



## Role of non-farm in rural development: A case study of two villages Dammennu and Undrajavaram in west godavarari district of Andhra Pradesh

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**Abstract:** Both villages Undrajavaram and Dammennu were taken to study which is located in agriculturally developed District West Godavari. In total households of the village 35 percent of agricultural workers and 35 percent of nonfarm workers households are taken into study. Agricultural workers are treated as agricultural cultivators and labour. Non-farm workers are divided in to traditional nonfarm and modern nonfarm workers. Total population of Undrajavaram village is 13293, in this non-workers are 7777 and works are 5516. Primary and secondary data also use to collect the data. In traditional non-farm 129 (67) percent are working and remaining 64 (33) percent are working in modern non-farm. In main and marginal household industry workers females are high than males. In main and marginal workers agricultural workers are higher than household industry workers. In main agricultural workers males are high but marginal workers female's agricultural workers are high. Total population of Dammennu village is 1860, in these 1029 are non-workers and 831 are workers. 14 non-farm employment households are selected in this village Dammennu. Out of 14 non-farm households, in traditional non-farm 4 (29) percent are working and remaining 10 (71) percent are working in modern non-farm. In main and marginal agricultural workers and household industry workers females are higher than males. In main workers agricultural labour are higher than household industry workers. There are no marginal workers in this village in agricultural and household industry also. Primary and secondary data also use to collect the data. There is no common factor to diversify their occupation of households.

**Key words:** *Rural non-farm Employment, Occupation diversification, Education, Gender, Income*

### Introduction

Rural Development is necessary to the country development especially India because it is rural society. Rural society drawbacks are low literacy or illiterates are high. Most of the rural people are depends upon agricultural sector, but agricultural is depend upon rains. Because all most all rural people depends upon agriculture but it is not giving full employment to all. Rural people are

landless people, low educates, no skills. This study focus is on rural people livelihood and their life style. Some suggestions have given by this study how they can improve their livelihoods.

### Objectives:

1) To examine agricultural condition in two villages of Dammennu and Undrajavaram



2) To locate Determinant factors of Non-farm of two villages of Dammennu and Undrajavaram

#### Hypothesis:

- 1) Agricultural labour elevated than Non-farm workers
- 2) Higher study leads to modern non-farm than low years of schooling

**Methodology:** In total non-farm households of the village 35% of the households are selected from each caste of that particular village.

#### Research Questions:

1. Causes shift agricultural to non-agriculture?
- 2 Villages change their structure?
3. Feature make non-farm?

#### Review of Literature:

Rudra Prakash Pradhan (2008) study rural non-farm covered the period from 1970-71 to 2003- 04. The data is mostly collected from Economic Survey, Government of India, India's state-wise and gender-wise trends of rural non-farm employment is analysed for the three cross sectional years viz 1983, 1993-94 and 1999. Second focuses on the overall trends of rural non-farm employment and its determinants during 1970-71 to 2003-04. Further, he says that India's rural non-farm employment is substantially influenced by HYV coverage, literacy and road in rural areas. While the impact of HYV is negative, the literacy and road are positively related to non-farm employment.

Iddo Kan, Ayal Kimhi, Zvi Lerman (2006), have studied the Georgian farmers. Data was taken from the Republic of Georgia. The farmers who working in agricultural their role is very difficult to understand. His agricultural production for their own consumption and at the same time he used for sale. In most of the agricultural families, after their own consumption remaining product only will sale. He is trying to find out the determine of farm output and non-farm earning. Farm output and land holdings positively affect market participation while it is not the case with non-farm income and education. Findings are Georgian farmers are interest their production to sell in the market.

Amarender Reddy and Praduman Kumar (2006) study concentrate on interrelation between the type of employment and the socio-economic and regional factors among the rural male workers in Andhra Pradesh. He discussed about the shares of three sectors. They suggest that given the very small share of non-agricultural and regular employment, there is an urgent need for structural diversification in rural workforce in Andhra Pradesh. The paper examines the determinants of workforce structure with respect to status and sector. It develops regression model by using national sample survey organization household survey data to analyze factors that influence types of employment of workers in rural Andhra Pradesh. Cultivated land, religion, educational level, age and other regional factors of the workers are used as variables. The education is positive effect on rural non-farm. Technical education is more likely to be part-time Employment. The probability of women workers to be



employed as part-time workers is higher than male workers. As educational level increases, non-agricultural weekly wage rates also increase but wage differs across different types of employment for male and female.

Maitreyi Bordia Das (2003), says that the non-farm household enterprises are important for a number of reasons to do with poverty and employment creation in India. To poverty eradication and for creation of employment non-farm role very important. Base of the tiny business is family, sometimes this types business passed to generation to generation. Characteristics of individuals' enterprises varies from one enterprise to other enterprise. Generally, it heterogeneity in character, can't define common characteristics. In rural areas, who have no land but educated are engage in this type of enterprises. This type of enterprises, help to absorbing excess agricultural labour and urban migration control. Developing countries, enough working sizable families are engage in non-farm enterprises. But these enterprises education levels are different in rural and urban areas, even low level of educates also survive in urban.

World Bank (2002), focus as on gender effects and Intergenerational linkages on non-farm participation in Nepal. Mother employment effect on the daughter employment in the same way father employment effect on the son employment. But comparing with mother and father effect on family members it is highly related to mother occupation. In skilled and unskilled jobs are indifferent. If you take cross gender effect no linkage can't find, son-mother and daughter-father employment.

Misra, V.N (1994), examines the role of female labour force participation in combination with the other important factors such as relative prices, productivity per hectare and per worker, unemployment, distribution of operational holdings, etc. in explaining the inter-state variations in rural poverty. The paper locates various inter-linkages while examining the relationships of the important factors with the rural poverty, real agricultural wages separately for male and female and non-farm employment. The regression coefficients are, along with the decomposition analysis of the changes in female labour force. The inter-state differences in the levels of female labour force participation. Rural poverty and non-farm employment and their changes over the period are discussed briefly hereby classifying the states into three levels-high i.e., medium and low for the 1993-94. The influence of female labour force partaking on rural poverty is quite significant. The implications of significantly negative coefficients of fertility and real agricultural wages in explaining female labour force participation also needs to be recognized. Female labour workers belong to low income households' participation in economic activities other than household and agriculture depend to a great extent, on employment opportunities created by public investments along with the measures for improving health, education and utilities.

Frank Ellis (1999), this study conducted on developing countries. Study focused on, rural development through occurred if the awareness increases on livelihood diversification. Two points he



observed one is diversification and other one is poverty. He found, proper natural resource management, gender relations and policies are important for diversification. This study was conducted in developing countries using primary and secondary data. He found, that natural resource management, farm productivity, poverty and gender relations in rural areas have different interactions. Policies are very important to diverse rural livelihoods, Infrastructure is very important to increase the farm size and at the same time, capability of individuals also is important.

Kumar Uttam D., Nageswara Rao, G.D. Mohan Rao, Y. and Rachel Slater (2002), average on the diversification of rural livelihoods. This study was conducted in Andhra Pradesh (Aurepalle and Dokur). For livelihood, agricultural is basis. Decrease in crop cultivation leads to occurrence of migration. In few cases, poverty households can lift by own. Agriculture effects the non-farm two ways, growth and distress. If rainfall increases it leads to non-farm growth but in some cases agricultural wages decreasing is leads to non-farm growth. Non-farm useful for only as bridge between farm and non-farm occupation but in some areas can provide permanent jobs. Again return to agriculture is not possible, so government policy making is very difficult only with appropriate policies can make positive exists from poverty through diversification.

Lanjouw, Peter, Himanshu, Mukhopadhyay Abhiroop and Murgai, R (2010), this study conducted in India (Uttar Pradesh), studied for six decades.

National Sample survey data indicate that the non-farm sector in rural India has grown steadily during the past 25 years. His study concentrate on decline the poverty, two ways he found one is through employment generation and second one is impact of agricultural wages.

Leonardo Corral and Thomas Reardon (2001), examine non-farm incomes among rural Nicaragua households the study was based on a nationwide survey (LSMS) in 1998. Second poorest country is Latin America and Caribbean islands. He used multi topic survey data for more details. Rural non-farm income constitute 41% of rural household incomes, Rural Non-farm Income (RNFI) is much more important than farm wage labour income and Rural Non-farm Income (RNFI) tends to be relatively concentrated geographically and socioeconomically toward the rural areas of the Managua zone and the Rest-of-pacific zone, which are denser in infrastructure and population and toward the upper income quartile of rural households.

#### **Undrajavaram Mandal details**

In this mandal, Undrajavaram village has taken into our study in this total rural population is 76489 shows (Table-1). Male population is 38715 and female population is 37774. Total male workers 22651 (59 %) and non-workers are 16064 (41 %). In female 9472 (25 %) are workers and 28302 (75 %) are non-workers. In total workers of male 12893 (57) percent are agricultural workers (main+marginal) and household industry workers are 421 (1.9) percent. In total female workers, 6508 (69) are working as agricultural workers (main+marginal)



and 194 (2) percent are working as household industry (main+marginal). In agricultural and household industry point of view, agricultural workers are higher than household industry workers in both male and female. Food crops and non-

food crops point of view, most of the land using for only food crops in this Palacoderu mandal. Under food crops 12514 hectare of land and under non-food crops 533 hectare of land is used.

Table-1 Mandal wise Total Population Workers and Non-workers

Gender	Total Rural Population	Workers and Non-workers		Agricultural and Non-Agricultural workers	
		Total Workers	Non-Workers	Main+Marginal Agricultural Workers	Main+Marginal Household Industry
Male	38715	22651(59)	16064(41)	12893(57)	421(1.9)
Female	37774	9472(25)	28302(75)	6508(69)	194(2)
Total	76489	32123	44366	19401	615

Source: Secondary Data 2011: Note: Figures in brackets are shows percentage

### Undrajavaram Village details

In this village male percent is 87 and female is 13. Village area in hectare was 1090 and total population of the village is 13293 shows (Table-2) according to the census of 2011. Total number of households is 3699 and area under non-agricultural is 155, 6.

In age point of 15-30 years of age only 1 (1), 23.8 percent are under the age group of 31.45 and the highest 53.4 percent of

the population are 46-60 years of age group people 61 years and above age group are 21.8 percent. In educational status view, up to 5<sup>th</sup> class completed are 27.5 percent and 6<sup>th</sup> to 7<sup>th</sup> standard people are 7.3 percent. The highest 46.6 percent of the completed 10<sup>th</sup> class and intermediate completed are 7.3 percent. Degree/PG completed is 3 percent and professional degree completed are 2.1 percent and illiterates are 5.7 percent.

Table-2 Undrajavaram Village Main marginal workers and non-workers

Gender	Main workers			Marginal workers			Non-workers	Total Workers	Total population
	AL	HHI	Total	AL	HHI	Total			
Male	1971	78	2049	104	1	1	2581	4073	6654
Female	798	20	818	154	0	0	5196	1443	6639
Total	2769	98	2817	258	1	1	7777	5516	13293

Source: Secondary Data 2011

Types of rural non-farm traditional and modern non-farm are

existing and total non-farm households are 193 shows (Table-3) in this Undrajavaram village. In traditional non-farm 129 (67) percent are working and



remaining 64 (33) percent are working in modern non-farm. Out of 129 modern non-farm households, the highest 18 are

working as drivers. After that 13 household are working in factory and 12 households are working as clerks.

**Table-3 Undrajavaram Village Traditional and Modern Nonfarm Workers**

Type of Non-farm Employment	Traditional Non-farm Employment	Modern Non-farm Employment	Total
No. of RNE	129	64	193
Percent (%)	(67)	(33)	(100)

**Source:** Primary Data 2015: *Note: Figures in brackets are shows percentage*

As welders and petty trade 9 households are working in each occupation. In construction work 7 households are working. Eating items making households are 6 and carpentry 5 households are working. From each occupation 4 households are hotel worker, electrician, mechanic and gold smith. Photographers, workers in rice mill, barber, a cloth business and meat business 3 household is from each occupation. In modern non-farm 2 households from is each occupation of teacher, hospital nurse and agents. One household from each occupation of cycle shop, oil business, radio repair, cinema operator, balck smith and butcher. In traditional out of 64 non-farm households, the highest 16 households are working as poultry keeping. Kirana 12 households next place occupied by tailors they are 9 households in this village. Washer man households are 6 and pawn shop households are 5. Pujari or priest households are 4 and 3 households from PDS. Two households from each occupation of clay workers, milk vendors, vegetable vendors and one household from each occupation of

rickshaw puller, teddy tapper, coconut seller. Total main and marginal male agricultural workers are 2075 and female agricultural workers are 952. Male household industry workers are 79 and female household industry workers are 20. Male Non-workers are 2581 and female non-workers are 5196. Wage employs, self-employs and entrepreneurs point of view, in Gollalakoderu village, 80 (41) percent of the workers are wage workers, 112 (58) percent are self-employ and only 1 (1) percent are working as entrepreneur. In caste point of view, forward caste are 53 (27) and the highest 38 percent the highest BC's are working in non-farm. Scheduled caste are 58 (30) percent scheduled tribe are 3 (1.5) and Minority are 5 (2.5) are selected to this study. Land size point of view, out of 13 households 183 (95) are land less households. Remaining 10 households are land holding households. In this 10 households, less than 9 (4) households are less than 1 hectare and one household 1 (1) had 1 hectare to less than 2 hectare of land. Out of selected households of the village 95 percent are land less and remaining 5 percent are very less hectare



of the land cultivating. In Undrajavaram out of 80 wage households, only 2 households have land remaining 78 have no land. In Undrajavaram out of 80 wage non-farm households, the highest 39 households are belongs to scheduled caste. Backward caste households are 22, forward caste households are 17 and minority households are only 2. There is no scheduled tribe households in this village. In Undrajavaram out of 112 households, 8 households have cultivating land 104 have no cultivating land.

In Undrajavaram 112 households are engage in self-employ rural non-farm. In this 52 households are backward caste and 35 households are forward caste. Scheduled caste 19 households, scheduled caste 3 households and minority households are 3. In Undrajavaram village out of 112 households and their

educational status was explained. Up to 5<sup>th</sup> class standard completed households are 31. 6<sup>th</sup> to 7<sup>th</sup> completed households are 8. 8<sup>th</sup> to 10<sup>th</sup> completed households are 55 and Intermediate completed households are only 7. Degree/pg completed households are 1 and professional degree completed households are 2. In this village illiterates are 8 out of 112 households. In Undrajavaram., one household are forward caste are engage in enterprise.

**Dammennu Village details**

In this village male percent is 76 and female is 29. This village area in hectare was 166 and total population of the village is 1860 shows (Table-4) according to the 2011 census. Total number of households in Dhammennu village is 513 and area under non-agricultural is 36.1.

Table-4 Dhammennu Village Main marginal workers and non-workers

Gender	Main workers			Marginal workers			Non-workers	Total Workers	Total population
	AL	HHI	Total	AL	HHI	Total			
Male	387	7	394	0	0	0	397	539	936
Female	248	5	253	0	0	0	632	292	924
Total	635	12	647	0	0	0	1029	831	1860

Source: Secondary Data 2011

Age point of view, 15-30 years age group people are 7.1 and 31-45 age group people are 21.4 percent. The highest 42.9 percent of the population are 46-60 years of age group people and 61 and above age group are 28.6 people. Education point of

view, up to 5<sup>th</sup> class studied people are 28.6 percent and 6<sup>th</sup> and 7<sup>th</sup> standard completed are 21.4 percent. 8<sup>th</sup> to 10<sup>th</sup> class 35.7 the highest are completed. Intermediate completed 7.1 percent and illiterates are 7.1 percent.

Table-5 Dhammennu Village Traditional and Modern Non-farm Workers

Type of Non-farm Employment	Traditional Non-farm Employment	Modern Non-farm Employment	Total
No. of RNE	4	10	14
Percent (%)	(29)	(71)	(100)

Source: Primary Data 2015; Note: Figures in brackets are shows percentage



14 non-farm employment households are selected in this village Dhammennu shows (Table-5). Out of 14 non-farm households, in traditional non-farm 4 (29) percent are working and remaining 10 (71) percent are working in modern non-farm. In Dhammennu village out of 4 modern non-farm households, 1 household from each occupation of hotel worker and working as clerk. Butcher households are 2 in this village Dhammennu. Out of 10 traditional non-farm households, 2 households are working in tailoring and 5 households are working in kirana (grocery). Vegetable vendor 1 household and 2 households are working as Pujari. Main and marginal male workers are 387 female workers are 248 same way main and marginal male workers are 7 and female workers are 5. Male non-workers are 397 and female non-workers are 632. Wage employs, self-employs and entrepreneurs point of view, in this village, 2 (14) percent of the workers are wage workers, 12 (86) percent are self-employ and no entrepreneur. Caste points of forward caste are 5 (36) percent and backward caste are 5 (36) percent. Scheduled caste are 3 (21) and Minority are 1 (7) percent and there is no Scheduled caste in this village. Land size point of view, out of 14 households 11 households are land less and only 4 household holding households. In 4 land households, 3 (21) are less than 1 hectare land. In Dhammennu out of 2 households, no household have own cultivated land. In Dhammennu out of 2 wage non-farm households, one household are belongs to backward caste and remaining one household are minority. There are no wage non-farm households in forward caste, scheduled caste and scheduled tribe

caste. In Dhammennu out 12 self-employ households, only 3 households have cultivating land and 9 households have no cultivating land. In Dhammennu village out of 12 self-employ non-farm households, 5 households are forward caste, 4 households are backward caste and remaining 3 households are scheduled caste. In Dhammennu village out of 12 households and their educational status was explained. Up to 5<sup>th</sup> class standard completed households are 3. 6<sup>th</sup> to 7<sup>th</sup> completed households are 3. 8<sup>th</sup> to 10<sup>th</sup> completed households are 5 and illiterates are 1 out of 12 households.

#### **Few Findings of Undrajavaram Village**

In total rural population males are higher than females. In total workers males are high and in non-workers females are high. In main and marginal agricultural workers males are low than females. In main and marginal household industry workers females are high than males. In main and marginal workers agricultural workers are higher than household industry workers. In main agricultural workers males are high but marginal workers female's agricultural workers are high. There are no marginal female household industry workers. In non-workers females are higher than males. In total workers males are higher than females. In traditional non-farm and modern non-farm, traditional non-farm employs are higher than modern non-farm employs.

#### **Few findings in Dammennu village**

In total population males are higher than female. In total workers males are higher than female and non-workers females are higher than males. In main and marginal



agricultural workers and household industry workers females are higher than males. In main workers agricultural labour are higher than household industry workers. There are no marginal workers in this village in agricultural and household industry also. In workers and non-workers point of view, non-workers are higher than workers irrespective of gender. In non-workers females are high and workers males are high. In traditional non-farm and modern non-farm employment, modern non-farm employs are higher than traditional non-farm employs.

Both villages Undrajavaram and Dammennu are located in Near Tanuku mandal in West Godavari district. Undrajavaram is famous for poultry development and Bricks making industries. In this village most of the nonfarm workers are working as supervisors on poultry farm. Low educates and illiterates are working as labour in poultry farm in this village. Traditional nonfarm workers are higher than modern nonfarm workers in Undrajavaram. Brick making industry are seasonal business and by order only the owners are making bricks with clay but at rainy season there is no work for workers. In Dammennu village compare with Undrajavaram totally different nonfarm workers, here almost who are engage in nonfarm are physically challenged people and women are working as *kirana* or *grocessary* shop runners. Distance of the village to town also decide the nonfarm employment, nearer villages are highly nonfarm developed than far villages. Compare with Gollalakoderu, Dammennu is the far from town Tanuku and Dammennu households are low in number. Most of

the nonfarm workers are who are working in this village are not migrate from one place to another place because one person loss two legs in Polio. Other person loss one leg in accident he is working as *kirana* or grocessary shop runner. In rural village people are suffering with proper economical support or investment so they are taking debt from money lenders. But money lenders are collecting high interest rates. Most of the nonfarm workers are waiting for government support and some SHG (self help groups) are supporting this small petty businesses in villages.

#### BIBLIOGRAPHY

Frank Ellis, (1999), Rural Livelihood Diversity in Developing Countries: Evidence and Policy Implications, *Overseas Development Institute*, Number 40, April 1999.

Himanshu , Peter Lanjouw , Abhiroop Mukhopadhyay and Rinku Murgai (2010), Non-farm diversification and Rural Poverty Decline: A Perspective from Indian Sample Survey and Village Study Data, *Asia Research Centre Working paper*.

Iddo Kan, Ayal Kimhi and Zvi Lerman(2006), Farm Output, Non-farm Income, and Commercialization in Rural Georgia, Discussion Paper No.16.06. *The Hebrew University of Jerusalem*.

Leonardo Corral and Thomas Reardon (2001), Rural Nonfarm Incomes in Nicaragua, *World Development*, Vol.29, No.3, pp: 427-442.

Maitreyi Bordia Das(2003),The Other Side of Self-Employment: Household



Enterprises in India, Social Protection Discussion Paper Series, No.0318, Human Development Network, *The World Bank*.

Misra, V.N(1994),Role of Female Labour Force Participation in Rural Poverty and Non-Farm Employment: Indian Experience, *The Journal of Labour Economics*.

Reddy, Amarender A, and Praduman Kumar(2006),Occupational Structure of Workers in Rural Andhra Pradesh, *Journal of Indian School of Political Economy*,Jan-june,2006.

Rudra Praksh Pradhan (2008),trends and determinants of rural non-farm employment in the Indian Economy, *European journal of Economics, Finance and Administrative Sciences*, Issue 10. Pp: 1450-2887.

Uttam Kumar Deb, G.D. Nageswara Rao, Y. Mohan Rao, Rachel Slater(2002),Diversification and Livelihood Options: A Study of Two Villages in Andhra Pradesh, India 1975–2001, *Overseas Development Institute*, UK.

World Bank (2002), Intergenerational Linkages in non-farm Participation focus on Gender Effects in Nepal.