UNDER-EMPLOYMENT AND WORK AMONG WOMEN IN RURAL ANDHRA PRADESH

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The paper examine the changes in work participation and employment pattern of women in rural Andhra Pradesh during 1993-94 to 1999-2000 based on the unit level data of NSSO 50th and 55th rounds. Participation in economic activities decreases and unemployment increases with levels of education, as opportunities for educated women are low in rural areas. Employment in service sector and regular employment increases with level of education. Gender differences in wages were quite high. Wage differences between males and females ranged from 50% among casual labourers in services to 193% in regular employed in industry. However, there seems to be reduction in wage differences among gender as well as among sectors during 1993-94 to 1999-00.

Key words: women employment, Rural, India, non-agriculture

1. Introduction

The structure of rural economy has changed considerably in the last two decades due to liberalization and structural adjustment programmes of the government. There is a growing diversification of activities to non-agricultural sector due to demand from within rural as well as from urban centers. As a result there is an increase in employment opportunities in rural non-agricultural sector. The share of non-agricultural workers in total rural workforce increased from 13.9 per cent in 1960-61 to 23.8 per cent in 1999-2000 (Chadha and Sahu 2002). The share of non-agricultural workers in the male work force in rural India had increased from around 16 per cent in 1961 to about 29.6 per cent in 1999-2000. The rural female work force however, showed a slower increase from about 10 to 13.7 per cent between 1960-61 and 1999-2000 (Chadha and Sahu 2002). This bias against women in share of non-agricultural employment necessitated a study on women employment focusing on work status and sectoral distribution of women workers. With the above backdrop this study examines the changes in work participation and employment pattern of women in rural Andhra Pradesh during 1993-94 to 1999-00.

2. The Data

The data used in this study were drawn from the quinquennial survey on employment and unemployment conducted by the National Sample Survey Organisation, (NSSO, India) in its 55th round for rural Andhra Pradesh state for the period of July 1993 to June 1994 and July 1999 to June 2000. The geographical coverage in Andhra Pradesh is 432 rural villages, covering 5185 households. For further details about the survey please see http://mospi.nic.in/stat_act_t14.htm

3. Employment status

Among females only about half of them were fully employed as against about 85 per cent of males fully employed. Work participation rate declined and unemployment increased in both male and female during 1993-1994 to 1999-2000. The rate of work participation declined by 2.7 per cent in females over the period during 1993-94 to 1999-00. About 40 per cent of females were not participating in market activities, but they were actively engaged in household activities (table 1). Among the household activities, the most important ones were firewood collection (30 per cent), followed by livestock (6 per cent), grinding of food grains (9 per cent), cow dung preparation (8.4 per cent) and kitchen garden (6 per cent) (table2). But due to the unaccountability of these activities, most of the times value of activities undertaken by women is underestimated both in national and at household level. In female's school enrollment rate schools is less than half of that of enrollment rate among males. However, school enrollment rate increased during 1993-94 to 1999-00 in females.

The lower participation in market activities among women calls for an examination of how it varies across the different socio-economic groups. Work participation rate among women declined from 63 per cent in bottom quintile to 43 per cent in top quintile income group. The rate of unemployment and participation in household activities increased with income. Work participation rate was high among small and medium landholding group of females i.e., it showed inverted 'u' shape association with landholding, whereas rate of unemployment was having inverse association with size of landholding. The lower employment and high unemployment among landless shows the importance of land for providing employment in women. As expected the school enrollment rate increased with both size of landholding and income.

Looking into the employment status by educational level, it was observed that unemployment ranged from 1.1 per cent to 18 per cent in females. Unemployment was higher among graduate and above educated women. Participation in employment is quite lower among higher educated than illiterate and less educated. These above figures indicate that opportunities for higher educated women were quite low in rural areas of Andhra Pradesh (table 5). Significant seasonal variations were observed in work intensity. Quite high seasonal variations in work participation were observed in summer season (*i.e.*, from March to May), employment opportunities were limited and unemployment was high compared to other seasons (table 6).

4. Sectoral distribution of women workers

In rural Andhra Pradesh, among females share of self-employed and regular employed was higher while casual labourer was lower than males. And share of casual labourer was increased among females and reduced among males during 1993-94 to 1999-00. The casual labourer constitutes 42 per cent among female and 33 per cent among males in 1999-2000. Share of agricultural workers in total workforce was 72 per cent in males; 82 per cent among females followed by industrial workers (17.5 per cent among males and 13 per cent among females) and service workers (10.6 per cent among males and 5.8 per cent among females) in 1999-2000.

Among females, about 40 per cent belonged to self-employed in agriculture and another 40 per cent in casual labourer in agriculture. About 9 per cent were self-employed in industry. All the remaining sectors form less than 10% of total employment each. Among males share

of self-employed in agriculture, industry and services was higher while casual labourer in agriculture was lower than females. Share of self-employed in agriculture and self-employed in services declined by 2.7% and 3.4% respectively during 1993-94 to 1999-00 for females while proportion of casual labourer in agriculture increased by 2.1 per cent. This shows an increasing trend in the casualisation of women workers (table 7).

Most women workers are engaged in either self-employed in agriculture or casual labourer in agriculture irrespective of income group of households. The share of regular employment in services and self-employment in agriculture and industry in total workforce increased with income, while reverse trend was observed for casual labourer in all sectors. Share of casual labourer ranged from 53% to 19% of female workforce among different income groups. The landless and marginal landholders were mostly dependent on casual labourer activity in agriculture. Education level was playing a vital role in diversification of employment from agricultural sector to non-agricultural sector on the one hand and from casual labourer to self-employment and regular employment on the other hand. Share higher educated in casual labourer in agriculture was almost negligible, whereas their share among illiterate was about 45 per cent. While share of regular employment in services drastically increased from 0.5 per cent among illiterate to about 75 per cent among graduate and above educated.

5. Wage earnings- gender gap

There was high gender difference existing in wage earnings of workers in different sectors of employment. Wage differences between males and female ranged from 50 per cent in casual labourer in services to 193 per cent in regular employed in industry. In general gender differences in wage earnings were more for regular employed than casual labourer. Among women also differences in wage earnings were quite high among different sectors of employment *i.e.*, ranged from Rs.91 per week among casual labourer in agriculture to Rs.376 among regular employed in services. Among women real wage earnings were increased in all sectors during 1993-94 to 1999-00. The increase in wage earnings was higher in case of casual employment than regular employment.

6. Conclusions

Among females, only half of them were participating in market activities as against about 85 per cent in males. About 45 per cent were mostly engaged in household activities like firewood collection, livestock rearing, etc., During 1993-94 to 1999-2000 there was an increase in unemployment and decrease in work participation was observed among females. Participation in market activities decreases with income and level of education. While among small and medium landholders work participation was higher than landless and large landholders. Unemployment increases with income and higher education, while decreases with size of landholding. About 40 per cent of total workforce among women was self-employed and another 40 per cent were casual labourer in agriculture as against 43 per cent and 26 per cent among males respectively. Share of casual labourer and agricultural workers in workforce was higher and growing among females than males. As income increases share of self-employed in agriculture decreases with corresponding increase in casual labourer in agriculture. Most of the higher educated women were working in regular employment in services. Gender differences in wages were quite high. Wage differences between males and female ranged from 50 per cent in casual labourer in

services to 193 per cent in regular employed in industry. However real wages were increased during the 1993-94 to 1999-00. There seems to be reduction in wage differences among gender as well as among sectors during 1993-94 to 1999-00.

Notes

1. We are grateful to National Sample Survey (NSSO), Government of India, Ministry of Statistics and Programmee Implementation, New Delhi., for providing Unit Personal Data from its 55th round conducted during 1999-2000, in India. It is a comprehensive survey covering employment status and consumption pattern through out India. This paper has been used data pertains to Andhra Pradesh state and covers only rural areas. Please see web site for further details. http://mospi.nic.in/stat_act_t14.htm

References

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NSSO (1994) National Sample Survey Organisation , NSSO 50th round on employment and unemployment unit household survey data.

NSSO (2000) National Sample Survey Organisation , NSSO 55th round on employment and unemployment unit household survey data.

Table 1

Distribution of Persons According to Employment Status in Rural Andhra Pradesh

(Per cent in total population)

Employment status of workers	Male		Change	Change Female		
	1993-94	1999-2000		1993-94	1999-2000	
Fully employed	84.9	83.8	-1.1	55.5	53.6	-1.9
Underemployed	0.6	0.4	-0.2	2.1	1.3	-0.8
Work participation rate	85.5	84.2	-1.3	57.6	54.9	-2.7
Unemployed	2.2	2.7	0.5	1.6	1.9	0.3
Student	4.6	4.7	0.1	1.8	2.2	0.4
Others	7.6	8.4	0.8	39.1	41	1.9
All	100	100		100	100	-
Total number of sample persons	7127	7495	-	7194	7555	-

Table 2
Employment Status of Women by Income Groups of the Household in Rural Andhra Pradesh (1999-2000)

(Per cent in total women)

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Employment status		Income group (quintiles)									
	Bottom 20%	Lower middle	Middle	Higher middle	Top 20%	All					
Fully employed	61.1	60	57	52.7	40.9	53.6					
Underemployed	0.6	0.8	1.1	1.3	2.4	1.3					
Work participation rate	61.7	60.8	58.1	54	43.3	54.9					
Unemployed	1.4	1.7	2	2.1	2.3	1.9					
Student	0.6	1.5	1.8	2.2	4.4	2.2					
Others	36.2	35.9	38.2	41.7	50	41					
Total	100	100	100	100	100	100					
Total number of	1319	1376	1485	1610	1765	7555					
Sample persons											

Table 3
Per cent Distribution of Females among
Landholding Group and Employment Status

Employment status		Landholding Group							
of Workers	Land Less	Marginal	Small	Medium	Semi large	Large	All		
Fully employed	42.6	51.2	61.9	59.7	53.2	45.5	53.6		
Underemployed	0.4	1.4	0.5	2.2	1.6	1.2	1.3		
Work participation rate	43	52.6	62.4	61.9	54.8	46.7	54.9		
Unemployed	3	3	1.3	0.3	1.3	0.3	1.9		
Student	1.7	2	1.5	2.1	3.3	3.6	2.2		
Others	52.2	42.4	34.8	35.8	40.5	49.5	41		
Total	100	100	100	100	100	100	100		
Total number of	230	3494	1408	925	748	750	7555		
sample persons									

Note: marginal (0.01 to 0.4 ha); small (0.41 to 1 ha); medium (1.01 ha to 2 ha); semi-large(2 to 4 ha) and large (above 4 ha land)

Table 4
Per cent Distribution of Women among Level of Education and Employment Status in Rural Andhra Pradesh (1999-2000)

Employment status of	General Education level								
Workers	Illiterate	Below primary	Primary	Middle and secondary	Higher secondary	Graduate and above	All		
Fully employed	61	46.2	39.4	28.3	23.6	37.5	53.6		
Underemployed	1	2.6	1.6	2.1	1.8		1.3		
Work Participation Rate	62	48.8	41	30.4	25.4	37.5	54.9		
Unemployed	1.9	0.8	1.3	1.3	4.5	17.7	1.9		
Student	0.1	0.5	0.5	13.7	23.6	9.4	2.2		
Others	36	49.9	57.2	54.7	46.4	35.4	41		
Total	100	100	100	100	100	100	100		
Total number of sample persons	5308	611	558	869	110	96	7552		

Table 5
Per cent Distribution of Women among Sub-round (season) and Employment Status in Rural Andhra Pradesh (1999-2000)

Employment Status of Workers		Sub-Round						
	June-Aug.	Sept-Nov.	Dec-Feb.	March-May	All			
Fully employed	53	56.5	54	49.7	53.3			
Underemployed	2.1	1.5	1.2	1.4	1.5			
Work Participation Rate	55.1	58	55.2	51.1	54.8			
Unemployed	1.9	1.7	1.1	3.1	1.9			
Student	2.1	2.3	2.4	2.1	2.2			
Not in labour	40.9	38	41.4	43.7	41			
Total	100	100	100	100	100			
Total number of sample persons	1924	1912	1857	1862	7555			

Table 6

Participation of Women (per cent of Respondent Women) in different
Household Activities in Rural Andhra Pradesh (1999-2000)

Household Activities of Women	% of total
Kitchen garden	6.3
Poultry/dairy	16.4
Fish/fruit/vegetable preservation	3.7
Fire wood collection	24.8
Cow dung preparation	8.4
Sewing/tailoring	4.8
Tutoring	6
Husking paddy	2.3
Grinding food grains	8.5
Total	100
Number of sample Observations	796

Table 7
Per cent Distribution of Workers among Activity Status and Sector of Employment in 1993-94 to 1999-2000 in Rural Andhra Pradesh

Sector/Activity	Male		Change	Fen	Change	
of Employment	1993-94	1999-00		1993-94	1999-00	
		Activi	ty Status			
Self-employed	59.4	58.8	-0.6	54.7	52.9	-1.8
Regular employed	9.8	8.1	-1.7	2.7	4.7	2
Casual labourer	30.8	33	2.2	42.6	42.4	-0.2
		Se	ector			
Agriculture	72.3	71.2	-1.1	81	80.6	-0.4
Industry	11.2	17.8	6.6	9.9	13.5	3.6
Services	16.5	10.9	-5.6	9.1	5.9	-3.2
All	100	100	-	100	100	-
Total number of Sample workers	6052	6311	-	4080	4147	-

Table 8
Per cent Distribution of Workers Among Activity Status/sector of Employment in 1993-94 to 1999-2000 (age above 15 years)

Sector/Activity Status	Male		Change	Fen	Change	
of Workers	1993-94	1999-00		1993-94	1999-00	
Self-employed in agriculture	44.3	43.1	-1.2	42.7	40	-2.7
Self-employed in industry	5.9	10.6	4.7	5	9.3	4.3
Self-employed in services	9.2	5.1	-4.1	7	3.6	-3.4
Regular employed in agriculture	2.1	1.3	-0.8	0.4	0.6	0.2
Regular employed in industry	1.5	2	0.5	0.8	2.1	1.3
Regular employed in services	6.2	4.8	-1.4	1.5	2	0.5
Casual labourer in agriculture	25.9	26.8	0.9	37.9	40	2.1
Casual labourer in industry	3.8	5.2	1.4	4.1	2.1	-2
Casual labourer in services	1.1	1	-0.1	0.6	0.3	-0.3
All	100	100	-	100	100	-
Total number of sample Workers	6052	6311	-	4080	4147	ı

Table 9
Per cent Distribution of Women Workers Among Sector/activity Status of Employment by Income Group in Rural Andhra Pradesh (1999-2000)

Sector/Activity Status	Income group (quintiles)									
of Workers	Bottom	Lower-	Middle	Higher-	Тор	All				
	20%	middle		middle	20%					
Self-employed in agriculture	30	32.9	40.5	43.6	53.9	40.0				
Self-employed in industry	7.0	8.2	8.8	9.3	13.5	9.3				
Self-employed in services	4.4	3.9	3.5	2.6	3.7	3.6				
Regular employed in agriculture	1.0	0.4	0.5	0.6	0.7	0.6				
Regular employed in industry	0.4	2.0	3.2	3.3	1.3	2.1				
Regular employed in services	1.2	0.7	0.8	1.7	5.9	2.0				
Casual labourer in agriculture	53.1	49.0	40.6	36.1	19.7	40.0				
Casual labourer in industry	2.6	2.6	1.9	2.4	1.2	2.1				
Casual labourer in services	0.4	0.2	0.2	0.2	0.3	0.3				
Total	100	100	100	100	100	100				
Total number of sample workers	814	837	862	869	765	4147				

Table 10
Per cent distribution of Women Workers among Sector/activity Status of Employment by Education Level in Rural Andhra Pradesh (1999-2000)

Sector/Activity Status	General Education level									
of Workers	Illiterate	Below	Primary	Middle	Higher	Graduate	All			
		primary		and	secondary	and				
				secondary		above				
Self-employed in agriculture	38.3	43.6	55.0	51.5	21.4	5.6	40.0			
Self-employed in industry	7.4	16.1	17.5	18.9	21.4	0.0	9.3			
Self-employed in services	4.0	1.3	1.7	1.5	7.1	8.3	3.6			
Regular employed in agriculture	0.4	0.7	0.0	1.9	3.6	8.3	0.6			
Regular employed in industry	1.7	4.0	2.6	3.8	0.0	2.8	2.1			
Regular employed in services	0.5	1.0	1.7	8.0	42.9	75.0	2.0			
Casual labourer in agriculture	45.3	30.9	18.3	12.5	0.0	0.0	40.0			
Casual labourer in industry	2.1	2.3	3.1	1.9	3.6	0.0	2.1			
Casual labourer in services	0.3	0.0	0.0	0.0	0.0	0.0	0.3			
Total	100	100	100	100	100	100	100			
Total number of sample workers	3290	298	229	264	28	36	4145			

Table 11
Wage Income per Week (Rs.) among different Sectors of Employment in Rural Andhra Pradesh in 1993-94 and 1999-2000 at Constant Prices.*

Sector/Activity status	Weekly wage income (Rs.)*								
of Workers		1999-00)		Female				
	Female	Male	Difference (%)	1993-94	1999-00	Change (%)			
Regular employed in agriculture	105.0	211.1	101.0	71.4	105	47.1			
Regular employed in Industry	104.0	305.6	193.8	96.4	104	7.9			
Regular employed in services	376.0	567.8	51.0	343.1	376	9.6			
Casual labourer in agriculture	90.9	143.4	57.8	74.8	90.9	21.4			
Casual labourer in Industry	121.6	198.6	63.3	83.5	121.6	45.6			
Casual labourer in services	118.7	178.6	50.5	86.3	118.7	37.6			
Total	107.0	210.6	96.8	85.5	107	25.1			

Note: *Wage income in the preceding week of the survey at constant prices of 1993-94.