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**STATUS OF
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Impact of Non-Farm Employment on the Earning Levels of Rural Non-Farm Workers in West Godavari District of Andhra Pradesh

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Abstract

The present paper is an attempt to find out the impact of rural non-farm employment on the earning levels of sample rural non-farm workers from eight villages of West Godavari district. A sample of 845 respondents were administered a structured schedule, and the data was collected, quantified, analyzed and interpreted. The study reveals the fact that level of income and standard of living of rural non-farm workers increased after entering into non-farm employment as the non-farm sector is capable of providing gainful employment and regular income.

Introduction

It is a universally accepted fact that agricultural sector is by itself, incapable of creating additional opportunities of gainful employment in the wake of increasing population. In most developing countries like India, the rural labour force is growing rapidly, but employment opportunities are not keeping pace with it. Rural non-farm sector (RNFS) is being given wide recognition in recent years as an instrument for alleviating rural poverty and providing gainful employment to the growing rural workforce. The sector helps in creating “insight jobs” associated with higher wages, which can also create opportunities especially for women and can act as the vehicle for reduction of gender gaps in the rural India.(M.Jatav and S,Sen, 2013).

Definition of Rural Non-Farm Activities

Several research scholars have defined the non-farm sector from different point of views.

According to Mukhopadhyay, Gangopadhyay and Nayas (2008), farm activity means agricultural activity and non-farm activity is used synonymously with non-agricultural activity.

The Census of India categorizes all rural workers into nine 'industrial' categories. Farm workers are those who engages mainly only for 183 days in a year in categories I to III. (I) being cultivators, (II) agricultural labour and (III) is agricultural allied activities i.e. livestock rearing, forestry, fishing, plantation, orchards and allied activities. Non-farming activities consists of: (IV) mining and quarrying; (V) manufacturing, processing, servicing and repairs in household (HH) industry and other than household industry; (VI) construction; (VII) trade and commerce; (VIII) transport, storage and communication and (IX) other services.

According to Mahajan and Fisher (1997), Rural Non-Farm Sector comprises all non- agricultural activities, mining and quarrying, household and non-household manufacturing, processing, repairs, construction, trade, transport and other services undertaking in village and rural towns up to 50000 population undertaken by enterprises varying in size from household own account enterprises all the way to factories.

For our study, we shall define a RNF worker as: 'engaged in non-farm activities', any worker within a household who has, as a primary occupation one or several of the activities covered by the Census of India 1991 occupational categories (IV-IX).

Context of the study

Agriculture is the main stay of the Indian economy, as it constitutes the backbone of rural India which inhabitants around 70% of total Indian population. But in recent times the share of agriculture in national income has been on the decline. During the post independent period, the share of primary sector in the national income has come down from the maximum of 57.20% in 1951 to the minimum of 15.11% in 2011. On the other hand the share of manufacturing sector increased from 8.90% to 31.21% and that of tertiary sector increased from 28.00% to 53.77% during the same period. In Andhra Pradesh also the share of primary sector has come down from 63.49% to 34.00% during the period 1960-61 and 2014-15. But in the case of manufacturing and service sectors, it was showing an increasing trend from 11.50% to 22.00% and 25.00% to 44.00% respectively. A significant fact is that the share of agricultural sector in employment generation is also decreasing over the years. During the post independent period, the share of primary sector in employment generation varied between 74.05 to 48.80% during 1972-73 to 2011-12. The share of manufacturing sector in employment increased from 11.2% to 23.45% and that of service sector increased from 14.65% to 27.75% during the same period. The declining share of agriculture in GNP and employment generation has aggravated the unemployment and under employment situation in India. At this juncture, non-farm sector in terms of increasing shares of manufacturing and service sectors both in national income and employment generation plays a prominent role in rural Indian economy.

Objectives of the study

- To find out the impact of non-farm employment on the earning levels of non-farm workers.
- To find out the factors behind the growth of non-farm employment.

Hypothesis Statements

- There is a positive correlation between non-farm employment and household income and standard of living

Research Tools: The present study used both conventional and statistical research tools in the process of gathering data, analyzing the results and finally achieving the stated objectives. In differential analysis, K-S (Kolmogorov-Smirnov) Statistic was used to test whether there is any significant difference between income of the respondents before and after entering non-farm employment.

IMPACT OF NON-FARM EMPLOYMENT

Impact of non-farm employment is explained in terms of earning levels of the non-farm workers in the study area.

Earning levels of non-farm workers

Level of income is undoubtedly an important determinant of standard of living of the workers. Earning levels decide the level of living of a family. There is a greater scope to maintain a better standard of living if the income levels are optimum. It is also viewed that low levels of income are responsible for poverty and low standard of living.

Table 1: Earning levels of Casual Labour (462)

Income per month in Rupees	Before entering Non-Farm employment		After entering Non-Farm Employment	
	No. of Respondents	Percentage	No. of Respondents	Percentage
Below 5000	257	55.62	84	18.18
5000-10000	155	33.55	209	45.24
10000-15000	42	9.09	137	29.65
Above 15000	8	1.73	32	6.93
Total	462	100	462	100

Table 1 gives the information regarding the monthly income of the casual labour. The table shows that before entering non-farm employment 257 respondents come under the low income category of Rs. Below 5000. Maximum number of respondents i.e., about 55.62% are in this category. 155 respondents (33.55%) come under the income category of Rs. 5000-10000. 42 respondents (9.09%) earn Rs. 10000-15000. Only 8 respondents (1.73%) earn above Rs. 15000. It is evident from the fact that most of the respondents (89.17%) earn below Rs. 10000 per month. The reason is that majority of the respondents are daily wage workers and they do not get employment throughout the month. They remain unemployed for two to three days per week.

After entering non-farm employment, the number of respondents come under the low income category of below Rs.5000 is reduced to 18.18 %. The number of respondents in the category of Rs.5000-10000 is increased to 45.24 %. The number of respondents in the category of Rs.10000-15000 is increased to 29.65% and the respondents in the income group of above Rs.15000 are increased to 6.93%. It is evident from the table that the earning levels casual non-farm workers are increased after entering non-farm employment. The reason is that the respondents are able to get employment for 20-25 days per month after entering non-farm employment.

To test whether there is any significant difference between income of the casual non-farm workers before and after entering non-farm employment, Kolmogorov-Smirnov test was used.

H_0 : There is no significant difference between the income of the casual non-farm workers before and after entering non-farm employment.

Income per month in Rupees	Before entering Non-Farm employment	C.F	F_B	After entering Non-Farm Employment	C.F	F_A	D_n
Below 5000	257	257	0.162	84	84	0.066	0.096
5000-10000	155	412	0.260	209	293	0.231	0.029
10000-15000	42	454	0.286	137	430	0.339	0.053
Above 15000	8	462	0.292	32	462	0.364	0.072
Total	462	1568	1.000	462	1269	1.000	0

K-S Statistic : $D_n = \max |F_A - F_B| = 0.096$.

The table value for D_n for $n=4$ and $\alpha = 0.05$ is 0.624. Since the table value of D_n (0.624) is greater than the calculated value of D_n (0.096), the null hypothesis is accepted. This implies that regarding the income of casual non-farm workers, there is no significant difference between before entering non-farm employment and after entering non-farm employment.

Table 2: Earning levels of Permanent Labour (71)

Income per month in Rupees	Before entering Non-Farm employment		After entering Non-Farm Employment	
	No. of Respondents	Percentage	No. of Respondents	Percentage
Below 5000	37	52.11	7	9.86
5000-10000	19	26.76	26	36.62
10000-15000	14	19.72	34	47.89
Above 15000	1	1.41	4	5.63
Total	71	100	71	100

Table 2 shows the monthly income of the permanent non-farm workers. The table shows that before entering non-farm employment 37 respondents (52.11%) come under the low income category of below Rs.5000. 19 respondents (26.76%) come under the income category of Rs.5000-10000. 14 respondents (19.72%) earn Rs.10000-15000. Only

The present study is an attempt to find out the impact of non-farm employment on the household income and living standards of Rural Non-Farm Workers in West Godavari District of Andhra Pradesh

METHODOLOGY

Data Base

For the present study, the researcher concentrated only on Rural Non-Farm Employment. The data for the research study were collected from both primary and secondary sources as per the details given below.

Secondary data sources: Census data is used for estimating trends in aggregate and sub-sector RNFE at state and district level. The most important secondary data sources are the Census of Andhra Pradesh published by the Census of India (1991, 2001 and 2011), Series-2. NSSO data is also used to some extent. Other data sources are from the Directorate of Economics Statistics, Government of A.P, Hyderabad, from the Centre for Economic and Social Studies (CESS), Hand Book of Statistics, Chief Planning Officer, West Godavari District, Records and Registers maintained by the DRDA and village panchayats.

Primary data source: A primary survey has been conducted to find out the impact of rural non-farm employment on the earning levels of rural non-farm workers in West Godavari district. The researcher has adopted multiple random sampling techniques. The researcher purposively selected one mandal from each of four revenue divisions in West Godavari District where there is more number of non-farm employment. After selecting the mandals, two villages from each mandal were randomly selected for the field survey. After selecting the mandals, two villages from each mandal were randomly selected for the field survey. Thus eight villages namely Ajjamuru and Chinakapavaram from Akividu mandal, Kothuru and Koniki villages from Pedapadu mandal, Kommara and Gummampudi from Attili mandal and Vedentapuram and Chopparamannagudem from Koyyalagudem mandal were selected for the survey. 30 per cent of the rural non-farm workers from each village are selected as sample. Total sample respondents from the 8 villages are 845. The data were collected by personally interviewing the selected respondents from the villages with the help of a structured schedule.

Profile of the respondents

The sample respondents include casual labour (54.67%), permanent labour (8.40%) and self-employed (36.92%). Among the sample respondents, about 32.66% were land owners while 67.34% are landless. The sample covers both genders with 75.38% men and 24.62% women. They belong to different age groups: 20-30(32.67%), 30-40(44.85%), 40-50(14.67%), 50-60(5.91%) and above 60(1.90%). 91% of the respondents are educated but their level of education varies: Illiterates(9.00%), Primary(20.47%), Upper Primary(27.46%), Secondary(24.61%), Inter(12.31%), Degree and above(5.44%) and technical education(0.71%).

1 respondent (1.41%) earn above Rs.15000. It is evident from the fact that most of the respondents (78.87%) earn below Rs.10000 per month.

After entering non-farm employment, the number of respondents come under the low income category of below Rs.5000 is reduced to 9.86%. The number of respondents in the category of Rs.5000-10000 is increased to 36.62%. The number of respondents in the category of Rs.10000-15000 is increased to 47.89% and the respondents in the income group of above Rs.15000 are increased to 5.63%. The earning levels of permanent non-farm workers increased after entering non-farm employment. It is evident from the table that 84.51% of the respondents earn between Rs.5000- Rs.15000 per month after entering non-farm employment where as it was only 46.48% before entering non-farm employment. The reason is that permanent non-farm workers come under regular employment and they are able to get employment throughout the month and throughout the year.

To test whether there is any significant difference between income of the permanent non-farm workers before and after entering non-farm employment, Kolmogorov-Smirnov test was used.

H_0 : There is no significant difference between the income of the permanent non-farm workers before and after entering non-farm employment.

Income per month in Rupees	Before entering Non-Farm employment	C.F	F_B	After entering Non-Farm Employment	C.F	F_A	D_n
Below 5000	37	37	0.158	7	7	0.039	0.119
5000-10000	19	56	0.239	26	33	0.185	0.054
10000-15000	14	70	0.299	34	67	0.376	0.077
Above 15000	1	71	0.303	4	71	0.399	0.096
Total	71	234	1.000	71	178	1.000	0

K-S Statistic : $D_n = \max |F_A - F_B| = 0.119$.

The table value for D_n for $n=4$ and $\alpha=0.05$ is 0.624. Since the table value of D_n (0.624) is greater than the calculated value of D_n (0.119), the null hypothesis is accepted. This implies that regarding the income of permanent non-farm workers, there is no significant difference between before entering non-farm employment and after entering non-farm employment.

Table 3: Earning levels of Self- Employed (312)

Income per month in Rupees	Before entering Non-Farm employment		After entering Non-Farm Employment	
	No. of Respondents	Percentage	No. of Respondents	Percentage
Below 5000	153	49.09	31	9.94
5000-10000	110	35.26	41	13.14
10000-15000	35	11.22	188	60.26
Above 15000	14	4.48	52	16.66
Total	312	100	312	100

they get in farm sector because majority of them are belonging to casual labour force. But people are able to get regular income in non-farm sector when compared to farm sector. Therefore it can be concluded that there exists a positive correlation between non-farm employment and the household income and standard of living.

Findings and suggestions

The findings from the current study in regard to the stated objective reveal that even though people are getting employment in non-farm sector, their level of income and expenditure is slightly increased as majority of them are belonging to casual labour force. But people are able to get regular income in non-farm sector when compared to farm sector. Poverty, unemployment and under employment are the major push factors and certainty of income and level of education are the major pull factors for the growth of rural non-farm employment. Under these circumstances, it is suggested that the government intervention is urgently required to sustain the growth of rural non-farm employment which in turn can reduce the severity of poverty and unemployment in rural areas.

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Table 3 gives the information regarding the earning levels of self-employed non-farm workers. Before entering non-farm employment 153 respondents (49.04%) come under the low income category of below Rs.5000. 110 respondents (35.26%) come under the income category of Rs.5000-10000. 35 respondents (11.22%) fall under the category of Rs.10000-15000. Only 14 respondents (4.48%) earned above Rs.15000 per month. It is evident from the table that 84.30% of the respondents earn below Rs.10000 per month before entering non-farm employment.

After entering non-farm employment, the number respondents in the low income category of below Rs.5000 is reduced to 9.94% and that of Rs.5000-10000 category also reduced to 13.14%. The number of respondents in high income categories of Rs.10000-15000 and above Rs.15000 is increased to 60.26% and 16.66% respectively. It is evident from the table that the earning levels of self-employed workers increased considerably after entering non-farm employment. Among the earning levels of three types of labour i.e. casual labour, permanent labour and self-employed, the number of respondents in the low income category of below Rs.5000 is high before entering non-farm employment. After entering non-farm employment, the number of respondents in the low income category of below Rs.5000 is reduced and the number of respondents in the second and third categories is increased. It is evident from the table that in these two categories i.e. of Rs.5000-10000 and Rs.10000-15000, there is a significant change in the earning levels. A slight increase in the earning level is observed in the last category of above Rs.15000.

To test whether there is any significant difference between income of the self-employed non-farm workers before and after entering non-farm employment, Kolmogorov-Smirnov test was used.

H_0 : There is no significant difference between the income of the self-employed non-farm workers before and after entering non-farm employment.

Income per month in Rupees	Before entering Non-Farm employment	C.F	F_B	After entering Non-Farm Employment	C.F	F_A	D_n
Below 5000	153	153	0.149	31	31	0.046	0.103
5000-10000	110	263	0.256	41	72	0.107	0.149
10000-15000	35	298	0.291	188	260	0.385	0.094
Above 15000	14	312	0.304	52	312	0.462	0.158
Total	312	1026	1.000	312	675	1.000	0

K-S Statistic: $D_n = \max |F_A - F_B| = 0.158$.

The table value for D_n for $n=4$ and $\alpha=0.05$ is 0.624. Since the table value of D_n (0.624) is greater than the calculated value of D_n (0.158), the null hypothesis is accepted. This implies that regarding the income of self-employed non-farm workers, there is no significant difference between before entering non-farm employment and after entering non-farm employment.

In general, it is inferred that due to prevailing severe unemployment situation in farm sector, people are shifting from farm to non-farm employment. Even though people are getting employment in the non-farm sector, their income is more or less the same as

The largest and important livelihood source in the report of International Food Policy Research Institute (IFPRI) previous 97th place to 100 in 2017. The report of our country found in serious category. Agriculture has become a major sector for economic production and the situation will remain same in future. The dependency on agriculture sector has not minimize as proportionate the sectoral contribution of agriculture decline in India's GDP from independence. The dependency of population decline from 75% to 58% but at same time the sectoral contribution fallen from 61% to 15% in the Gross Domestic Product of the country. The present conventional farming can however be improved by adopting appropriate technologies of crop production, post-harvest processing and by improving quality so that agriculture becomes not only sustainable in long term but a profitable business also by linking production with consumerism. Sustainable agriculture improve soil health by integrating all possible measures so that crop productivity is maintained for a longer time. The book explains the emerging concerns of Indian Agriculture in terms of Agricultural growth performance land degradation, water efficiency and natural farming, inclusive agriculture development, distress in agriculture, problems of dry land agriculture, employment problems of small farmers, socio-economic conditions of agriculture labour, impact of mechanization on farm business and productivity, impact of technology on cost and returns of technology, wage differentials among labour in agricultural sector on the basis of gender, problems and prospectus of agricultural marketing and factors influencing the milk production in India. The book is useful to students, researcher and policy makers and others having interest in the field of agriculture and development.



Prof. M. Koteswara Rao is a Professor of Economics having put up three and half decades teaching and research experience published very widely in National and International Journals of repute and presented papers in National and International Conferences. Guided 28 Ph.D's and 26 M.Phil's so far for the award of Research Degrees. Specialized in the areas of Urban Development and Labour Economics. Carried out 6 Research Projects sponsored by UGC and other Agencies. Prof. Rao is currently the Dean of Faculty of Social Sciences, Dean, College Development Council and Vice-Principal, University College of Arts, Commerce & Law, Acharya Nagarjuna University, Nagarjuna Nagar, Guntur District.



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