



## Agency area rural non-farm situation: A case study of two villages Bothappagudem and Palakunta west of Buttayagudem mandal in West Godavari district of Andhra Pradesh

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**Abstract:** This study conducted in the village Bothappagudem which is located in agriculturally developed District West Godavari. These two villages agency villages and depend upon only agriculture. 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. Primary and secondary data also use to collect the data. Bothappagudem village total population is 615; in these 232 non-workers and 383 are workers. In agricultural workers the highest 84 percent are females and but when compare male that is 73 percent. Household industry both male and female percent are low compare with agricultural workers. Male household industry workers are 1.5 and female household industry workers are only 1.3. Main and marginal workers point of view main workers are high than marginal workers. Palakunta west total population of this village is 422, in these non-workers are 181 and workers are 241. In total workers males are higher than females and non-workers females are high. In main agricultural workers females are high and in household industry workers males are high. In main and marginal workers, main agricultural workers are high. In main and marginal agricultural workers females are high. This study explains rural people are diversified their occupations from farm to non-farm because of some factors like education, caste, gender, age and assets. This study focused on selected households' reasons for diversification.

**Key words:** Rural Non-farm Employment, Education, Occupation Diversification, Land, Forward and Backward Linkage

### Introduction

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. 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 find out Agricultural situation in the selected villages Bothappagudem and Palakunta west



2) Determinant factors of Non-farm employment in the selected villages Bothappagudem and Palakunta west

### Hypothesis:

1) Agricultural labour higher than Non-farm workers in both selected villages

2) Non-farm workers variations occurred because of years of schooling differ from person to person

**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. Why Rural employment shift agricultural to non-agriculture?

2 Why structural changes occur in villages also?

3. What are the factors generate non-farm?

### Review of Literature

Francisco H.G. Ferreira and Peter Lanjouw (2001), studied rural Brazil. Most of the rural areas are suffering with poverty still dominant people are facing insufficient minimum needs. So this study concentrate on rural people, lot of differences in occupations between poor and non-poor. High labour productivity/high income activities and low labour productivity activities which serve as a residual source of employment. Here univariate and multivariate models found non-agricultural employment determinants. The main findings of this study were, high qualified get high incomes in urban.

Nong Zhu and Cuizhen Zhang (2007), studied rural China Hubei province. They say that the income gap between non-farm and farm sectors serves is the major pull factor that favors non-farm participation. Simulation results show that the participation probability is more sensitive to non-farm income increase than to farm income decrease. We also find that education and proximity to urban place and specialized commercial farming are crucial factors in helping rural non-farm households. Lack of the Land and the surplus of the labour are leads into non-farm participation. Their analysis indicate education positive role in non-farm participation farm and non-farm productivity among rural households. Therefore, improved education level among rural labour will be a great help for their long-run development in rural China. The regression results show that the shortage of land is actually a crucial push factor in non-farm activity participation among rural households. This implying that better quality of land would encourage rural households to focus on farming. Non-farm participation is the most effective choice to increase the income of rural households.

Islam, Nurul (1997), suggests through his study conducted in Washington D.C that the emphasis on education helps for growth in non-farm sector. Education contributes to higher productivity. If he/she completed secondary level of education can have capacity to run own establishments but if low educated people can't. Education makes it easier to take up skill development training for particular enterprises. Farm and the non-farm rural sectors contribution to overall rural development are greatly strengthened by the development of human capital



through the spread of education and the improvement of health. Investment on health also leads to increased labour productivity. Growth of non-farm sector increases rural employment including women.

Takashi Kurosaki (2001), used to examines human capital effects estimated. Human capital is education, and the levels of education is primary, secondary, higher secondary, degree and above degree. This paper analyzes or estimates, casual labour and self-employs wage getting. Male educated people are getting more wages in non-farm; in this is not appeared in agriculture. If he/she completed primary study that is not effect on agricultural incomes. Non-farm household members are receiving high wages.

Vikas Rawal, Madhura Swaminathan and Niladri Sekhar Dhar (2008), conducted a study conducted in three villages (Ananthavarm, Bukkacherla and Kothapalle) Andhra Pradesh. These three villages has different agro-ecological settings with in the state. Andhra Pradesh survey data in 2005-06 examine income diversification of rural households.

In three regions, out of 10 districts are selected on random sampling; and 20 villages are selected. Total households are treated as cultivating and non-cultivating households. Again these cultivating households are divided into marginal, small, medium and large size. Out of 20 villages, 315 rural households were selected for personal interview method. The village Kothapalle, which is located nearer to the high way north Telangana diversification income is more than two other Ananthavaram and Bukkacherla. These two villages Ananthavaram and

Bukkacherla are getting more income from agriculture. We can't conclude simply if assets have more can earn more.

Tripe Olivia-Paula (1999), found linkages between the assets (Education, land and infrastructure facilities promoting factors) in developing countries. Land access is important to improve agricultural production. Economic activities determined by assets of the household. Without improving the assets of the households welfare can't welfare. So, policy interventions can improve non-farm though increase the assets of households. Land ownership is positively associated with agricultural activities and agricultural wage participation. To earn high income in non-farm and enter into the non-farm education always shows positive relation. But at the same this education negatively associated with agricultural activities and infrastructure. If the selected village nearer to urban it is positive to non-farm but negative to farm.

Deininger, K and Olinto, P (2001), the study was conducted in Columbia. Two important factors are discussed in this paper, one importance of non-farm employment to participation in non-farm among all people. No conflict between development of the farm and the non-farm sector. But maximize gains from non-farm development and reduce undesirable consequences. Here, the policies are needed to non-farm development. Take farm or non-farm poor people are working as wage labour and self-employment in either agriculture or non-agriculture. There is lot of chances to enter into non-farm for educated and skillful persons. Capable to invest in non-farm all are encouraged by this sector. Government intervention always encourage through human capital, credit markets. Human capital especially



on education and training will help promote the non-farm.

Ma Pledad S.Geron (1991), study was conducted in Philippines. This study was concentrated on women role and development. In creating rural income and employment, the non-farm enterprises (NFEs) role is important. Small agro based enterprises are expected to boost development in the area by raising the value of agricultural products. Being labour intensive NFEs are believed to employ a sizable number of women in their labour force. In agrarian reform areas, women and youth are mostly affected due to their dependency upon the farm sector. Women are being the household's unorganized decision maker in financial matters may have some effect on financial policies impinging on the agricultural sector. These policies may also have an impact on the relative position of women in the community and their access to resources. Likewise the role of NFEs and agrarian reform in enabling women to participate in development is also assessed. Lastly, the review identifies empirical issues that need further investigation. These include claims, which have not yet been substantially validated by empirical findings.

The relationship found between the increased agricultural production and growth of employment in the non-agricultural sector. This study was conducted by Mellor, J.W. and Lele, M. 1972, by assuming the existence of labour and food markets as two separate but interacting markets in a dualistic economy. The model highlights the adverse effect of the wage good constraint on growth of employment in the non-agricultural sector in a situation of traditional low productivity agriculture

faced in many developing countries. This it does by showing that technological change which increases labours share in agriculture may well lead to a decline in the marketed surplus of food grains and an increase in the real wages in the non-food sector. On the other hand, in situation of biased technological change even the direct employment effect of new technology in agriculture is limited. In India regarded the green revolution as an external shock raise agricultural productivity and rural income would create linkages to the rural non-farm sector as well as to urban sectors. Both forward and backward production linkages and consumption linkages were thought to be important. In addition, there would be potential factor linkages through the supply of labour and capital. Growth in various sectors would be mutually reinforcing with employment and incomes increasing in a dispersed pattern.

Ann Gordon and Catherine Craig 2001 examine RNF activity in sub-Saharan Africa and the determinants of differentials access to RNF incomes. Improvements in infrastructure help to facilitate access to RNF income sources. Poor people's access to infrastructure (for examples roads), financial and social capital and natural resources (particularly land) is examined in relation to their participation in RNF activities; several interrelated factors play an important role. In rural areas there is a particular need to avoid over-emphasis on cost-recovery in infrastructure because of poor purchasing power and the inherently higher per capita costs of infrastructure in rural areas. Data has taken from primary and secondary sources. The RNF 'sector' is heterogeneous, making blanket policy



prescriptions difficult. In many African countries decentralization processes have been underway, traditionally this 'sector' has had no specific organization whose remit is focused exclusively on its development- rather it has been covered by numerous organizations, but with none taking overall responsibility. Macroeconomic management accompanied by recognition of the need for safety nets. Promoting rural engines of growth, other activities may develop, correcting for urban bias in overall policies and making sure that policy delivery is consistent with policy intent.

Mukherjee, Kuroda and Yoshimi 2001. Using a panel dataset for fourteen major Indian states from 1973 to 1993, they estimates a simultaneous equation model for the rural sector taking into account the endogeneity between farm and nonfarm sector growth. The rural non-farm sector development is influenced more by improvements in physical, social and financial infrastructure. The last one is particularly important from the policy perspective because until now, the major share of rural finance has gone to agriculture, not least because of vested interest in a country like India. Our analysis pints to the benefits of targeted lending to small and medium enterprises in the rural areas, an aspect that is currently being practiced by micro-credit organization around the world. The decade of the 1980s was actually the best in terms of employment growth. A policy of protection, domestically through licensing of small scale units and externally though quantitative quotas on imports, coupled with cheap credit, investment subsidy and infrastructure provision was instrumental in bringing about a substantial increase in both

employment and output and share of the rural non-farm sector. Rural employment, especially rural non-farm employment, grew rapidly. Backward linkage from non-farm employment to agriculture may have sustained the productivity increase in the farm sector during this period. More than 45 million jobs were created in the rural areas during the 10-year period 1983-1993, most of which were in the non-farm sector. However, unlike China there was no large-scale shift in labour shares between farm and non-farm sectors. However, to quantity the impact of nonfarm income and infrastructure at the micro level, we need to extend our analysis to surveys and other sources of microeconomic data, to be undertaken.

Vyas and Mathai 1978: found that even if there were to be a deliberate social intervention in favour of allocating larger resources to agriculture, the labour absorption capacity of Indian agriculture would be limited; and path of rapid rural industrialization too is beset with many pitfalls. Total workforce has remained virtually unchanged despite all the efforts at diversification of rural occupational structure over the past thirty years. National Sample Survey data was used in this study. Physical and social infrastructure changes in the present rural credit and pricing policies, etc need to change. Until 1970, India's agricultural share of national employment remained constant. Two interrelated are to the explained. First is the weak linkage between agricultural and non-agricultural sectors. As a result of a skewed share of different holding groups in agricultural production, distribution of incomes among the peasantry is highly uneven. This can be illustrated by the share of different categories of holdings in food-grains



production. The employment situation in India, as revealed by successive rounds of the NSS, has not only improved, but has deteriorated. Surprisingly there were no serious dips in unemployment during 'peak' or 'lean' season. Wherever immediate possibility of decentralized production does not exist, possibilities of decentralizing various processes of industry and evolving a mix of labour intensive and capital intensive process can be tried out. Apparently textile industry does provide an example of this type of industrial organization whereas spinning activity may have to be centralized, weaving can be largely decentralized.

Basu. And Kashyap. 1992, studied about labour absorption in the farm sector, deals with studies on non-farm sector. Data has taken from Census and various NSS rounds. The emphasis of the paper has been on identifying regionally differentiated agricultural development process in relation to the size of non-farm sector. Most of the available studies lend support to the 'residual' sector hypothesis regarding the emergence of non-farm rural employment (NFE) implying that relative population pressure and unemployment rates are the determining factors of rural non-farm employment. Such a generalized hypothesis is not satisfactory as it tends to conceal the role of agricultural development process, though it may be limited to certain regions in the country. Further divisions into different typologies, depending upon size of the non-farm sector, level of agricultural growth, crop commercialization index and productivity growth reveal that in about 82 districts the size of the non-farm sector appeared to be positively associated with the agricultural growth.

Integration of rural development process with the rural-urban employment linkages to identify areas in a broader spatial-framework where inter-dependencies between the growth of the agricultural sector and the non-agricultural activities could be strengthened by appropriate policy interventions.

#### **Data Analysis: Buttayagudem mandal details**

In this mandal, our study conducted in two villages Bothappagudem and Palakunta west. Total population of the mandal is 53031, in this male are 25533 and female are 27498. Total male workers 16147 (63 %) and non-workers are 9386 (37 %). In female 14472 (53 %) are workers and 13026 (47 %) are non-workers. In male agricultural workers (main+marginal) 11708 (73) and household industry workers (HHI) workers are 241 (1.5). Female agricultural workers 12192 (84) and household industry workers (HHI) are 190 (1.3) shows (Table-1). In agricultural and household industry point of view, agricultural workers are higher than household industry workers in both male and female.

#### **Bothappagudem village details**

This village area in hectare was 86 and total population of the village is 615 shows (Table-2) according to the census of 2011. Total number of households is 180 and area under non-agricultural is 12 hectare of land. In this village male percent is 66.7 and female is 33.3.



**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	25533	16147(63)	9386(37)	11708(73)	241(1.5)
Female	27498	14472(53)	13026(47)	12192(84)	190(1.3)
Total	53031	30619	22412	23900	431

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

**Table-2 Bothappagudem 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	127	0	127	0	0	0	127	188	315
Female	169	0	169	1	0	1	105	195	300
<b>Total</b>	<b>296</b>	<b>0</b>	<b>296</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>232</b>	<b>383</b>	<b>615</b>

Source: Secondary Data 2011

The age group of 31-45, 46-60 and 61 above age group are 33.3 percent from each age group. Education point of view, 16.7 from each group is up to 5<sup>th</sup> class, 8<sup>th</sup> to 10<sup>th</sup> class and illiterates. In traditional non-farm 6 (100) percent are working. In this village 100 percent are self-employ and there is no wage employs. Main and Marginal male agricultural workers are 127 and female workers are

169 same way main and marginal household industry female workers are only one are working in but there is no male household industry workers in this village. Non- male workers are 127 and female workers are 105. Wage employs, self-employs and entrepreneurs point of view, self-employs are highest and there is no wage employs and entrepreneurs.

**Table-3 Bothappagudem village Traditional and Modern Non-farm Workers**

Type of Non-farm Employment	Traditional Non-farm Employment	Modern Non-farm Employment	Total
No. of RNE	6	0	6
Percent (%)	(100)	(0)	(100)

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



Out of 6 non-farm households in this village, all are belongs to traditional non-farm. In detailed explanation, 1 household maintaining kirana (grocessary), 3 households are working as teddy tappers and 2 households are working in Liquor shops (Kallu) shows (Table-3). Out of selected 6 households in this village all 5 (83) are belongs to Scheduled tribe except one household that is forward caste 1 (17). The highest 17 percent of the workers are completed 10<sup>th</sup> class and illiterates are 67 percent in this village.

Out of selected households of the village 50 percent are land less and remaining 50 percent are very less hectare of the land cultivating. In Bothappagudem village out of 6 self-employ non-farm households

3 households have own cultivating land and remaining 3 households have no cultivating land. In Bothappagudem village out of 6 self-employ one household are forward caste and 5 households are scheduled tribe. In Bothappagudem village out of 6 households and their educational status was explained. Up to 5<sup>th</sup> class standard completed households are 18<sup>th</sup> to 10<sup>th</sup> completed households are 1 and illiterates are 4 out of 6 households.

**Palakunta west village details**

This village area in hectare was 376 and total population of the village is 422 (2011) shows (Table-4). Total number of households is 155 and area under non-agricultural is 35. In this village male workers percent is 100 and there are no female non-farm workers in this village.

**Table-4 Palakunta Village Main marginal workers and non-workers**

Gender	Main workers			Marginal workers			Non-workers	Total Workers	Total population
	AL	HHI	Total	AL	HHI	Total			
<b>Male</b>	91	0	91	2	0	2	69	133	202
<b>Female</b>	99	0	99	6	0	6	112	108	220
<b>Total</b>	<b>190</b>	<b>0</b>	<b>190</b>	<b>8</b>	<b>0</b>	<b>8</b>	<b>181</b>	<b>241</b>	<b>422</b>

Source: Secondary Data 2011

In age point of view, the highest 71.4 percent of the population are 46-60 years of age group people and 31-45 age group are 28.6 are existing in this village. In education status of view, the highest 14.3 percent of the completed 10<sup>th</sup> class and 6<sup>th</sup> and 7<sup>th</sup> standard educates are existing and up to 5<sup>th</sup> class 57.1 percent completed. Illiterates are 14.3 percent in this Palakunta west village. In this village Palakunta, total main and marginal male agricultural workers are 92 and female agricultural workers are 3

and female agricultural workers are 99 and female agricultural workers are 6. Male non-workers are 69 and female non-workers are 112. 105 same way total main and marginal household industry male workers are Types of non-farm divided into two traditional and modern non-farm. Total non-farm employs are 7 shows (Table-5) in this village in this traditional non-farm 4 (57.1) percent are working modern non-farm workers are 3 (42.9). Out of 4 traditional non-farm households, 2 households are running





kirna (groceries) and two working as toddy tappers. Out of 3 modern non-farm households, 2 households are working as

drivers and one household is working as carpentry work.

**Table-5 Palakunta west Village Traditional and Modern No-farm Workers**

Type of Non-farm Employment	Traditional Non-farm Employment	Modern Non-farm Employment	Total
No. of RNE	4	3	7
Percent (%)	(57)	(43)	(100)

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

This village is actually a tribal village only one family belongs to forward caste remaining 6 families belong to Scheduled tribe. The highest 6 (86) percent the highest STs are working in non-farm there is an OC's are 1 (14) percent. Land size point of view, out of 7 households, only one household has no land. Less than 1 hectare of land 4 (57) and 1 hectare to 2 hectare of land 2 (28) are cultivating. In Palakunta west there is one household in wage employe but this household also have no own cultivated land. In Palakunta west only one household are engage in wage non-farm that is from scheduled caste. In Palakunta west village out of 6 self-employ non-farm households, 5 households have own cultivating land but one household have no cultivating land. In Palakunta west of 6 households, one household are belongs to forward caste and scheduled tribe are 5. In Palakunta west there is one household in wage employe but this household also have no own cultivated land. In Palakunta west only one household are engage in wage non-farm that is from scheduled caste.

In Palakunta west village out of 6 self-employ non-farm households, 5 households have own cultivating land but one household have no cultivating land.

In Palakunta west of 6 households, one household are belongs to forward caste and scheduled tribe are 5. In Palakunta west village out of 6 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 1. 8<sup>th</sup> to 10<sup>th</sup> completed households are 1 and illiterates are 1 out of 6 households

**Few Findings of Bothappagudem village**

In total workers the highest workers are male 63 percent and lowest 53 percent are female workers. In non-workers the highest 47 percent are females and 37 percent are male. Only agricultural labour is there in this village and there are no household industry workers in main and marginal workers also according to the secondary data of 2011. Main agricultural labour are high than marginal agricultural labour. In total workers the highest are females and lowest are males. In non-workers the highest are male and lowest are females. Traditional non-farm and modern non-farm point of view, traditional nonfarm employs only existing in this village there is no modern non-farm employs in this village Bothappagudem.



### Few Findings of Palakunta West Village

In total rural population females are high. There are no household industry workers in main and marginal workers according to the data of 2011. In non-workers and total workers females are higher than males. In traditional non-farm and modern non-farm, traditional non-farm employs are higher than modern non-farm employs

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