turnip and other improvements in agriculture.

Lewis (1954) This paper shows that one of the senses in which industrialization is dependent upon agricultural improvement; it is not profitable to produce a growing volume of manufactures unless agricultural production is growing simultaneously. This is also why industrial and agrarian revolutions always go together, and why economies in which agriculture is stagnant do not show industrial development.

Lipton (1975) it is discussed in the paper that, legislation aimed at limiting workers' portability, like a Natives Urban Areas Act of 1923 under this law , the Africans's people ability to get an employment in the metropolitan areas, was another major reason for promoting labour readiness to white agriculture was controlled and restricted.

Daly (1981) had explained in his study on "Agricultural employment: has decline ended ?"to explore the importance and contribution of agriculture sector in employment generation .The study used secondary data collected from various sources and the author uses percentage method compare data. He found that by adoption of new technology the output of individual producers rises as a result prices of agricultural output fall considerably. Hence the profit also reduced out of business and some workers move to other non-farm sector.

Klerk & Mike (1984) it is depicted in the paper, because of the varying nature of cereal cultivation and cultivation in the Western Transvaal area during late 1960s to early 1980s time period, showed in great pattern of acceptance of new mechanical equipment's and technologies like tractors and harvester and what this meant for agricultural workers and labourers in terms of the varying nature of the work they were anticipated to perform, the numbers and types of labourers required and the real wages, so on.

Booth &Sundrum (1985) paper shows that, during the starting period of technological innovation and its acceptance is associated with rise in the demand for labourers in farming sector but later with more innovation and technological advancement reduced that labour demand once further.

Murphy (1987) had examined in their study on "Employment in agriculture" to study the relation between agriculture sector and employment in European countries and why share of agricultural employment declining in these countries. The study based secondary data and the source is employment and unemployment ,statistical office of the European union communities ,luxenburg and he used pooled data ,which shows the number of employed in agricultural sector of selected European union countries from 1960 to 1985.He found in European countries, the labour force employment from 1960 to 1985 explained declines averaging about 3-4 % per each year in the form of unorganised as agriculture as their main occupation. An additional factor forcing reduction in agricultural employment is cost price squeeze in long run. Use of labour-saving technology on other case of reduction in agricultural employment.

Chadha & Khurana (1989) had examined in their study on "Backward Agriculture, Unrewarded Labour and Economic Deprivation: Bihar's Contrast with Punjab" . To study employment structure of the rural labour household especially in Punjab and Bihar region and to examined the effect of green revolution in different Indian states particularly in Bihar and Punjab. This study was based on household level data (primary data) which was collected from a villages each of Bihar as well as Punjab. Here the author used purposive sampling a type of non-random Sampling as data collection method . Here 300 samples were collected. He found that In Punjab due to green revolution there is a huge rise in employment under various of non-farm activity. And Non-farm employment available in Punjab is for more superior than Bihar. In this way Low productive employment is quite widespread in Bihar and On Farm employment dominates both the states.

Marcus (1989) in his study , he found one crucial point that workforce oppression did not end with the shift in commercial farming and adoption of greater technology intensive technique and not with the elimination of the pass laws and other racially based pieces of legislation and law . Rather, part and parcel of this shift was due to change in the "union of the labour force", where more exposed groups have been increasingly drawn upon to perform various farm work, which includes migrants worker, women, criminal and children, . The reason for this shift in employment is to maintain a relatively docile, immobile workforce, in other words, the nature of the repression changed in order to adopt with the emerging situation and surroundings.

BHALLA (1989) The paper shows that, the rate of growth of non-farming output is normally at least twice and doubled as compared to the rate of growth of non- farming labour employment. And in Indian

agriculture was thrown back on yield increases and the extension of double cropping as the major potential sources of employment growth. Paper also reveals that the limited opportunities for non-farm employment, together with the marked deceleration in the extension of net sown area, were reflected in the continuous deteriorating of land to man ratios, and the spread of sub-marginal uneconomic activity. Income and asset redistribution programmes do not work effectively in rural areas, and that there is now very little scope for redistributing land in any case, most of these people are going to be forced into wage paid work, much of it casual and in the unorganised sector.The study found that most unorganised workers are rural workers, not only in agriculture, but also in non-agriculture

Kurian (1990) Conducted a study on "Employment Potential in Rural India: An Analysis" to To explore the potential employment in countryside areas with main emphasis on agriculture and different allied activities. Here the study is based on secondary time series data. Here the source is the 7th five year plan report and the report of NSSO and some data is used from the 1981 census and he found that there is a sharp fall in the share of labourers employed in agricultural activity.

Payne et al. (1990) paper shows that how the introduction of new and modern technology like tractors helped farmers to rapidly expand the area under cultivation, which initially had increase the demand for labour by farms, but later that technology displaced labour employment.

Thirtle & et al. (1995) it is found in the paper that the labour-saving, capital-using nature of technological change in South African agricultural farm is largely because of the , a sharp rise in the labour cost or wage which support the induced innovation hypothesis(John Hicks 1932).

Newman & et al. (1997) in his paper, "Farm Labour Remuneration, Labour Legislation and Commercial Farmers' he found Increased costs can be attributed to hiring more employees as a result of reduced work time by individual workers. In addition, the cost of overtime and weekend/holiday pay resulted in increased labour costs. With rise in the labour costs were also a result of the costs of transacting business due to maintenance of labour records and settlement of various wage disputes.

Torres (1998) The literature points to the Zimbabwe experience, where the number of workers employed on large scale commercial farms declined from 215 000 in 1980 to 165 000 by 1996.

Sidhu & Singh (2004) make a study on "agricultural wages and employment ",To study the impact of technology in agricultural employment in Punjab with reference to paddy and wheat production and To analyses the pattern of employment for wheat and rice. Here the study based on secondary data which is collected from 'Comprehensive Scheme Cultivation of principal crops in Punjab ,reports of agricultural cost

and price etc. Here author uses regression analysis and adjusted R^2 to analyse the data .He found that the adoption of new and modern technology causes a steady and rapid decline in demand for labour particularly in Punjab state during 1980's.

Jha (2006) It is depicted in this paper that in all the states, except Karnataka, in all other states the agricultural income growth is less than compared to the country average. Same for the state like Maharashtra also escaped from disadvantaged group as in Maharashtra during 80s the agricultural growth is very high and subsistence with a moderate growth rate (as compared to less than the country average) but during 90s is not less credible. From these two state , one can conclude that the pull in agriculture has attracted countryside labourers in the respective sector. In Andhra Pradesh and Orissa,due lackn of non farm activity during that period forced the workers to work in agriculture sector. But the push factor becomes more relevant due to low growth of agriculture earning Andhra Pradesh with negative growth of agriculture in Orissa during the 90s.The paper shows that In forestry, the main cause for a adverse employment growth during the 90s may be because of a sharp fall in the forest area in the country as well as the states during the same time period. For many decades now, the country and the various states of the country have seen an overall trend of fall in forest areas coverage , but what made the 1980s unique was that there were social forestry projects and employment generation in the forestry sector. There has been falling in the profit from some trees like poplar tree and eucalyptus tree, and this caused the area to decrease in these types of trees.

Rajni (2007) Paper shows that, an interconnected transactions raised in Meerut village. The Dudhiyas people are adopting a very strict policy of lending of money in the Meerut area so as to keep those village laborers in a dependent relationship with Dudhiyas, they provide credit to villagers for other purposes as well. But After the demise of the labor households have to repay their loan, they are bound to take loans for another purchase of animal. Because land is divided into numerous fragmented pieces, which makes managing very challenging, **landlord mainly lease heir land**. Furthermore, leasing also enables access to labour from tenant households whenever necessary. All the lessors belong to the Bhumihar caste, which holds a sizeable amount of land in the villages studied. Lessees generally come from the Ahir, Mallah, Kumbhar, and Chamar castes, who belong to a lower rung in the hierarchy compared to the Bhumihars. Paddy farming involves leasing out the land to labour households through sharecropping due to the difficulty in accessing casual labour for such crops. Since most of the tenancy operations take place between the cultivators and labour households, the relationship between tenancy and labour is rather weak. In Meerut, the hiring of group labourers is more organized than the hiring of migrants and casual labourers.

Heady et al. **(2010)** the paper shows that, in most of the Asian nations with rise in income of $1,000 per capita cause only10-point rise in the urban population share. The largest African i.e Nigeria, most of the people in the country depends on agriculture from past 40 years , despite of no significant GDP growth Indeed, Nigeria's real GDP per capita fell by about $300 from 1960 to 2000, but at the same time the proportion of non-agricultural workers among the work force rose by nearly 40 percentage points . But most of the Asian nations has achieved tremendous growth and poverty alleviation with little urbanization, mostly because of rapid agricultural growth and spatially dispersed industry activity. The ability of Asian agriculture to provide rural subsistence has declined largely in the last few decades, and there are good reasons for believing that meeting the need for an increase in employment opportunities beyond Asia's agriculture will not be easy.

Foster (2011) the impact of **agricultural technology growth** on the **nonfarm sector** is intricate, with even minor differences in theoretical models producing widely varied conclusions. Specifically, improvements in agricultural productivity tend to **boost nonfarm service activities** by raising demand for local products, **reduce factory sector activity** by driving up wages and discouraging new capital investment, and **expand the value-added sector** by decreasing the cost of essential inputs.

Merhotra et al. (2014) in their paper "tried to Explaining Employment Trends in the Indian Economy". This study was based on various secondary data which is collected from NSS and UN-database. The author used regression as a tool for trend analysis. And %as tool for comparing the data.The major findings include absolute reduction in farm employment and a sharp rise in non-farm employment due to increase in spread of the education which reduced child labour. Mechanisation of agriculture appreciates the standard of living in rural areas due to increase in wage which also reduce the demand of work force in agriculture and farm sector.

Ding & et al. (2016) the study "Employment and Agriculture: A Review of the Eleventh Forum of the World Association for Political Economy" explored how economic integration has affected agriculture and employment in Asian and South Asian countries. The research found that inexpensive imports from developed countries harm agricultural growth and job opportunities in developing Asian nations. While globalization has enabled these countries to boost export earnings by selling more agricultural products abroad—resulting in some job growth in export sectors—the overall rise in employment has been less than anticipated.

METHODOLOGY

This study is based on various secondary data which is collected from different NSSO rounds such as (50th NSSO round, 52th NSSO round ,53th NSSO round ,54th NSSO round NSSO round, 55th NSSO round ,59th NSSO round ,60th NSSO round ,61th NSSO round,62th NSSO round,64th NSSO round ,66th NSSO round ,68th NSSO round)and from different PLFS (like PLFS 1,PLFS 2,PLFS 3,PLFS 4). In order to analyze the data we have used descriptive statistics such as bar diagram ,trend line etc.in this study data collected from 1993 to 2021 .

DATA ANALYSIS

ODISHA EMPLOYEMNT SHARE			
Year	**Share of Agricultural Employment**	**Year**	**Share of Agricultural Employment**
1993-94	80.9	***2007-08***	73.2
1994-95	78.6	***2008-09***	70.4
1995-96	77.8	***2009-10***	67.6
1996-97	86.5	***20010-11***	64.9
1997-98	78	***2011-12***	62.2
1998-99	78	***2012-13***	63.6
1999-2000	78	***2013-14***	62.9
2000-01	72.7	***2014-15***	63.2
2001-02	75.4	***2015-16***	63.0
2002-03	73.4	***2016-17***	58.5
2003-04	71.2	***2017-18***	53.9
2004-05	69	***2019-20***	53.3

2005-06	72.1	***2020-21***	49.6
2006-07	72.7		

Table 1.1

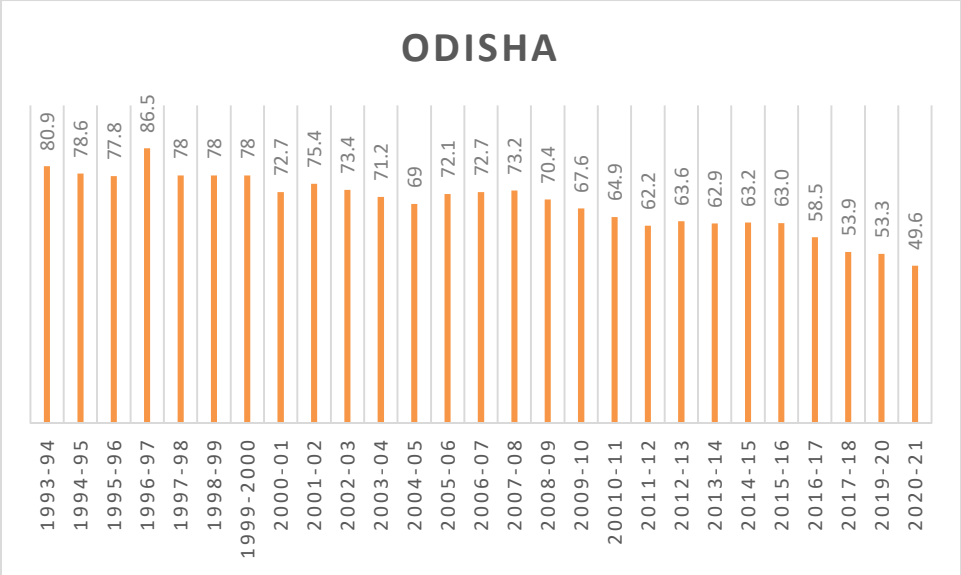

Figure 1.1

The above box bar diagram shows the trend of agricultural employment in rural odisha from 1993 to 2021 and it is clearly shows downward trend of agricultural employment in Odisha .In 1993 approximately 81% of employment in rural area was employed in agriculture sector for their livelihood but gradually it decreased to approxmately 50%'

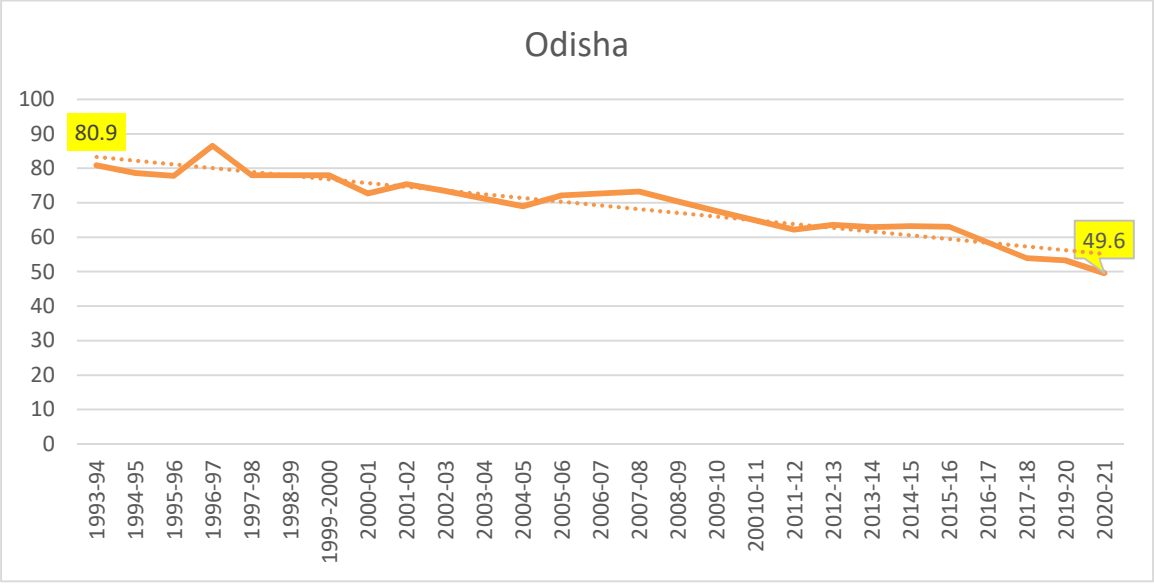

Figure 1.2

In Odisha there is a decreasing trend in employment in agricultural and farm sector in rural area of Odisha is obtained. The share of employment in agricultural sector in rural Odisha decreases from 80.9% in 1993-94 to 49.6% in 2020-21. There is a significant decreases of 31.3% in employment in agricultural sector in Odisha. It states that there is a significant portion of people those earlier employed in agriculture sector diversified to other sector. Diversification indicates the agricultural sector is not remained profitable any more as time passes.

Share of Agricultural Employment of Different States				
State	**1993-2000**	**2000-07**	**2007-14**	**2014-21**
Andhra Pradesh	80.6	73.3	69.9	64.2
Assam	74	72.9	66.7	52.8
Bihar	82.6	79.8	69.5	57.2
Chhattisgarh		88.1	86.2	76.4
Jharkhand		68.6	60.3	55.8
Madhya Pradesh	88.6	84.3	78.2	73.4
Odisha	79.6	72.3	66.4	56.9
Punjab	70.5	63.9	57.8	45.3
Rajasthan	79.2	73.4	64.0	61.9
Uttarakhand			65.1	59.7
Uttar Pradesh	78.5	74.3	67.0	63.1
West Bengal	67	59.5	55.3	79.7

Table 1.2



Figure 1.3

The above bar digram shows the comparative declining share of agriculture employment of some selective states and its is clearly visible that almost in every state the share of agricultural employment is declining .In 1993 ,approxmately 80 % labour force in odisha and Andrapradesh were engaged in agriculture sector,which is now reduced to less than 60% but the declining rate in case of odisha is much faster than that of AP. During 2014-2021 in West Bengal 79.7 % of rural worker were engaged in agriculture sector whanich is maximum ,in the same period in Punjab 49.3% of worker were engaged in the same sector which is minimum but in Odisha 56.9% were engaged in agriculture sector.

The pictorial representation indicates that the share of employment in agricultural sector in rural areas of the several major states of India.

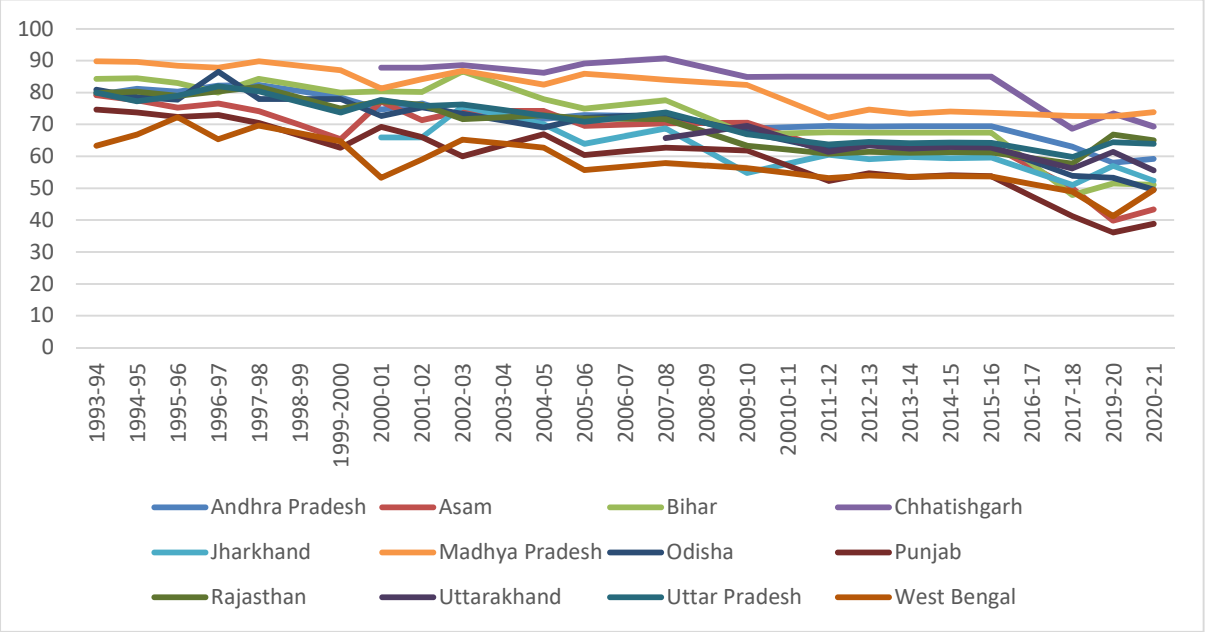

Figure 1.4

The above figure shows trend line of all selected states and it is clearly visible that in every state the share of employment in agriculture sector in rural area is continuously falling.

ANDHRA PRADESH EMPLOYEMNT SHARE			
YEAR	EMPLOYEMNT SHARE	**YEAR**	EMPLOYEMNT SHARE
1993-94	79.3	**2007-08**	72.6
1994-95	81.2	**2008-09**	70.7
1995-96	80.3	**2009-10**	68.7
1996-97	82.2	**20010-11**	69.1
1997-98	82.4	**2011-12**	69.5
1998-99	80.5	**2012-13**	69.3
1999-2000	78.5	**2013-14**	69.4
2000-01	74.7	**2014-15**	69.4

2001-02	76.6	**2015-16**	69.4
2002-03	72.6	**2016-17**	66.2
2003-04	72.2	**2017-18**	63.0
2004-05	71.8	**2019-20**	58.0
2005-06	73	**2020-21**	59.2
2006-07	72.8		

Table 1.3

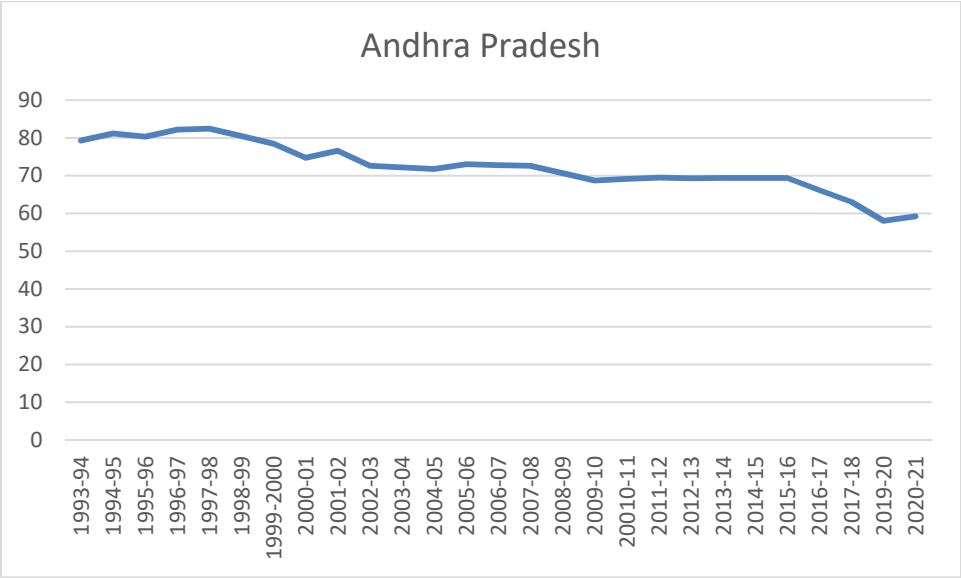

Figure 1.5

In Andhra Pradesh there is a stable trend is obtained which did not fluctuate so much in share of agricultural employment in rural area. But after the 2015-16 it is obtained a relatively more declining trend in share of agricultural employment comparing to the year before 2015-16. Still it is very high around 60% of the workforce involved in the agricultural activity.

ASSAM EMPLOYEMNT SHARE

YEAR	EMPLOYEMNT SHARE	YEAR	EMPLOYEMNT SHARE
1993-94	79.2	**2007-08**	70.3
1994-95	77.6	**2008-09**	70.4
1995-96	75.3	**2009-10**	70.5
1996-97	76.6	**20010-11**	66.3
1997-98	74.2	**2011-12**	62.0
1998-99	69.8	**2012-13**	64.1
1999-2000	65.3	**2013-14**	63.1
2000-01	77.2	**2014-15**	63.6
2001-02	71.3	**2015-16**	63.4
2002-03	74.2	**2016-17**	56.7
2003-04	74.3	**2017-18**	50.0
2004-05	74.3	**2019-20**	39.8
2005-06	69.5	**2020-21**	43.3
2006-07	69.9		

Table 1.4

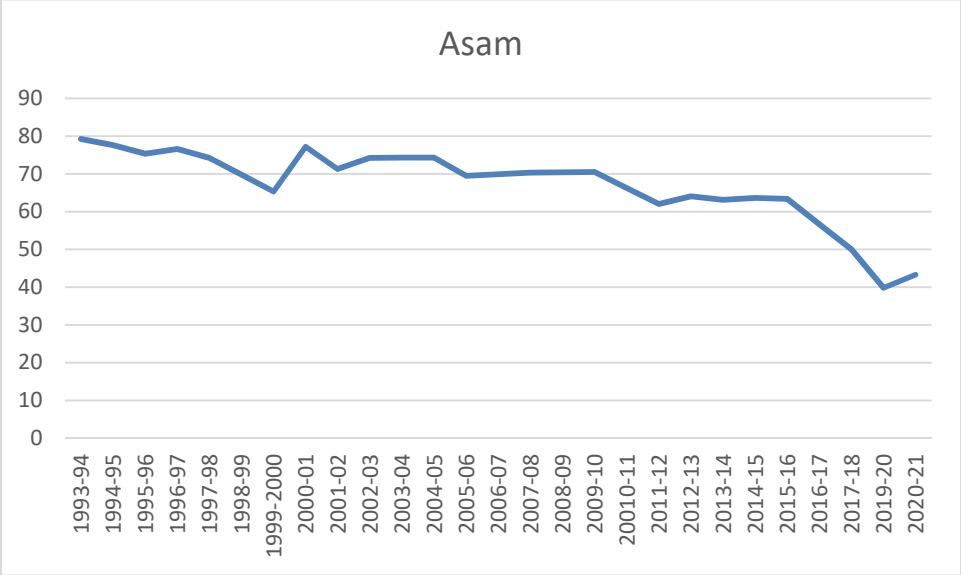

Figure 1.6

In Asam there is a declining trend of share of agricultural employment in rural area. The employment declines from 79.2% in 1993-94 to 43.3% in 2020-21. There is a significant diversification of 35.9% employment from agricultural activity is observed. The dependency of agricultural of workforce of rural area declines significantly in rural area of Asam. From 2015-16 to 2020-21 the rate of declining of share of employment in agricultural sector is more than before .

Share of agricultural employment in rural Bihar from 1993 to 2021

BIHAR EMPLOYEMNT SHARE			
YEAR	EMPLOYEMNT SHARE	YEAR	EMPLOYEMNT SHARE
1993-94	84.3	**2007-08**	77.6
1994-95	84.5	**2008-09**	72.3
1995-96	83	**2009-10**	66.9
1996-97	80	**20010-11**	67.2
1997-98	84.3	**2011-12**	67.5

1998-99	82.2	**2012-13**	67.4
1999-2000	80	**2013-14**	67.4
2000-01	80.4	**2014-15**	67.4
2001-02	80.2	**2015-16**	67.4
2002-03	86.6	**2016-17**	57.7
2003-04	82.3	**2017-18**	47.9
2004-05	77.9	**2019-20**	51.5
2005-06	75	**2020-21**	51.1
2006-07	76.3		

Table 1.5

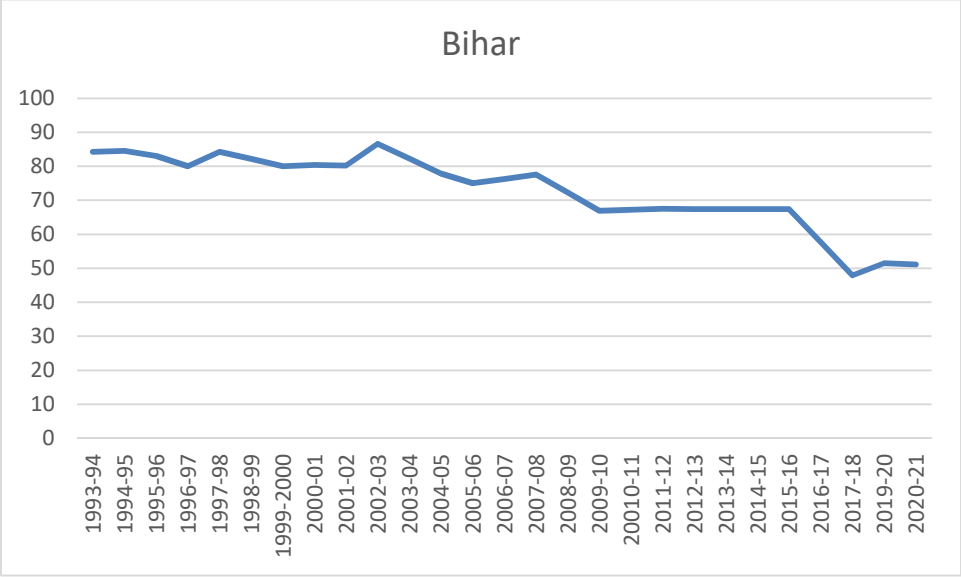

Figure 1.7

In Bihar there is a slowly declining trend of share of employment of agricultural sector in rural area is obtained from 1993-94 to 2008-09. From 2008-09 to 2015-16 the share of agricultural employment in Bihar remain same. After 2015-16 there is a sharp declining trend is observed. Still about 50% of workforce depends upon the agriculture sector in rural area for their livelihood. In the period of 27 year of observation 33.2% of workforce diversify from agriculture sector to other sector for their livelihood. It indicates either

the agricultural activity is not so profitable or there is improvement in other sectors like industry and service sector in creating the employment.

CHHATISGARH EMPLOYEMNT SHARE			
YEAR	EMPLOYEMNT SHARE	**YEAR**	EMPLOYEMNT SHARE
1993-94		**2007-08**	90.7
1994-95		**2008-09**	87.8
1995-96		**2009-10**	84.9
1996-97		**20010-11**	85
1997-98		**2011-12**	85.0
1998-99		**2012-13**	85
1999-2000		**2013-14**	85.0
2000-01	87.8	**2014-15**	85
2001-02	87.8	**2015-16**	85.0
2002-03	88.6	**2016-17**	76.8
2003-04	87.4	**2017-18**	68.6
2004-05	86.2	**2019-20**	73.5
2005-06	89.1	**2020-21**	69.3
2006-07	89.9		

Table 1.6

Share of agricultutal employment in rural Chhattisgarh

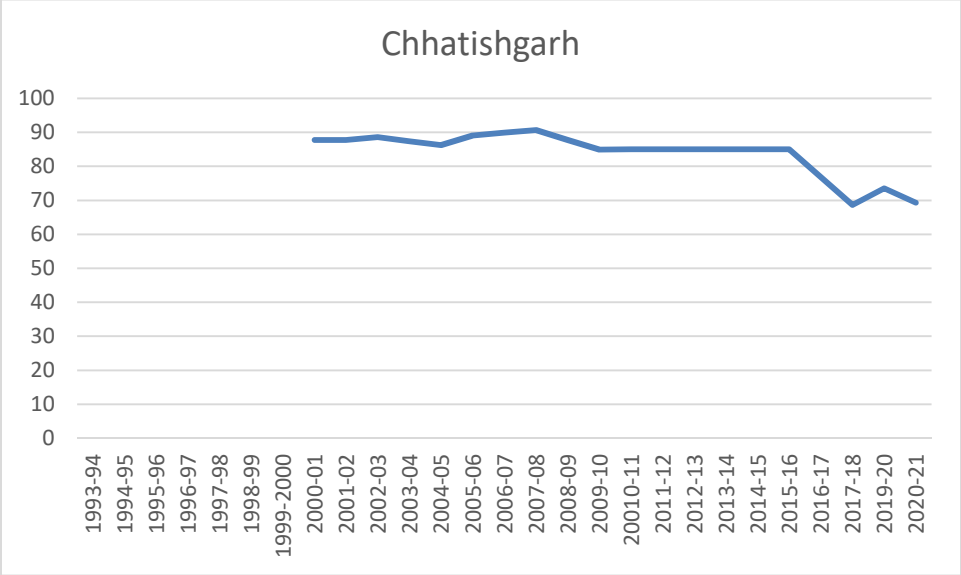

Figure 1.8

In Chhattisgarh there is a stable trend of share of agricultural employment in rural area is obtained from 2000-01 to 2014-15. After 2014-15 there is a declining trend is observed. The share of employment in agricultural sector in Chhattisgarh fluctuates in between 70% to 90%. The trend defines the workforce of rural area of the Chhattisgarh is heavily depends upon the agriculture for their livelihood.

JHARKHAND EMPLOYEMNT SHARE			
YEAR	EMPLOYEMNT SHARE	**YEAR**	EMPLOYEMNT SHARE
1993-94		**2007-08**	68.7
1994-95		**2008-09**	61.8
1995-96		**2009-10**	54.8
1996-97		**20010-11**	57.7
1997-98		**2011-12**	60.5
1998-99		**2012-13**	59.1

1999-2000		**2013-14**	59.8
2000-01	65.9	**2014-15**	59.4
2001-02	65.9	**2015-16**	59.6
2002-03	75.7	**2016-17**	55.3
2003-04	72.9	**2017-18**	51.0
2004-05	70	**2019-20**	57.0
2005-06	63.9	**2020-21**	52.4
2006-07	66.3		

Table 1.7

Share of agricultutal employment in rural Jharkhand

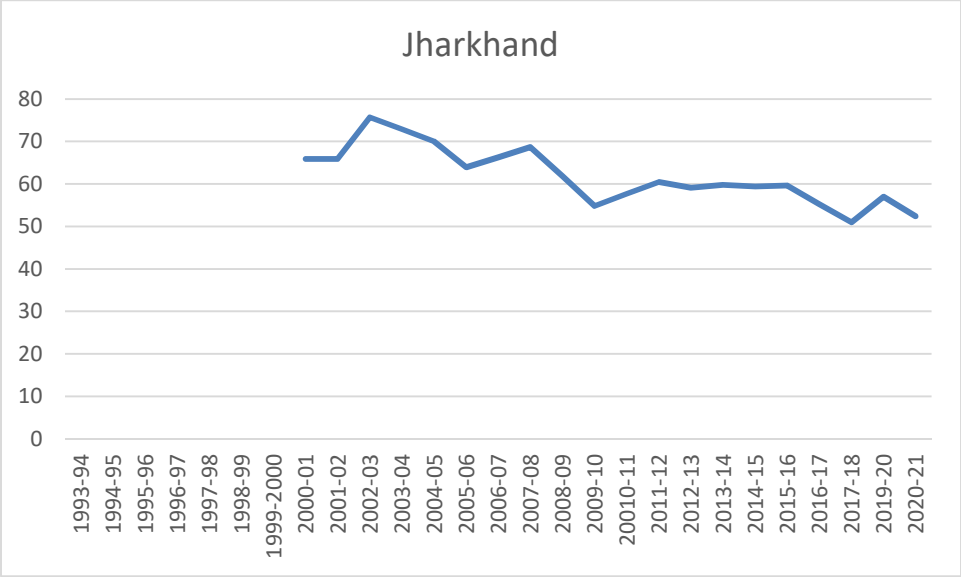

Figure 1.9

In Jharkhand it is obtained a fluctuated trend in between 75.7% in 1999-2000 to 52.4% in 2020-21. Sometimes the share of agricultural employment increases and sometimes it decreases, but the overall trend shows there is a fall in the share of agricultural employment in rural area of Jharkhand. Though there is a declining trend is obtained but still the contribution of employment of Jharkhand in agricultural sector in rural area is so significant.

MADHYA PRADESH EMPLOYEMNT SHARE			
YEAR	EMPLOYEMNT SHARE	**YEAR**	EMPLOYEMNT SHARE
1993-94	89.8	**2007-08**	84
1994-95	89.6	**2008-09**	83.2
1995-96	88.4	**2009-10**	82.4
1996-97	87.8	**20010-11**	77.3
1997-98	89.8	**2011-12**	72.1
1998-99	88.4	**2012-13**	74.7
1999-2000	87	**2013-14**	73.4
2000-01	81.3	**2014-15**	74.1
2001-02	84.2	**2015-16**	73.7
2002-03	86.8	**2016-17**	73.2
2003-04	84.7	**2017-18**	72.7
2004-05	82.5	**2019-20**	72.6
2005-06	85.9	**2020-21**	73.9
2006-07	85		

Table 1.8

Share of agricultutal employment in rural MP

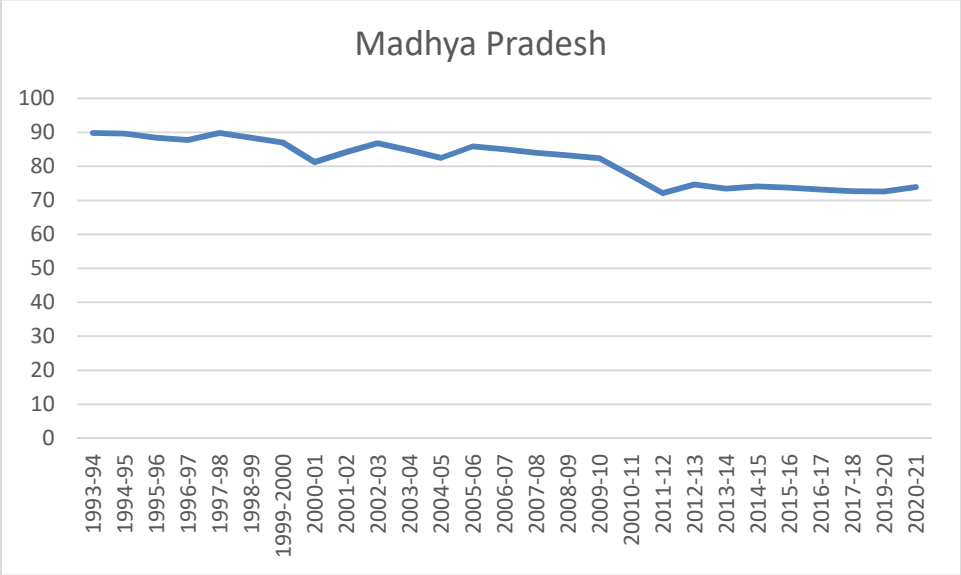

Figure 1.10

Initially in 1993-94 the share of employment in agricultural sector in rural area of Madhya Pradesh was extremely high of 89.8% whereas after 27 year the share declines only to 73.9% in 2020-21. The share of employment in agricultural sector only declines by 15.7%. In Madhya Pradesh the diversification of employment towards other sector in rural area is not so significant. In the rural area of Madhya Pradesh a large portion of the work force still depends upon the agricultural activity.

PUNJAN EMPLOYEMNT SHARE			
YEAR	EMPLOYEMNT SHARE	YEAR	EMPLOYEMNT SHARE
1993-94	74.7	**2007-08**	62.7
1994-95	73.8	**2008-09**	62.3
1995-96	72.4	**2009-10**	61.8
1996-97	73	**20010-11**	57.1
1997-98	70.4	**2011-12**	52.3
1998-99	66.6	**2012-13**	54.7

1999-2000	62.7	**2013-14**	53.5
2000-01	69.2	**2014-15**	54.1
2001-02	66	**2015-16**	53.8
2002-03	60	**2016-17**	47.5
2003-04	63.5	**2017-18**	41.2
2004-05	66.9	**2019-20**	36.1
2005-06	60.4	**2020-21**	38.8
2006-07	61.6		

Table 1.9

Share of agricultutal employment in rural Punjab

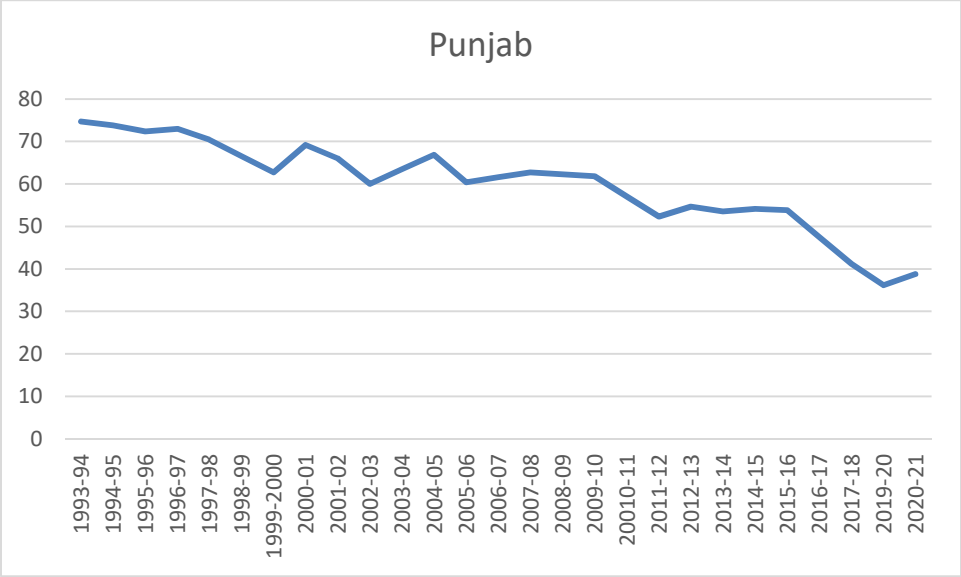

Figure 1.11

In earlier stage of the time period taken into account in this paper the contribution of employment opportunity in the economy is contributed by the agricultural sector in rural area of Punjab. But after a time lapse it is obtained a significant decline in the share of the employment in agricultural sector in rural area of Punjab. Share of agricultural employment declines around 35.9% in rural area of Punjab.

RAJASTHAN EMPLOYEMNT SHARE			
YEAR	EMPLOYEMNT SHARE	YEAR	EMPLOYEMNT SHARE
1993-94	79.9	**2007-08**	71.7
1994-95	80.3	**2008-09**	67.5
1995-96	79	**2009-10**	63.3
1996-97	80.4	**20010-11**	62.1
1997-98	81.8	**2011-12**	60.8
1998-99	78.4	**2012-13**	61.4
1999-2000	75	**2013-14**	61.1
2000-01	77.3	**2014-15**	61.3
2001-02	76.2	**2015-16**	61.2
2002-03	71.6	**2016-17**	59.4
2003-04	72.3	**2017-18**	57.7
2004-05	72.9	**2019-20**	66.8
2005-06	71.9	**2020-21**	65.0
2006-07	71.8		

Share of agricultutal employment in rural Rajasthan

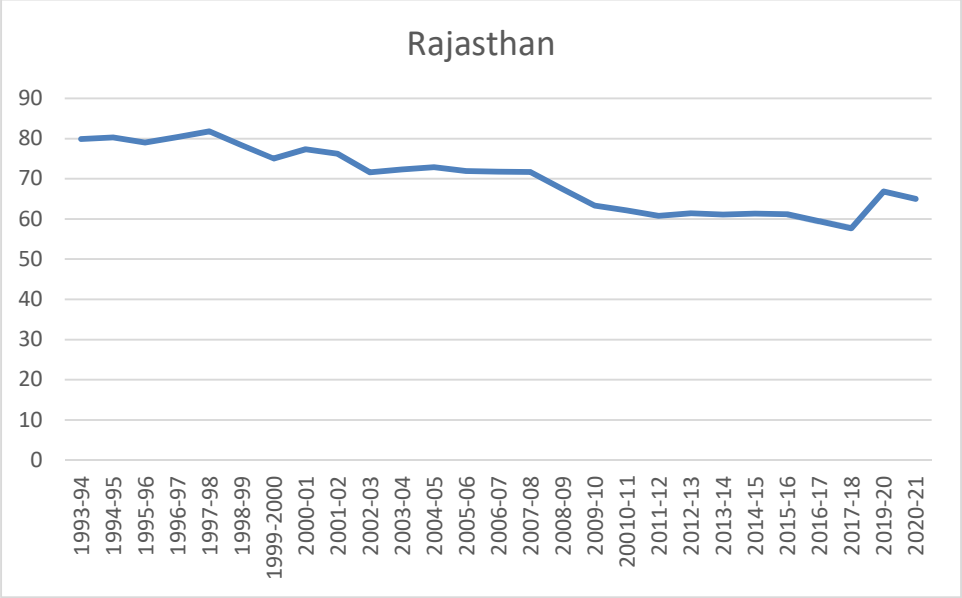

Figure 1.12

In Rajasthan there is a slowly declining trend in agricultural sector in rural area is obtained from 1993-94 to the 2017-18. And then after 2017-18 there have a upward trend in share of agricultural employment in rural area of Rajasthan. The fluctuation of share of trend of agricultural in rural area of Rajasthan is in between 80% to 60% in between the time period of 1993-94 to 2020-21. The pictorial presentation shows that there is a large portion of the share of workforce still stick into the agricultural activity.

UTTARAKHAND EMPLOYEMNT SHARE	
YEAR	EMPLOYEMNT SHARE
2007-08	65.7
2008-09	67.6
2009-10	69.5
20010-11	65.5
2011-12	61.4

2012-13	63.4
2013-14	62.4
2014-15	62.9
2015-16	62.7
2016-17	59.4
2017-18	56.2

Table 1.11

Share of agricultutal employment in rural Uttarakhand

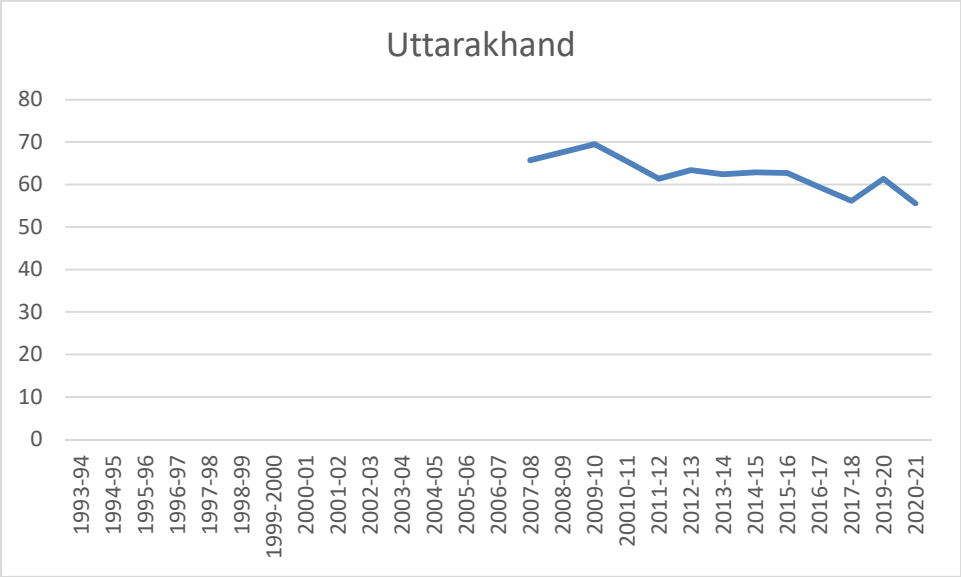

Figure 1.13

In Uttarakhand it is observed that the trend of employment in agricultural sector of rural area declines slowly but consistently. Some what it is a healthy sign that indicates that slowly the diversification of employment among other sector increases. Though the there is a declining trend exist in the trend of agricultural employment in rural area of Uttarakhand, but still a large chunk of people about 55% depends upon the agricultural sector.

UTTARPRADESH EMPLOYEMNT SHARE

YEAR	EMPLOYEMNT SHARE	YEAR	EMPLOYEMNT SHARE
1993-94	80	**2007-08**	73.8
1994-95	77.3	**2008-09**	70.4
1995-96	79	**2009-10**	66.9
1996-97	82	**20010-11**	65.3
1997-98	80.4	**2011-12**	63.7
1998-99	77.1	**2012-13**	64.5
1999-2000	73.8	**2013-14**	64.1
2000-01	77.7	**2014-15**	64.3
2001-02	75.8	**2015-16**	64.2
2002-03	76.3	**2016-17**	62
2003-04	74.6	**2017-18**	59.8
2004-05	72.8	**2019-20**	64.4
2005-06	70.8	**2020-21**	63.9
2006-07	72.3		

Table 1.12

Share of agricultutal employment in rural UP

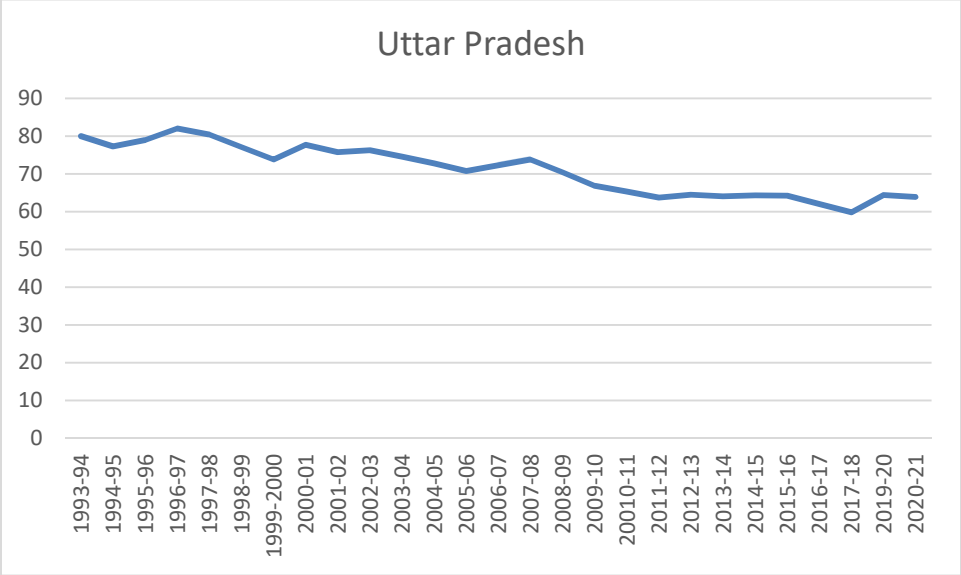

Figure 1.14

The pictorial diagram the employment in rural area of Uttar Pradesh declines from 80% to 70% in the agricultural sector. It indicates that a significant portion of the people still depends upon the agricultural sector. Some what it reflects the less diversification of employment is very insignificant among the other sector excluding agricultural Sector. And it also shows that till today in rural area of Uttar Pradesh agricultural sector provides a greater amount of livelihood to the people.

YEAR	West Bengal YEAR AND EMPLOYEMNT SHARE		EMPLOYEMNT SHARE
1993-94	63.3	**2007-08**	57.9
1994-95	66.8	**2008-09**	57.1
1995-96	72.3	**2009-10**	56.3
1996-97	65.3	**20010-11**	54.8
1997-98	69.6	**2011-12**	53.2
1998-99	67.2	**2012-13**	54

1999-2000	64.7	**2013-14**	53.6
2000-01	53.3	**2014-15**	53.8
2001-02	59	**2015-16**	53.7
2002-03	65.2	**2016-17**	51.3
2003-04	64	**2017-18**	49.0
2004-05	62.7	**2019-20**	41.2
2005-06	55.7	**2020-21**	49.5
2006-07	56.8		

Table 1.13

Share of agricultutal employment in rural WB

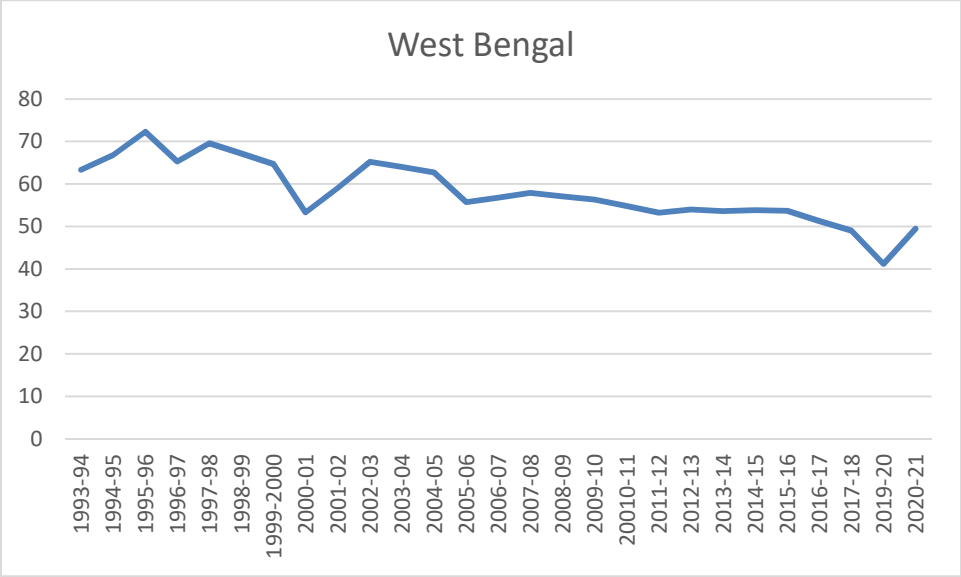

Figure 1.15

In West Bengal the trend of employment in agricultural sector in rural area shows a declining trend which varies in between highest ever 72.3% in 1995-96 and 41.2 % in 2019-20. The employment in rural area of West Bengal decreases around 31.1% in past 27 years. It reflects that the people diversify themselves from agricultural sector to other sectors for their livelihood. And it indicates that there is increase in the employment option in the other sector.

FINDINGS

In this study we have found that the share of agriculture employment is continuously falling and almost in each and every state the share of agricultural employment is declining in rural areas .In 1993 ,approximately 80 % of labor force in Odisha and Andhra Pradesh were engaged in agriculture sector, which is now reduced to less than 60% but the declining rate in case of Odisha is much faster than that of AP. During 2014-2021 in West Bengal 79.7 % of rural worker were engaged in agriculture sector which is maximum and in the same period in Punjab 49.3% of worker were engaged in the same sector which is least r but in Odisha 56.9% were engaged in agriculture sector.

LIMITATION OF THE STUDY

This study does not cover the employment share in agriculture sector of urban area due to data inconsistency.

REFERENCES

Daly, P. (1981): Agricultural employment: has the decline ended?, Monthly *Labor Review*, 104(11): 11-17

Murphy, J. A. (1987): Employment in Agriculture, *An Irish Quarterly Review*, 76(303): 326-332

Ding, X.,Qian, Y. & Tong, S. (1989):Globalization, Employment and Agriculture: A Review of the Eleventh Forum of the World Association for Political Economy, *World Review of Political Economy*, 7(4): 541-555

BHALLA, S. (1989): Employment in Indian Agriculture: Retrospect and Prospect, Social Scientist, 17, No. 5(6): 3-21

Kurian, N. J. (1990): Employment Potential in Rural India: An Analysis, *Economic and Political Weekly*, 25(52): 177-188

Rajni, V. (2007): Casual Labour Contracts of Agricultural Labourers in East and West Uttar Pradesh, Economic and Political Weekly, 42(2): 13-19

Heady et al.,(2010): Agricultural Employment Trends in Asia and Africa: Too Fast or Too Slow?, http://wbro.oxfordjournals.org/, 25:57–89

MEHROTRA, S., PARIDA, J., SIHNA, S., & GANDHI, A. (2014, August 9). Explaining Employment Trends in the Indian Economy. *Economic and Political Weekly*(49), 49-57.

Sidhu & Singh, (2004): Agricultural Wages and Employment, *Economic and Political Weekly*, 39(37): 11-17

Agri SA, 2000, "Sectoral Determination for the Agricultural Sector", unpublished paper.

Barrientos, S., 1999, "Women and Agribusiness: Working Miracles in the Chilean Fruit Export Sector", University of Hetifordshire.

Bhorat, H., 1999a, "Domestic and Farm Workers: The Policy Dilemma".

Bhorat, H., 1999b, "The Poorest of the Poor in South Africa's Labour Market" , mimeo.

Booth, A., and R. Sundrum, 1985, Labour Absorption in Agriculture, Oxford: Oxford University Press.

Bundy, C., 1979, The Rise and Fall of the South African Peasantry, Berkeley and Los Angeles: University of California Press.

Davenport, T., 1987, "Can Sacred Cows Be Culled? A Historical Review of Land Policy in South Africa with Some Questions About the Future", Development Southern Africa, 4(3).

de Klerk, Mike, 1984, "Seasons That Will Never Return: The Impact of Farm Mechanization on Employment, Incomes and Population Distribution", Seminar Paper, University of the Witswatersrand, May.

Diaz. H. P., 1990, "Proletarinisation and Marginality: The Modernisation of Chilean Agriculture", in Hojman, ed., Neo-Liberal Agriculture in Chile, London: Macmillan.

Hamman, J., 1996, "The Impact Of Labour Policy on Rural Livelihoods on Western Cape Wine and communication, Nkuzi Development Association.

Fruit Farms", in M. Lipton M, ed., Land Labour and Livelihoods in Rural South Africa, Durban: Indicator Press.

Hayami, Y., and V. Ruttan, 1985, Agricultural Development: An International Perspective, Baltimore: Johns Hopkins.

Hendricks, F., 1990, The Pillars of Apartheid: Land Tenure, Rural Planning and the Chieftaincy, Uppsala: Almqvist and Wiksell.

Keegan, T., 1986, Rural Transformation in Industrialising South Africa: The Southern Highveld to 1914, Johannesburg: Ravan Press.

Lipton, Merle, 1975, White Farming: A Case History of Change in South Africa, Johannesburg: SA Institute of Race Relations.

Loewenson, R., 1992, Modern Plantation Agriculture: Corporate Wealth and Labour Squalor, London: Zed Books.

Marcus, Tessa, 1989, Modernising Super-Exploitation: Restructuring South African Agriculture, London: Zed Books.

Newman, R. A., G. F. Ortmann, and M. N. Lyne, 1997, "Farm Labour Remuneration, Labour Legislation and Commercial Farmers' Perceptions in KwaZulu Natal", Agrekon 36(1).

Payne, N., J. van Zyl, and H. Sartorious von Bach, 1990, "Labour-Related Structural Trends in South African Commercial Grain Production: A Comparison between the Summer and Winter Rainfall Areas,1945-1987", Agrekon, 29(4), December.

Reserve Bank, 2000, Quarterly Bulletin, Government Printer, March.

Sender, J., and D. Johnston, 1996, "Some Poor and Invisible Women: Farm Labourers in South Africa", Development Southern Africa, 13(1), February.

Stats SA, 1999, Agricultural Surveys: 1994, 1995 and 1996, Pretoria: Government Printer.

Stats SA, 2000a, October Household Survey 1998 and October Household Survey 1999, survey

data on CD ROM.

Stats SA, 2000b, Measuring Poverty in South Africa, Government Printers.

Stats SA and National Department of Agriculture (NDA), 2000, Employment Trends in Agriculture in South Africa, Pretoria: Government Printer.

Thirtle, C., R. Townsend, J. van Zyl, 1995, "Testing the Induced Innovation Hypothesis in South African Agriculture: An Error Correction Approach", World Bank working paper.

Timmer, C., 1990, "The Agricultural Transformation", in C. Eicher and J. Staatz, eds., Agricultural Development in the Third World, Baltimore: Johns Hopkins.

Torres, L., 1998, Labour Markets in Southern Africa, Oslo: Fafo.

van Zyl, J., T. Fenyes, and N. Vink, 1987, "Labour Related Structural Trends in South African Maize Production", Agricultural Economics, 1(3).

Vink, N., 2000, "Farm Profitability and the Cost of Production Inputs in South African Agriculture", report to the National Department of Agriculture.