Rural Non-farm Employment in Andhra Pradesh: A Case Study of West Godavari District

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By

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CERTIFICATE

This is to certify that the thesis entitled **"Rural Non-farm Employment in Andhra Pradesh: A Case Study of West Godavari District"** Submitted by **Andugula. Srinivasa Rao** bearing registration number 04SEPH11 in partial fulfilment of the requirements for award of **Doctor of Philosophy** in the School of **Economics** is a bonafide work carried out by him/her under my supervision and guidance.

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I HerebyDeclare That The Work Embodied In This Thesis Entitled **"Rural Non-farm Employment in Andhra Pradesh: A Case Study of West Godavari District",**carried out by me under supervision of **Professor K. LAXMINARAYANA,** Professor of Economics, School of Economics, University of Hyderabad, is original and this had not been submitted for any degree either in part or in full to any other university or to this university.

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Srinivasarao.A

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Abbreviations

ADD : Agricultural Distress Diversification

BLs : Backward Linkages

CLs : Consumption Linkages

CRPF : Central Reserved Police Force

FLs : Forward Linkages

HH : Household

HHH : Head of Household

NSS : National Sample Survey

NSSO : National Sample Survey Organisation

OBC : Other Backward Caste

OC : Other Caste

RMP : Registered Medical Practitioner

RNFE : Rural Non-Farm Employment

RNFS : Rural Non-Farm Sector

Rs. : Indian Rupees

SC: Scheduled Caste

SSC : Secondary School Certificate (new regulations)

VRO : Village Revenue Officer

WG: West Godavari

Glossary of terms

acre: 2.45 acres = 1 hectare

anganwadi : kindergarden helper

bajra:chickpea

brahmin: ceremonial caste, highest in the ritual order of the Hindu society

golla: shepherd community

harijans: the traditionally untouchable low castes

harijanwada : a settlement of harijans at the end of village

jowar: a coarse cereal

kalasi: porter

kamma: a landowner business caste

kapu : the leading caste

kharif (sarwa) :the first paddy autumn crop which is grown during June to September in the delta

kirana: store selling provisions (dry goods)

kutch: mud path

lakh: one hundred thousand

muttamaistry: foreman

paleru: permanent servant for farm as well as home

panshop: a shop selling soft drinks, sweets and cigarettes

purohit: person who conducts rituals of Hindu religion

rabi (dalwa) : the second paddy winter crop which is grown during November to March

tapi worker : mason

toddy: a drink made from the sap of the palmayra tree

vaisya: traditional grocer trader in villages

santani : flowers provides to temples and flower sellers

Chapter-1

INTRODUCTION

Introduction; In India, Andhra Pradesh is one of the largest state and it was formed in 1956. The highest income 60% coming from agricultural only. In the last 50 years, the annual growth rate of agriculture was only 2.88%. Both agricultural production and diversification[1] strategies (education, caste etc.,) an important to the development of three regions i.e., Coastal Andhra, Rayalaseema and Telangana of the state. Basically, our study conducted in south coastal Andhra Pradesh.

1.1 Rural employment increases (agriculture to non-agriculture)

Changing agricultural to non-agricultural of the Indian economy has been slow due to differences in both agricultural and non-agricultural labourer. Urban manufacturing sector is not providing labour-intensive[2] employment. Agricultural employment in rural areas is insufficient for the rapidly growing population. Share of agricultural employment was decreased for example, in 1972-73 it was 74.58 percent but in 1993-94 it was decreased to 63.84 again it was decreased to 51.76 percent in 2009-10. Share of Industry employment was increased, in 1972-73 it was 06.75 percent but in 1993-94 it was increased to 15.01 again it was increased to 21.93 percent in 2009-10. Share of Service sector employment was increased, in 1972-73 it was 18.67 percent but in 1993-94 it was increased to 21.16 again it was increased to 26.30 percent in 2009-10 (Deepak Kumar Behra and Mitali Tiwari,2012[3]).

1.2 Sectors Contribution to Gross Domestic Product (GDP)

The agricultural sector share has declined in Gross Domestic Product (GDP), it is lower than industry and service sectors. Labour is pulled out from agriculture and got dependent on industry and service sectors. Agricultural sector contribution in GDP was

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[1]Diversification can be regarded as the re-allocation of some of a farm's productive resources, such as land, capital, farm equipmentand pices to other farmers and, particularly in richer countries, non-farming activities such as restaurants and shops.

[2] .Needing a large workforce or a large amount of work in relation to output.

[3] .Structural transformation of Employment in India, 1983-2012, Artha Vijnana, Vol.LIV,No.3, Sep-2012,pp 342-356.

decreased. The rural labour preferred move from agriculture to non-agriculture, because low income of agriculture and seasonal unemployment. Irrespective of gender, both male and female are not interest to continue in agricultural sector as bonded and attached labour. Now a days the rural people not showing any interest do work as daily wage labour but trying to increase bargaining power with contractual work. In this situation, infrastructure is playing key role; through development of roads, transportation, communication and literacy non-farm development occur. In this process government intervention is very important, so most of the people in rural areas trying to shift their occupation. Especially, landless, marginal and small farmers who are receiving low incomes are diversified farm to non-farm. Scheduled caste mainly, who have no caste occupation mostly work as agricultural labourer.Non-farm can control rural to urban migration through self-employment creation.

Currently, non-farm sector is no longer a residual sector it is emerging as a driver of rural development and transformation and contributing around 65% to the rural Net Domestic Product in 2010 (Papola, et, al 2013[4]).The agriculture share in GDP 1972-73 is41%, but it was decreased to 2011-12 to 14%.But tertiary increased from 35% to 58%. However, stillagriculture plays main inrural workforce it is 68% in 2009-10. Share of Industryin GDP was 13% by 1950-51, but increased to 24% by 1983 further increased to 28% by 2010-11. Share of Service sector in GDP was 28% in the year 1950-51, but increased to 40% by the year 1983 further increased to 58% in the year of 2010-11 (Deepak Kumar Behra and Mitali Tiwari[5]).

1.3 Village Diversification agriculture to non-agriculture

Villages are diversified farm to non-farm. Agricultural employment, since 1980s to 2012, the rate was decreased to 2% to 0.4%. Labour force and agricultural employment also decreased. But comparison of male and female, female workforce decreased than male. It is decreased 33 percent to 26.10 percent from 1993 to 2010 (Reddy.Amarender A., 2015[6]).

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[4] . Papola TS. 2013. Employment Growth during the Post-Reform Period. *The Indian Journal of Labour Economics*, 56(1):1-13.

[5] .Structural transformation of Employment in India, 1983-2012, Artha Vijnana, Vol.LIV, No.3, Sep-2012,pp342-356.

[6]. Growth, structural change and wage rates in Rural India, Economic and Political Weekly, Vol, No.2 Jan 2015, pp: 56-65.

1.4 The motivating factors for the growth of non-farm sector

Transport development it leads to moving people one place to another place is easily, but before that roads construction is important. Roads develop may positively impact to young and educated people migrate from rural to urban for jobs searching. In this manner, communication skills, personal development will take place. Here, educated people, can get chances to earn good jobs in urban. So, who are getting low wages will get high salaries in non-farm. Generally, among Scheduled Caste (SCs), Other Backward Caste (OBCs) and Other Caste (OCs); Scheduled Caste people percentage was increased in rural non-farm employment than two other(Reddy, Narasimha, D., Reddy, Amarender, A.,Nagaraj, N etc., 2014[7]).

1.5 Agriculture

Non-farm making only low quality of goods because the people who are engage in non-farm are belongs to low standard of education and skills. Globalization, market is opening market so these non-farm goods can't compete with that. Non-farm is heterogeneity in character, state to state, region to region, village to village and household to household also. Primary studies are important to describe the rural non-farm employment.

In this contextthe state-level (AP) land-use pattern datashows that difference in land use pattern in north and south coastal Andhra. Slowly land use for non-agriculture is increasing it mean agricultural sector priority decreasing. Not only in north coastal Andhra Srikakulam but it is happened in south coastal Krishna district also. Land uses from Food crops to non-food crops also increasing the cultivators are giving importance to cultivated commercial crops because increase their income. Agricultural paddy cultivation not getting any reasonable prices and at the same government also not giving any sufficient support to agricultural cultivators. In agricultural most of the cultivators only engage as marginal, small holding cultivators. From the beginning of the cultivation, cultivators are facing so many problems; especially these north coastal Andhra dependence upon rains there is no proper irrigation. Now the people are

[7] Emerging Trends in Rural Employment Structure and Rural Labour Markets in India, Working Paper Series No.56, ICRISAT Research Program Markets, Institutions and Policies, 2014

showing interest to do non-farm activities. Land use in agricultural slowly decrease then it use for non-agricultural purpose (Seethalaxmi, S., 2010[8]).

1.6 Government Policies

To decline rural poverty this non-farm sector plays much role in India. Green revolution is mile stone for technology development, there is lot of varies in pre and post green revolution.Agricultural full of uncertainties, like production, employment, wages, ets., When this green revolution came in to agricultural total the share of agricultural were changed. This first it brings technology into agriculture so food grain production was declined.Irrigation also not certainty so variations among different regions are increased. In Andhra Pradesh, because of improper development of infrastructure like roads, transport cultivators are not getting proper or minimum prices for major crops also.

As literature shows that the rural non-agricultural employees produce only low productivity and low standard of quality of goods. Most of these households are landless, small and marginal farmers andrural non-farm employment provided additional income for their survival. Another problem of is rural poverty, to decrease this poverty the growth of non-agriculture sector is important. Raising of the rural non-agricultural incomes can reduce economic poverty and inequalities. Likewise the other problem is rural- urban migration, non-farm sector would lead to reduce the migration of rural population. Non-farm employers create their own establishment with hired labour and without hired labour establishments. Structural transformation will occur through the rural non-farm sector development. India holds the differences in terms of social, cultural, economic and geographical. In some areas agricultural development leads to non-farm employment likewisein some areas it leads to distress diversification (ADD).

The present thesis has following objectives

[8] Shifting land use patterns in Andhra Pradesh: Implications for Agriculture and Food Security, Center for Sustainable Agriculture, Hyderabad, Andhra Pradesh

1.8 Objectives

1. To understand the changes in the agrarian structure of Andhra Pradesh since 1980's
2. Factors determining non-farm employment in Kodurupadu village
3. To study diversification of employment in socio-economic groups in Kodurupadu village

1.9 Research questions

1. Why Rural employment shift agricultural to non-agriculture?
2. What are the causes to increase GDP share of non-agriculture?
3. Why structural changes occur in villages also?
4. What are the factors generate non-farm?
5. What effect of Globalization on agriculture and non-agriculture?

1.9 Hypothesis

1. Agricultural development leads to Rural Non-farm Employment
2. The relationship between education and non-farm employment is positive
3. The lower castes diversify their employment to traditional non-farm and higher castes to modern non-farm

1.11 Data and Methodology

The study is based on the both secondary and primary data.The secondary data were collected from Directorate of Statistics and Economics (DES), Population Census. The primary is collected from selected village namely Kodurupadu. This village was agriculturally developed village in West Godavari District of Coastal Andhra Region.

In the selected village, total population caste-wise, working people, non-working people, education status, land size of holdings, occupation details were taken. If he/she engage in non-farm, it is traditional non-farm or modern non-farm are discussed.

Determinants factors, like income, caste, gender, age, family size, share of income, wage difference, working days all are taken into consideration.

1.12 Organization of the Thesis

In first chapter introduce the topic Rural Non-farm (RNF). The second chapter, review of literature available to relate to the rural non-farm employment is given. Agrarian structure of the Andhra Pradesh was explained in third chapter. In the fourth chapter, determinants of non-farm employment in the village were explained. The fifth chapter gives concluding remarks.

Chapter-II

REVIEW OF LITERATURE

Introduction: Rural employment is getting diversified from farm to non-farm sector. Non-farm employment has links not only with farm but other factors like caste, gender, education, income, social network etc. There is no common factor to determine non-farm employment. So there are many variations in rural non-farm employment from state to state, region to region, village to village, household to household and it has heterogeneity in character and not homogenous. In rural areas, people are suffering from poverty, excess labour force in agricultural and seasonal unemployment.

2.1Education

Micevska, Dil Bahadur Rahut (2008) says that,most of the income of Himalaya's people are getting from non-farm. This study examines, what factors are cause to enter in to non-farm was analysed. He concentrates on education of the people he found who are educated they are engage in non-farm. His study explains land less, marginal size of holders are giving priority to enter into non-farm. Caste is also one of the main determinant of non-farm especially who have no caste occupation they are trying to come non-farm sector. Climatic conditions of the area also decide which the main occupation of the people is. Male and female differences also important to decide this non-farm sector.

Mahendra Dev, S (2007) focused on Rural Non-farm activities in India and discussed about determinants factors. In India non-farm was diversified but slow particularly in female. Skilled and educated person are increased in rural non-farm employment (RNFE). Those who develop their personal skills they can easily enter into non-far. In this manner, government intervention or investment provide is important to promote the non-farm.

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.

Amarender Reddy and Praduman Kumar (2006) study concenters 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 positive effect on rural non-farm. Technical educationis 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.

Macherla Prasadarao (2002) studied in Andhra Pradesh two village i.e., Anandapuram and Veeravalli. He is trying to say about relation of non-farm withfarm, land size, land productivity, education, age, caste and season in the agriculture (khariff and rabi), migratoin. Moreover, agricultural growth linkage or distress diversification with non-farm also discussed.Both villages (Anandapuram and Veeravalli), one is agriculturally developed and other one is agriculturally backward village. In his results, education has positive impact, land size is negative impact, caste is negative impact, agricultural seasons impact on non-farm. Migration positive impact on non-farm. Either positive or negative in the case of, caste, skills, poor or non-poor.

Diana Traikova (2005),in her study conducted in Bulgaria, the diversification incomes in rural Bulgaria. For this study, 120 households has been taken basically this is the gender study. Male and female participation especially in non-agricultural very different. So many female labour are engage in service sector but in the case of male; they are in constructing work. Main occupation the Bulgaria is agricultural sector. Lastly, found

there no differences between man and woman in work participation. Women have constrains to do some jobs, social restrictions so most of the female are participating in service sector.

Marzia Fontana with Cristina Paciello in (2009), studied gender differences in Sub-Saharan Africa and South-Asia rural employment. Their found thatwomen are limitedcompared to men. Women role is very important in caring children and family. Now governmentemphasizing on gender equality and poverty reduction. But there are so many differences in regions, institutional settings and economic structure. Rural employment generation lot of employment across the world. This paper was emphasizing thatthere is an urgent need to implement proper measures in order to and redistribute the burden of unpaid work. For this purpose government proper intervention can help to remove gender discrimination in education and employment. In rural areas, this non-farm employment income (NFEI) secure the people and at the same its leads to wider inequalities. New technology protect the rural women and mobilize the rural organizations particularlyto increase awareness among women.

Valeria Sanchez (2005), explained the gender analysis was in Bolivia study. Discussed on gender participation in non-farm, male and female participations are different. When compare with male, female are struggling so much economic, social obstacles. He used ordinary least square (OLS) to estimate income determinants. Gender has a significant influence on whether participation in non-farm activities. Women participation in non-farm employment is definitely limited, regardless of the region. Education is also an important determinant in all three models especially non-agricultural wage employment and highly skilled employment. Rural people are showing interest engage in other than agricultural wages.Policy makers should also note the high share of non-agricultural wage employment in household activities.

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), studies 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.The land is very lack and the surplus of labor act as the push factor in non-farm participation.Their analysis indicateeducation 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 cant. Education makes it easier to take up skill development trainingfor 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.

Antonio Yunez-naude and Edward Taylor (2001), conducted study on Mexican households. This study shows that effects of education. The data come from a survey of 391 households with 2960 members between 1992-1995. Head of household (HHH) education and income source details discussed. If government policies are help to increased education easily the people can move to non-agriculture. In the Mexian experience, primary and secondary education is positive effect on non-farm. It helps to increase the own establishments. With limited or proper investment rural education development is much needed.

Masakazu Hojo (2005), shows that education external effects on the wages and employment in South Africa. Now a days, economist concentrate on non-farm even it is low standards of goods its giving employment to the rural people.For this study he has taken 8000 households. But comparison of wages farm and non-farm, non-farm wages are high twice than farm. In illiterates also, who are isolated can't get jobs in non-farm than proximate illiterates. Family literacy also one of the important factor to determine non-farm jobs. This is saying about, if father works in non-farm son also interest to do. In the same way, mother occupation definitely effects the daughters' occupation.

Iddo Kan, Ayal Kimhi, Zvi Lerman (2006), have studied the Goergian 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.

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.

Lanjouw, Peter Rinku Murgai (2008), attempts to explore relationship between poverty and diversification. This study was conducted in India based on the National Sample Survey. Casual labour, wage and self-employs are three types of non-farm employs NSS data from 1983-2005 were taken to analyze rural poverty and diversification. Regular non-farm characters are low education, social status, wealth are not good except high consumption levels. But self-employs of non-farm diversify in character. Here, policy makers when making policies concentrate on poverty eradication through non-farm development. To promote non-farm better to remove barriers to enter in to non-farm. Not only increase income levels but also fight with poverty.

Reardon, Tom. (1997), examines the prority of education as a determinant of Rural Non-farm (RNF). Rural industrialization in Asia andskill acquisition in Taiwan Province of China and the Republic of Korea are explained in this study. In cash-cropping zones, high investment was kept for farmers on education, especially for poor households. Data was taken for 1980s and 1990s in different countries. Educated people can have chance to get non-farm jobthan low educated people.

B. B,Christopher, Reardon, T and Patrick, W, (2001), studied rural Africa. This study discussed about factors which useful to enter or exit of non-farm. "Traditionally termed push factors are risk reduction, response to diminishing factor returns in any given use, such as family labor supply in the presence of land constraints driven by population pressure and landholdings fragmentation reaction to crisis or liquidity constraints, high transactions costs that induce households to self-provision in several goods and services". The "pull factors" "are realization of strategic complementarities between activities, such as crop-livestock integration or milling and hog production, specialization according to

comparative advantage accorded by superior technologies, skills or endowments". Data suggests, increase of non-farm leads to high consumption and also non-farm income diversification. Rural Africa experienced relation between non-farm income and household welfare it is showing positive relation.

2. 2 Land

Edna A. Reyes (1987),this study discussed about the Philippine Development. Data was taken from the Census of Agriculture. The data for Laguna were taken from the series of intensive village and household surveys conducted by the group of Dr. Yujiro Hayami. The analysis focused on both macro and micro setting and a case study villagethe data allowed for an analysis rural incomes and of income distribution. At the village level due to increased population pressure landless also increased and land reform regulations resulted in decreasing farm size, and unequal size distribution of farms. As an effect, the mobilization of the rural economy can be achieved even against relatively deteriorating agricultural conditions if the appropriate macro and sector-specific are put in place. Especially, those that would encourage the growth of a dynamic rural non-farm sector.

Tripe Olivia-Paula (1999), found linkages between the assets (Education, land and infrastructure facilities promoting factors) in developing countries. Land access 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.

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 thehigh 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.

2.3 Caste

Sukhadeo, Thorat and Nidhi Sadana Sabharwal (2006), attempt to assess whether present government policies promote non-farm employment in rural areas particularly for Scheduled Castes. Reservation policy in jobs and services, the improved education is expected to increase their share in regular and salaried jobs. They examined the shape and variations in the size of non-farm employment among SCs. Through type of economic activities, can analyses non-farm employment. Trying to find education and non-farm activity of the person, in this matter policies of education are important. In the Scheduled Caste and Scheduled Tribe community most of the people are illiterates so poverty is increasing day to day in that community. If you take the unorganized sector working people their mean years of schooling is very less. Both men and women the highest persons are belongs to illiterates. Among women self-employed, illiteracy rate was high. Comparing of the casual labour education with self-employed, self-employed education is high.Educational development have been used as major policy instruments to promote non-farm employment among them. While easy and cheap access to financial capital through bank credit is intended to promote self-employment, the educational programmes are expected to increase the share of SCs in regular employment. Lack of human resource development (HRD), they are adjusting in low income employment. Government policies are necessary to promote SCs and STs.

2.4Gender

Fredu Nega, Stefaan Marysse, Eric Tollens and Erik Mathijs (2005) conducted in Northern Ethiopia says that thepush and pull factors are causesoffarm households' income diversification. For this study, 385 households were selected to find levels of diversification and income inequality at micro level.To selection of the area, lot of indicators are taken into considerations like socio-economic and climatic factors. This area were three different agro-

ecological zones and analyses that some of the significant factors for the overall income inequality.There is difference between male headed and female headed households social differences are occurred.

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, 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.

Samantha Watson (2009), says thatso many obstacles, are faced by the women than men because of institutional and legal problems. In India especially, south India; so many restrictions can see to enter in to non-farm activities. Secondary data NSS data were taken to study in the year of 2000. This study concentrates, women role in production process and

small enterprise. Social structure like (caste, class, age) are taken to this study. Recently structural changes slowly occurred then female labour also enter into this type of non-farm. All under-employed, landless labour and poor enter into small enterprises.

Eduard, B. Vermeer (2003), conducted study in rural China tofind determinants factors of wage income. This study conducted in 1998, nearly 3500 households and 11 villages were taken. In 1980s, natural resource advantages and location were the main determinants of income differentials between Chinese villages. Here, Wuxi and Quingyuan are comparing their incomes so Wuxi got four times than Quingyuan because of industrialization. In wage labour high gender difference can see in Qingyuan than Wuxi. One village is highly developed (Wuxi) and other not developed (Qingyuan).

Beneria, Lourdes (2003), study concentrated on work difference between men and women. Female are more obligations than male, she engage in un-paid work. (for example, child care, house management). The obstacles of the women are in the manner of labour force participation, paid employment in both farm and non-farm. Non-markets are leading to low earning, low paid, unstable and poor quality employment. For economic growth and human development long run gender inequalities are not good. Slowly the women fertility rate and participating in unpaid work also decreasing day to day.

RubenR. and Marrit, V. D. Berg (2001), examines the Honduras non-farm income the studyis based on the national income and expenditure survey from 1993 to 1994. Non-farm wage, labour is geographically concentrated in small rural towns and in the industrial free zones located in the Northern region.Household is a complex farm unit, the consumer unit. Agricultural and Natural office data has taken.Non-farm income coming from wage employment as well as self-employment. Females are most likely to be involved on self-employment, while better educated persons tend toward non-farm wage employment. But when making policies concentrate on education and training programmes.

2.5Income

Abdul M. M. and Usami, K (2010),this study was conducted the Bangladesh and were taken 214 small households in advanced villages. Micro-econometric techniques were used to analyses the study. In advanced villages, small households are not earning are using

for food consumption not for any production. Because of no production still it is low realized reducing education and poverty.This situation hints at the need for any poverty reduction policy measure in the rural sector to pay attention to non-farming sector activities as alternative avenues of employment to people getting displaced from agricultural community. These NF activities are also proved to be supplementary sources of income for the supposedly better off categories in the rural areas.

Amitabh Kundu, Niranjan Sarangi, and Paritosh Das (2003), studied a process of sectoral diversification in rural India. 1990s liberalization have had a positive impact on growth of non-agricultural activities in India. Used NSS data source of this study.To the heathy economic development of rural areas high share of non-farm employment are not necessarily link. Levels of employment or adequate means of livelihoods are more important to reduce rural poverty. Female participation decreased from 1987-93 period than male participation. Although, low earning in the non-farm some people are creates their own self-employment.

Lanjouw, Peter, Himanshu, MukhopadhyayAbhiroop 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 in Latin America and Caribbbean 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.

Richard L. Meyer and Donald W. Larson (1978),studiedRNFE in East Asian countries. In the low income countries, the development depends upon capital intensive

activities in both the agricultural and non-agricultural sector. This study finds the importance of small-scale firms, rural non-farm enterprises, off-farm work for farm households. Rural non-farm activities may significantly improve the incomes of low income farm families by increasing opportunities for off-farm work like Taiwanese. It is not exactly clear what needs small firms have and how public policy should best address them. The dynamic effects on the farm sector also need to be better understood. Japan's experience suggests an emerging dilemma when increased part-time farming is associated with a decline in agricultural productivity and farm work is increasingly performed by women, children and old people, while young men work in off-farm jobs. A strategy involving small-scale farms and large amounts of off-farm work carried the risk of an unproductive agriculture. Too many labour surplus countries, however, appear to have ignored the successful experience of some Asian countries and thereby have failed to achieve balanced growth. Economic problems at this stage in the development of many low-income countries require abandoning the large-scale, capital-intensive bias, and substituting increased attention on small-scale farm and nonfarm firms. The benefits would include increased employment, reduced chain on capital and foreign exchange markets, and improved interpersonal and interregional income distribution.

2.6Government Policies

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 two 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 identify empirical issues that need further investigation. These include clams, which have not yet been substantially validated by empirical findings.

Stein Kristiansen (2003), studied unemployment in Indonesia. Economic crisis of 1997 most effected in the Indonesian unemployment. Rural labour markets can't provide employment to all. In Indonesia most of the land not cultivate only limited land will cultivate at the time rural non-farm importance was increased. Data were taken from different sources to understanding the rural unemployment. In this study he found, lack of awareness. Most of the people not aware of the market jobs, because low education standard and skills. Communication skills also very important to finding jobs through education can improve this including this relation development also needed.

Swapna Mukhopadhyay (1985), conducted a study in South Korea. In an East Asian country like South Korea, income growth rate is needed. Most of South Asian countries are facing surplus labour problem in those countries improve of income growth rate was very difficult. In mainland China, in spite of lower land/man ratio, as compared to India. Much of the controversy regarding the nature and dynamics of rural non-farm activities can be resolved if one allows for their essential heterogeneity within the sector. An attempt is made here to characterize a prototype Asian rural economy when a rural non-farm sector with its bimodal character is embedded in the system. Data is taken from, National Sample Survey. One way of going about with the task would be to look into the consumption profiles and income generation process for, all possible categories of households as is done in the analysis of social accounting matrices (SAM). Along with this, one could try to trace out the sector-wise consumption linkages. Producers as well as

subsistence farmers who produce less than their requirements, need to buy food from capitalist agriculture, which is the major source of marketable surplus of food grains in the system. This in turn is made possible by the provision of labour services by land and asset less people on capitalist farms.Rural non-farm is hegrogenity in character because the word “sector” also false. Non-farm is difficult to understand cannot give common definition.

Frank Ellis (1999),this study conducted on developing countries. Study focused on, rural development through occurred if the awareness increase 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 usingprimary 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.

Remco H.Oostendorp,R, H Tran Q, Trung, Nguyen T, Tung (2006),this study conducted in Vietnam. Saying about non-farm household enterprises it is a low-productivity sector. But at the same time it is dynamic, flexible and are innovative sector. This study collected information on income and how it can estimate income. They found that NFHE are importantfor income generate and to reduce income inequality and income volatility. But it was affected by trade liberalization. The role of the NFHE sector has been

diminishing during the period 1993-2002 in Vietnam according to the logic of international comparative advantage. Policy makers have to target appropriate policies to favouring NFHE.

R.R.Biradar and S.T. Bagalkoti (2001), say that in the process of economic development of a country, several changes occur over a period of time. One such change is the diversification of rural employment structure in favour of rural non-farm. India is not an exception to this phenomenon. The declining land frontiers, deteriorating employment elasticities in agricultural and urban organized manufacturing sector and excess supply of labour force on the one hand, and increasing investment opportunities due to globalization. In the changing economic scenario of the country, RNFAs providing employmentin the rural households, particularly the poor.Secondary data on employment and unemployment published by National Sample Survey Organization (NSSO) from 1972-73 and 1999-2000. Although the share of non-farm workers in rural areas has increased, the annual growth rate seems to have slowed down. In the case of female workers, increased continuously only in two states i.e., Kerala and Himachala Pradesh during 1972-73 to 1999-00. The data increased continuously in manufacturing, construction, trade and transport, etc., during 1990-2000. As far as impact of RNFAs on rural poverty is concerned, promotion of male RNFAs, followed by increasing rural male literacy, seems to be a better strategy of poverty alleviation in rural areas as compared to an increase in agricultural income and rural per capita public expenditure on rural development and social service.

G.M.Arif, Hina N and Haq, R (2000), a study conducted in Pakistan to examinethe linkage between non-farm and poverty. Secondary data has been taken fromHousehold Integrated Economic Survey (HIES) in 1996-97. For this study, 14,497 households are taken to find poverty and income distribution and provide and poverty with employment. Agriculture may predominant role non-farm helps the poverty alleviation. Manufacturing sector share of non-farm declined drastically. But poverty is increasing day to day rural or it may be urban and spread to all population. Non-farm wage labour not that much of worse than agricultural labour. Remaining sectors of non-farm concentrate on reduction of poverty.

2.7 Forward Linkages

Micro level study was conducted by Vibhoti Shukla 1991 in Maharashtra. In this study, the author examines consumption linkages between the agricultural and non-agricultural outputs of the rural economy[9]. They give considerations to the stimulus that a prospering agricultural economy can give to consumption demand for the products of local non-farm activity. The model is implemented through multiple regression analysis of the determinants of levels of and changes in overall rural non-farm activity and its industrially disaggregated components across the districts of Maharashtra.

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. Macro-economic 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.

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[9] Theoretical perspectives on aggregative inter-relationship in a dynamic two-sector framework include Uma Lele and John Mellor, "Technological Change, Distributive Bias and Labour Transfer in a Two-sector Economy', Oxford Economic Papers 33(3) November 1981. An estimation-simulation model of the Japanese economy appears in Yair Mundlak, InterSectored Factor Mobility and Agricultural Growth, Research Report 6, International Food Policy Research Institute, Washington, DC, February 1979. As examples of studies exploring the spatial micro-foundations of these macro Sectored linkages, see Robert P King and Derek Byerlee, 'Factor Intensities and Locational Linkages of Rural Consumption Pattern in Sierra Leone;, American Journal of Agricultural Economics, 60 may 1978; and CS Ahammed and R W Herdt, 'Measuring the Impact of Consumption Linkages on the Employment Effects of Mechanization in Philippine Rice Production', Journal of Development Studies, January 1984.

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 andrural 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.

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 strengthens by appropriate policy interventions.

2.8 Backward Linkages

There is positive contribution of nonfarm employment, research and development and irrigation agricultural productivity according to

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 changed. Until 1970, India's agricultural share of national employment remained constant. Two interrelated are to the explained. First is the weak linkages 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 by largely decentralize.

Chapter-III

AGRARIAN STRUCTURE OF ANDHRA PRADESH

Introduction: Andhra Pradesh has three zones, Rayalaseema and Telangana. Coastal Andhra.Andhra again divided into North coastal with three districts Srikakulam, Viziayanagaram and Visakhapatnam. South Coastal has six districts namely, East Godavari, West Godavari, Krishna, Guntur, Prakasam and Nellore. Comparatively, North Coastal Andhra is poorer than South Coastal Andhra. Chittoor, Cuddapah, Anantapur and Kurnool districts of Rayalaseema districts. Telangana, divided into north and south, north Telangana is Nizamabad, Adilabad, Karimnagar, Warangal and Khammam districts and South Telangana, Mahbubnagar, Nalgonda, Ranga Reddy, Medak and Hyderabad districts are there. In 2014, Telangana was divided into two separate states, Andhra Pradesh and Telangana. However, this study is focused on Andhra Pradesh.

The total population of Andhra Pradesh is 84,580,777as per 2011census. Main workers are 1, 93, and 17,499.Marginal workers are 37, 63,465 and total workers are 2, 30, 80,964. Out ofthe total main workers of 1,93,17,499, cultivators are 30,93,392, agricultural labourers are 86,12,238, household Industry are 5,28,709 and Others are 70,83,160. The total Marginal workers in AP are 37,63,465 in which cultivators are 2,46,741, agricultural labourers are 24,40,365, household industry are 1,33,899 and Others are 9,42,460.

The total population of West Godavari is39, 36,966as per 2011census: here the main workers are 15, 63,867, marginal workers are 2, 44,426 and total workers are 18, 08,293. Main workers are 15, 63,867 out of which cultivators are 1, 54,210, agricultural labourers are 9, 11,184,household industry are 25,981 and others are 4, 72,492. Marginal workers are 2, 44,426, out of which cultivators are 6,090 agricultural labourers are 1, 77,817 household industry are 8,239 and others are 52,280.

This chapter will be discussing the agrarian structure of Andhra Pradesh. Land is very important factor in rural areas. Land size, agricultural employment, main and marginal workers, area under food and non-food crops, area, production and yield details is given in this chapter. Land is an important in rural areas and according to their land size farmers are divided into marginal, small, S-medium, Medium and Large farmers. The division of main or marginal workers in to cultivators, agricultural labour, household industry and area under food and non-food crops per district-wise details is given. Area, Production and Yield per

hectare in India, as well as Andhra Pradesh and West Godavari details is also given in this chapter.

Marginal holdings are high in India, almost 67 percent are less than one hectare and small holdings are 18 percent and large holdings are 0.7 percent according to the 2011 agricultural census. Total number of operational holdings are 138.3 million and total operated area was 159.59 million hectare as per the agricultural census of 2010-11. The average size of holdings has shown a steady declining trend over various agricultural censuses since 1970-71.

Farmers involved in cultivation is called operational holder, is defined as “all land, which is used wholly or partly for agricultural production and is operated as one festival unit by one person along or with others without regard to the title, legal farm, size or location” (Agricultural Census of India).

3.1 Operational holdings in India

Table-3. 1.1 Number of holdings in India All Sizes and Social Groups 1980-2011

Size group	Number of holdings (in '000hec)			
	1980-81	1990-91	2000-01	2010-11
Marginal	50122 (56.3)	63389 (59.4)	75408 (62.8)	92826 (67.09)
Small	16072 (18.08)	20092 (18.8)	22695 (18.9)	24779 (17.91)
Semi Medium	12455 (14.01)	13923 (13.05)	14021 (11.6)	13896 (10.04)
Medium	8068 (9.07)	7580 (7.1)	6577 (5.4)	5875 (4.2)
Large	2166 (2.43)	1654 (1.5)	1230 (1)	973 (0.7)
All sizes	88883 (100)	106637 (100)	119931 (100)	138348 (100)

Source: Agricultural censuses various years

Note: **Marginal:** below 1 hectare; **Small**: 1.0 hectare to 2.00 hectares; **Semi-medium**: 2.00 to 4.00 hectares; **Medium**: 4.00 to 10.00 hectare; **Large**: above 10.00 hectares.

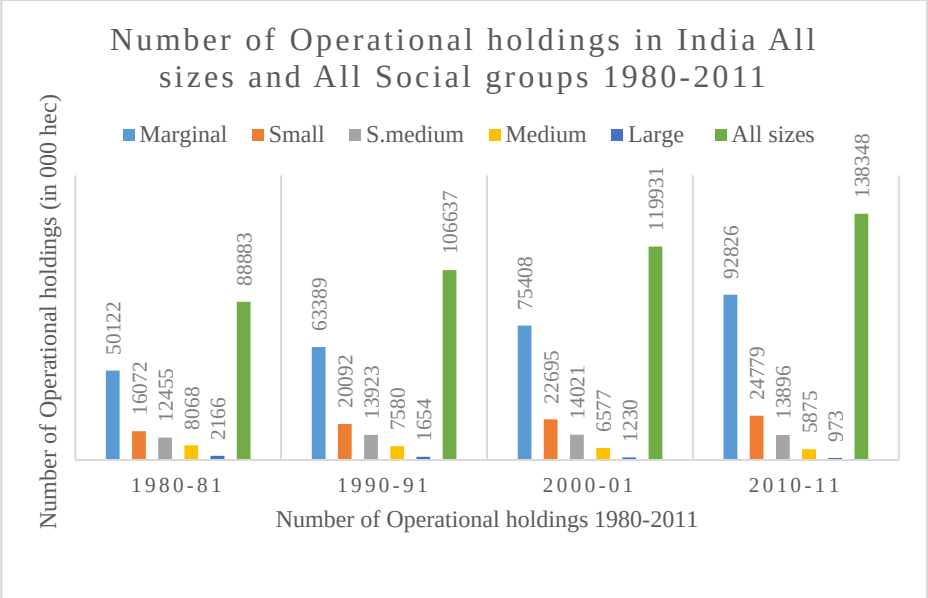
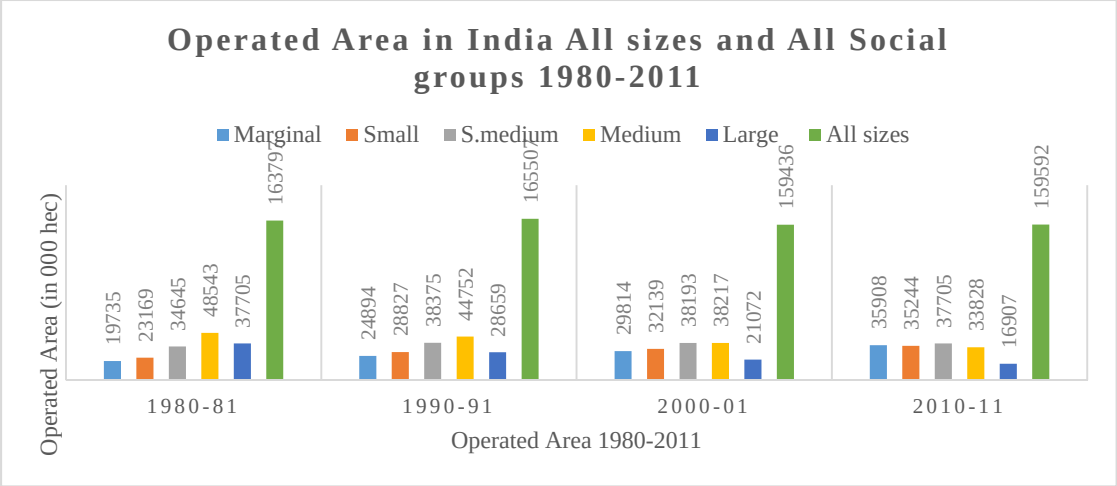


Table 3.1 shows the holdings and sizes from 1980-81 to 2010-11. Marginal size number of holdings increases continuously from 1980-81 to 2010-11 from 50122 to 92826 holdings. In the same way, small size group also increased from 16072 holdings to 24779 holdings in the same years from 1980-81 to 2010-11. But small medium size group condition is different, it increased from 1980-81 to 2000-01 from 12455 to 14021 but later in 2010-11 it was decreased to 13896 holdings. Medium size holdings decreased from 1980-81 to 2010-11 from 8068 holdings to 5875 holdings. In Large size group, holdings also decreased from 2166 holdings to 973 holdings from 1980-81 to 2010-11. All sizes increased from 88883 holdings to 138348 from 1980-81 to 2010-11. Marginal size and small size holdings are increasing but Semi-medium, Medium and large holdings are decreasing continuously in all India level.

Table-3. 1.2 Operated Area in India All Sizes and Social Group 1980-2011

Size group	Operated area (in '000 hec)			
	1980-81	1990-91	2000-01	2010-11
Marginal	19735 (12.04)	24894 (15.04)	29814 (18.69)	35908 (22.49)
Small	23169 (14.14)	28827 (17.41)	32139 (20.15)	35244 (22.08)
Semi medium	34645 (21.15)	38375 (23.18)	38193 (23.95)	37705 (23.62)
Medium	48543 (29.63)	44752 (27.03)	38217 (23.97)	33828 (21.19)
Large	37705 (23.01)	28659 (17.31)	21072 (13.21)	16907 (10.59)
All sizes	163797 (100)	165507 (100)	159436 (100)	159592 (100)

Source: Agricultural censuses various years



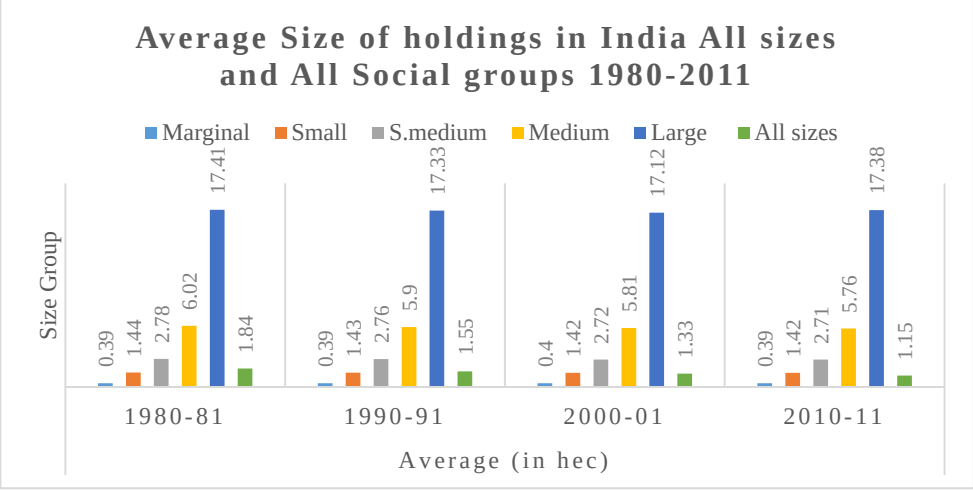
The above table 3.1.1shows area and size 1980-81 and 2010-11. Marginal size operated area increased continuously from 1980-81 to 2010-11 from 19735 to 35908 hectares. In the same way, small size group also increase from 23169 hectares to 35244 in the same years from 1980-81 to 2010-11. But small medium size group condition is different, it was increased from 1980-81 to 1990-91 from 34645 to 38375 but later in 2000-01 decreased to 38193 to 33828 in 2010-11. Medium size group decreased from 1980-81 to 2010-11, 48543

to 33828 hectares. In Large size group, holdings also decreasing 37705 hectares to 16907 hectares from 1980-81 to 2010-11. All sizes increased from 163797 hectares to 159592 from 1980-81 to 2010-11. Marginal size and small size are increasing but Semi-medium, Medium and large operated areas are decreasing continuously in all India level.

Table-3. 1.3Average Size of holdings in India All Sizes and Social Group 1980-2011

Size group	Average (in hec)			
	1980-81	1990-91	2000-01	2010-11
Marginal	0.39	0.39	0.4	0.39
Small	1.44	1.43	1.42	1.42
Semi medium	2.78	2.76	2.72	2.71
Medium	6.02	5.9	5.81	5.76
Large	17.41	17.33	17.12	17.38
All sizes	1.84	1.55	1.33	1.15

Source: Agricultural censuses various years



This table 3.1.2 shows the averages (in hectares) of all sizes. Marginal sizes, from 1980-81 to 1990-91 there was no change with the same 0.39 hectares but in 2000-01 this decreased to 0.4 hectares but again increasedto 0.39 hectares. In small size, from 1980-81 to 2000-01, it only has been decreasing from 1.44 hectares to 1.42 but in 2010-11 average hectares remained the same there is no change. In Semi-medium, averages continuously decreasing

from 2.78 hectares to 2.71 hectares from 1980-81 to 2010-11. In the same way, medium size group average hectares are decreased from 1980-81 to 1990-91 from 6.02 to 5.76 average hectares. In large size group, average hectares decreased from 17.41 hectare to 17.12 hectares from 1980-81 to 2000-01 but later in 2010-11 it increased to 17.12 to 17.38 hectares. In all sizes, average hectares decreased continuously from 1.84 to 1.15 hectares from 1980-81 to 2010-11.

Land less labour is increasing day by day, so there has been many disparities in access to land. Rural people, Scheduled Caste (SCs), Scheduled Tribe (STs) and Other Backward Caste (OBCs) are cultivating small and marginal size of holdings. There is inequality in land distribution because of caste disparities and large size of holdings are in the hands of Other Caste (OCs).

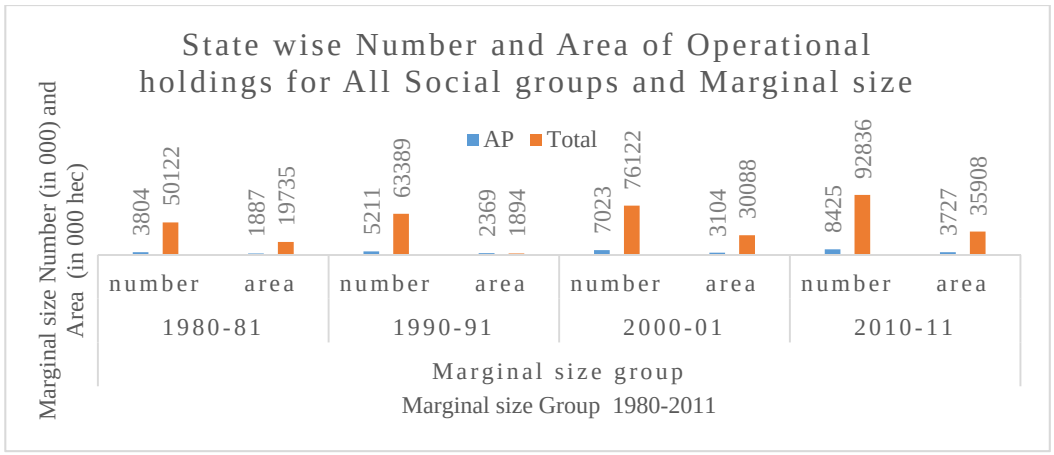
3.2 Operational Holdings in Andhra Pradesh:

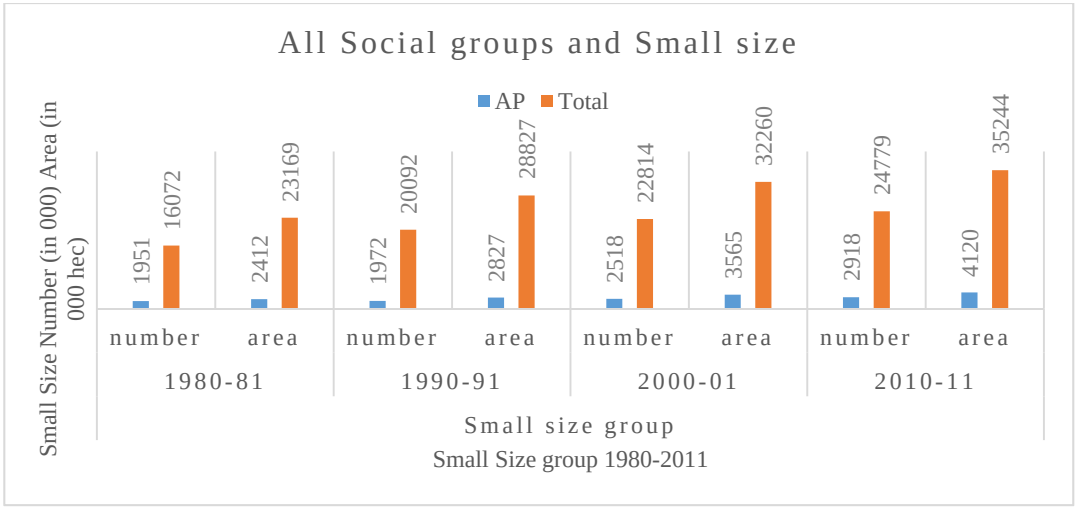
Table-3.2.1Changes in Operational holdings for All Social groups and All sizes 19801-81 to 2010-11

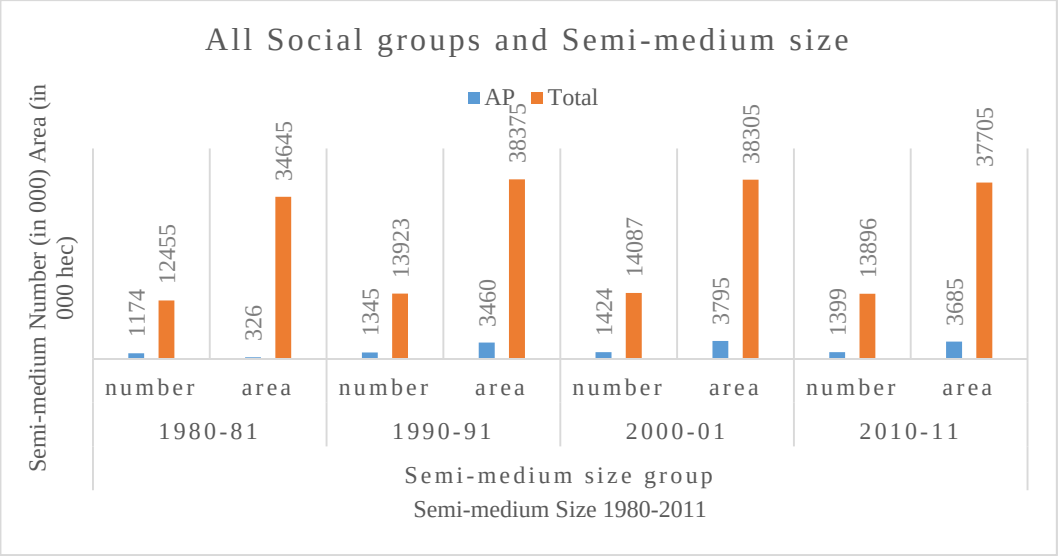
State	Marginal size group							
	1980-81		1990-91		2000-01		2010-11	
	Number	Area	Number	Area	Number	Area	Number	Area
AP	3804 (7.6)	1887 (9.6)	5211 (8.2)	2369 (12)	7023 (9.2)	3104 (10.3)	8425 (9)	3727 (10.3)
Total	50122 (100)	19735 (100)	63389 (100)	18948 (100)	76122 (100)	30088 (100)	92836 (100)	35908 (100)
	Small size group							
AP	1951 (12.1)	2412 (10.4)	1972 (9.8)	2827 (9.8)	2518 (11)	3565 (11)	2918 (11.7)	4120 (11.6)
India	16072 (100)	23169 (100)	20092 (100)	28827 (100)	22814 (100)	32260 (100)	24779 (100)	35244 (100)
	Semi-medium size group							
AP	1174 (1.3)	326 (0.9)	1345 (9.6)	3460 (9)	1424 (10.1)	3795 (9.9)	1399 (10)	3685 (9.7)
India	12455 (100)	34645 (100)	13923 (100)	38375 (100)	14087 (100)	38305 (100)	13896 (100)	37705 (100)
	Medium size group							
AP	646 (8)	3978 (8.1)	644 (8.4)	3777 (8.4)	501 (7.6)	2855 (7.4)	397 (6.7)	2209 (6.5)
India	8068 (100)	48543 (100)	7580 (100)	44752 (100)	6568 (100)	38125 (100)	5875 (100)	33828 (100)
	Large size group							
AP	7370 (8.2)	2795 (7.4)	118 (7.1)	1848 (6.4)	66 (5.3)	1080 (5.1)	36 (3.6)	552 (3.2)
India	88883 (100)	37705 (100)	1654 (100)	28659 (100)	1230 (100)	21124 (100)	973 (100)	16907 (100)
	All sizes group							
AP	7370 (8.2)	14313 (8.7)	9290 (8.7)	14460 (8.7)	11532 (9.5)	14400 (9)	13175 (9.5)	14293 (8.9)
India	88883 (100)	163797 (100)	106637 (100)	165507 (100)	120822 (100)	159903 (100)	138348 (100)	159592 (100)

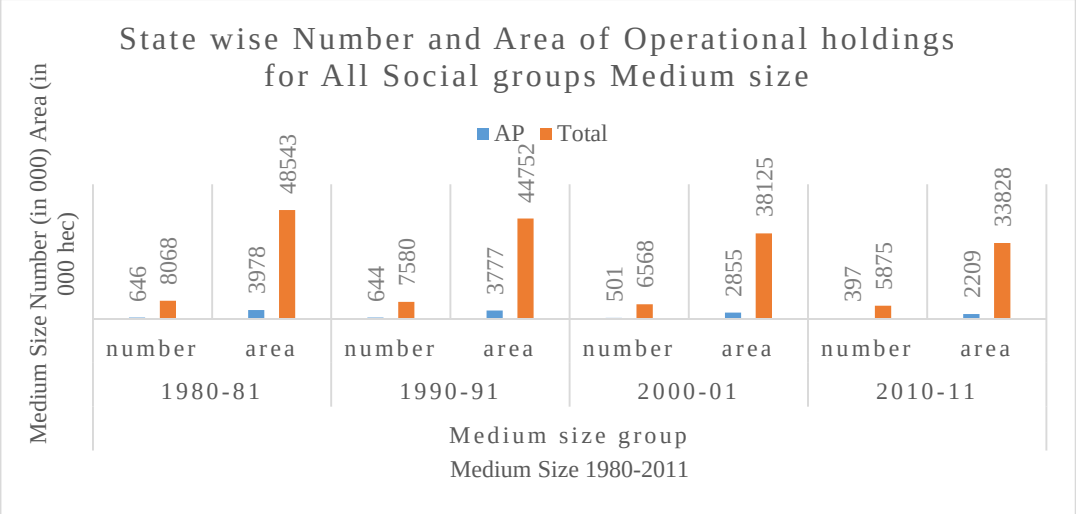
Source: Agricultural Census various reports

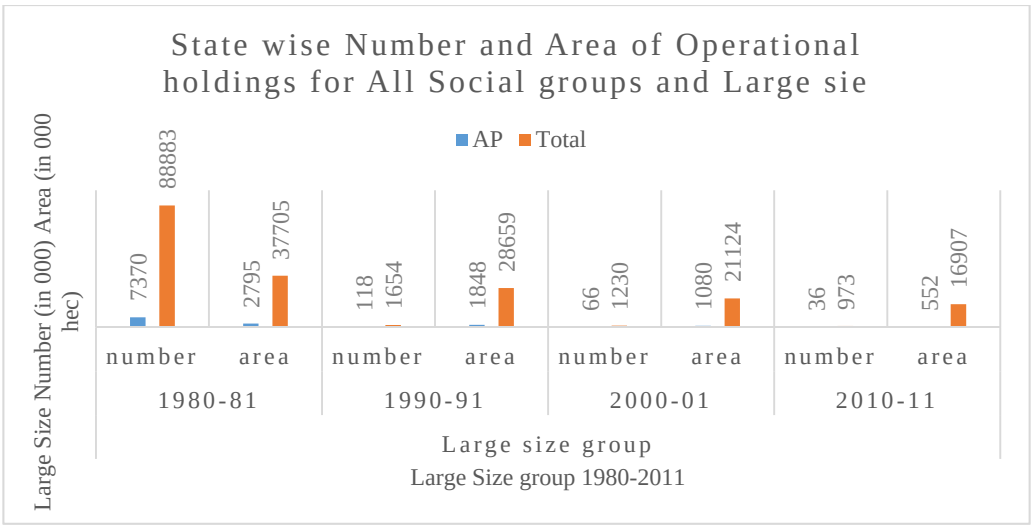
Note: Number in thousands, Area in thousands hectares'


State wise Number and Area of Operational holdings for All Social groups and Marginal size
Marginal size Number (in 000) and Area (in 000 hec)
AP
Total
3804
50122
1887
19735
5211
63389
2369
1894
7023
76122
3104
30088
8425
92836
3727
35908
number
area
1980-81
1990-91
2000-01
2010-11
Marginal size group
Marginal size Group 1980-2011


All Social groups and Small size
Small Size Number (in 000) Area (in 000 hec)
AP
Total
1951
16072
2412
23169
1972
20092
2827
28827
2518
22814
3565
32260
2918
24779
4120
35244
number
area
1980-81
1990-91
2000-01
2010-11
Small size group
Small Size group 1980-2011


All Social groups and Semi-medium size
AP
Total
Semi-medium Number (in 000) Area (in 000 hec)
1174
12455
326
34645
1345
13923
3460
38375
1424
14087
3795
38305
1399
13896
3685
37705
number
area
1980-81
1990-91
2000-01
2010-11
Semi-medium size group
Semi-medium Size 1980-2011


State wise Number and Area of Operational holdings for All Social groups Medium size
AP
Total
Medium Size Number (in 000) Area (in 000 hec)
646
8068
3978
48543
644
7580
3777
44752
501
6568
2855
38125
397
5875
2209
33828
number
area
1980-81
1990-91
2000-01
2010-11
Medium size group
Medium Size 1980-2011



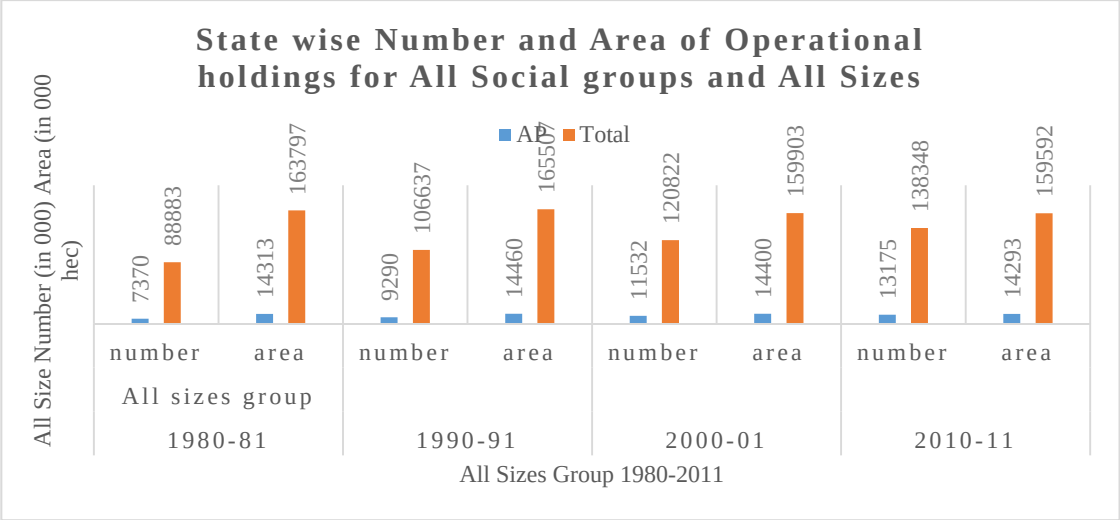


Table.3.2.1 The Marginal size group of Andhra Pradesh,total States number and area is shown in the above table 3.4 from the 1980-81 to 2010-11. In Andhra Pradesh, number continuously increased from 3804 in 1980-81 to 8425 in 2010-11; area also increased from 1887 to 3727 from 1980-81 to 2010-11. In total states also, number continuously increased from 50122 in 1980-81 to 92836 in 2010-11; area also increased from 19735 to 35908 from 1980-81 to 2010-11.

The Small size group of Andhra Pradesh,total States number and area is shown from the 1980-81 to 2010-11. In Andhra Pradesh,number increased continuously from 1951 in 1980-81 to 2918 in 2010-11; area also increased from 2412 to 4120 from 1980-81 to 2010-11. In total states, also number increased continuously from 16072 in 1980-81 to 24779 in 2010-11; area also increased from 23169 to 35244 from 1980-81 to 2010-11.

The Semi-medium size group of Andhra Pradesh,total States number and area is shown from 1980-81 to 2010-11. In Andhra Pradesh,number increased continuously from 1174 in 1980-81 to 1424 in 2000-01 but 2010-11 it was decreased to 1399; area also increased from 326 to 3685 from 1980-81 to 2010-11. In total the states also number increased continuously from 12455 in 1980-81 to 14087 in 2000-01 but in 2010-11 it decreased to 13896; area also increased from 34645 to 38375 from 1980-81 to 1990-91 but in 2000-01 it decreased to 38305 and again increased to 37705 2010-11.

The Medium size group of Andhra Pradesh,total States number and area is shown from the 1980-81 to 2010-11. In Andhra Pradesh,number decreased continuously from 646 in 1980-81 to 397 in 2010-11; area also decreased from 3978 to 2209 from 1980-81 to 2010-11. In total states also, number decreased continuously from 8068 in 1980-81 to 5875 in 2010-11; area also decreased from 48543 to 33828 from 1980-81 to 2010-11.

The Large size group of Andhra Pradesh,total States number and area is shown from the 1980-81 to 2010-11. In Andhra Pradesh,number decreased continuously from 7370 in 1980-81 to 36 in 2010-11; area also decreased from 2795 to 552 from 1980-81 to 2010-11. In total states also, number decreased continuously from 88883 in 1980-81 to 973 in 2010-11; area also decreased from 37705 to 16907 from 1980-81 to 2010-11.

The all sizes group of Andhra Pradesh,total States number and area is shown from 1980-81 to 2010-11. In Andhra Pradesh,number increased continuously from 7370 in 1980-81 to 13175 in 2010-11; area also increased from 14313 to 14293 from 1980-81 to 2010-11. In total states also, number increased continuously from 88883 in 1980-81 to 159592 in 2010-11; area also decreased from 163797 to 159592 from 1980-81 to 2010-11.

Table-3.2.2 Changes in Operational holdings and Area Operated 1970-71 to 2012-13

Changes in Percentage Distribution of Operational holdings and Area Operated by Size class of Operational holdings												
Year	Number of Household Operational Holdings						Area Operated Household Operational Holdings					
	Marginal	Small	S.Medium	Medium	Large	All	Marginal	Small	S.Medium	Medium	Large	All
Andhra Pradesh												
2012-13	50.6	29.08	18.38	3.58	0.26	100	16.28	28.07	36.08	17.04	2.52	100
2002-03	60.7	20.7	12	5.5	1.1	100	18.6	21.1	22.8	22.1	15.5	100
1991-92	59.3	21.4	13.2	5.4	0.8	100	12.5	23.3	26.2	23.5	9.4	100
1981-82	48.2	22.1	15.5	10.8	2.9	100	10.3	15.4	21.1	30.2	23.1	100
1970-71	47.3	19.1	18.2	11.9	3.5	100	9.3	11.7	21.9	31.3	25.3	100
India												
2012-13	73.17	15.3	8.1	3.04	0.37	100	22.71	23.44	23.5	19.33	6.02	100
2002-03	69.8	16.2	9	4.2	0.8	100	22.6	20.9	22.5	22.2	11.8	100
1991-92	62.8	17.8	12	6.1	1.3	100	15.6	18.7	24.1	26.4	15.2	100
1981-82	56	19.3	14.2	8.6	1.9	100	11.5	16.6	23.6	30.2	18.2	100
1970-71	45.8	22.4	17.7	11.1	3.1	100	9.2	14.8	22.5	30.5	23	100

Source: Report No.571, Household Ownership and Operational Holdings in India, Jan-dec-2013, NSS

The above 3.2.2table shows thenumber of operated HHs details in AP. Marginal HHs increased in 1970-71 from 47.3 percent to 2002-03 60.6 percent but in 2012-13 the marginal HHs decreased from 61 percent to 50.6 percent. Small HHs increased from 19 percent in 1970-71 to 29 percent in the year of 2012-13. Semi-medium HHs decreased 18 percent in the year of 1970-71 to 12 percent in the year 2002-03 but again it increased to 18 percent. Medium HHs are 12 in the year 1970-71 but it decreased to 4 percent to2012-13. Large HHs is nearly 4 percent in 1970-71 but it decreased to 0.26 in the year of 2012-13.

In operated area point of view, in Andhra Pradesh, continuously increased 9 percent in the year 1970-71 to 18 percent in the year of 2002-03 in 2012-13 it decreased 16 percent. In

the year 1970-71, operated area is 12 for small farmers and it increased up to in the year 1991-92 but in the year 2002-03 it decreased to 21 percent and again it rise in the year 2012-13 to 28 percent. Semi-medium operated area is very uncertainty. In the year 1970-71 it was 22 percent but decreased in the year 1981-82 to 21 percent and again it rised to 26 percent in the year 1991-92, in the year 2002-03 it decreased to 23 percent and in 2012-13 increased tremendously to 36 percent. Medium size operated area continuously decreased from 31 percent to 17 percent in the year 1970-71 to 2012-13. Large size operated area is 25 percent in the year 1970-71 but continuously decreased in 1990-91 to 9.4 percent and again increased in 2002-03 to 16 in 2012-13 it decreased to 3.

In India, operated households are explained in the year 1970-71 to 2012-13. In the year 1970-71, marginal size operated households are 46 percent and continuously increased to 73 percent in the year of 2012-13. Small size operated households are 2 percent in the year of 1970-71 and continuously decreased in the year from 2012-13 to 15 percent. Semi-medium households are also same from 1970-71 to 2012-13, it continuously decreased from 18 percent to 8 percent. Medium size operated households continuously decreased from 11 percent to 3 percent in 1970-71 to 2012-13. In large size operated households also, in the same year of 1970-71 it is 3 percent but in 2012-13 it decreased to 0.37 percent.

In operated point of view in India, marginal size operated area increased 9.2 percent to 23 percent from 1970-71 to 2012-13. In small size operated area also, in the same year 1970-71, it is 15 percent but in 2012-13 increased to 23 percent. In semi-medium` operated area, from 1970-71 to 1990-91, area increased to 23 percent to 24 percent but in 2002-03 it decreased to 22.5 percent and again increased to 24 percent in the year 2012-13. But in Medium size operated area this is different, from the beginning of 1970-71 to 2012-13 it continuously decreased from 31 percent to 19 percent. In large size operated area also, same thing happened and it continuously deceased from 23 percent to 6 percent in the same period 1970-71 to 2012-13.

Agricultural labourer occupation is the lowest place in the socioeconomic structure of the rural and they mostly belongs to SCS, STs and OBCs. They have no resource and are mostly landless. Agriculture is the chief occupation of the people of India. Their livelihood is based on agricultural operation or activities. The agricultural labour is generally

classified into two sub-categories such as land agricultural labour and small cultivators, whose main source of earning is wage employment are not their small and sub-marginal holdings. Landless labourer is turn can be classified into two categories, attached labour and causal labour. The small cultivators can be divided into three sub-groups such as cultivators, share croppers and lease holders.

3.3 Agricultural Employment in AP and West Godavari

Table-3.3.1Agricultural Employment of Andhra Pradesh and West Godavari District 1991-2011 in Percentage

Agricultural Employment 1991-2011 (in percentage)									
	Main Workers			Marginal Workers			Total Workers		
	1991	2001	2011	1991	2001	2011	1991	2001	2011
W.G	41.53	37.5	39.13	1.82	6.6	6.12	43.34	44.12	45.26
A.P	42.77	38.1	38.6	2.28	7.7	7.54	45.05	45.78	46.56

Source: Census of India various years

This table 3.3 shows the agricultural and non-agricultural employment in Andhra Pradesh and West Godavari District from 1991-2011. In 1991-2011, from 43 percent to 39 percent and 42 percent to 39 percent. But marginal and total workers increased in 1991-2011. Marginal workers increased from 2.28 to 7.54 in Andhra Pradesh and 1.82 to 6.12 percent in West Godavari district is the same year 1991-2011. Total workers increased from 45.05 to 46.56 1991 to 2011 and 43.34 to 45.26 increased in West Godavari in the same year 1991-2011.

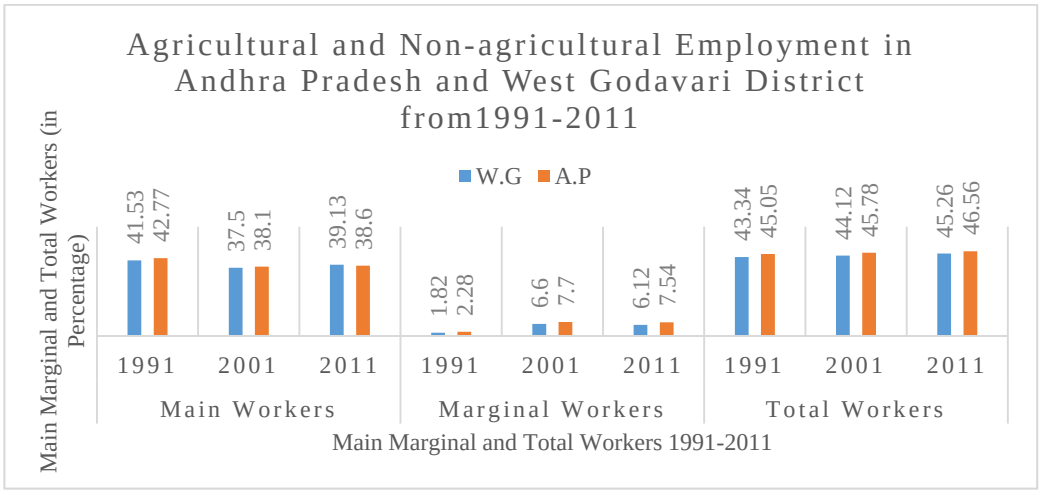
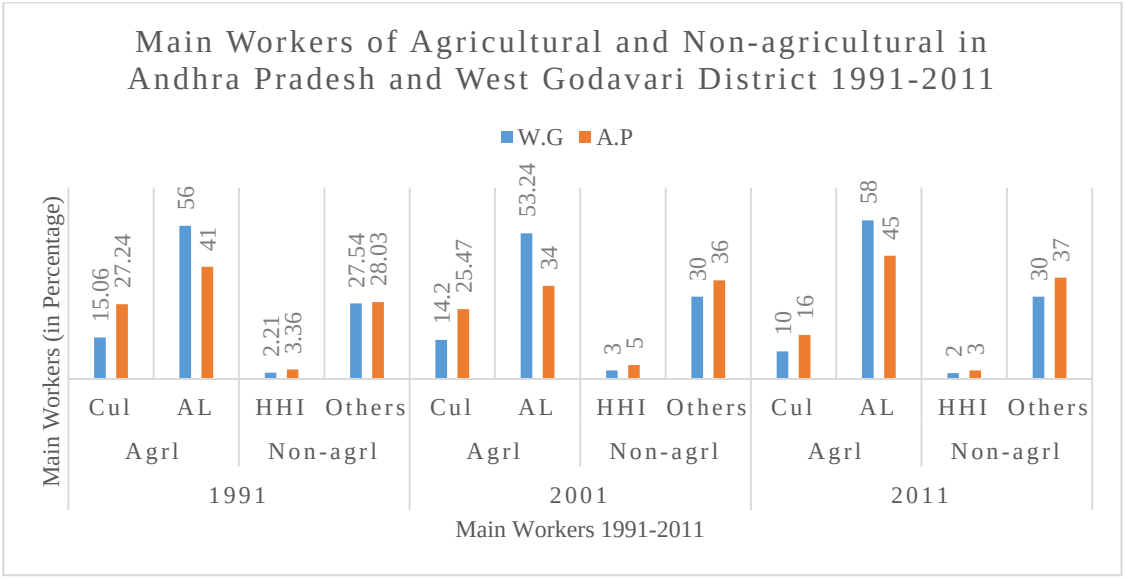
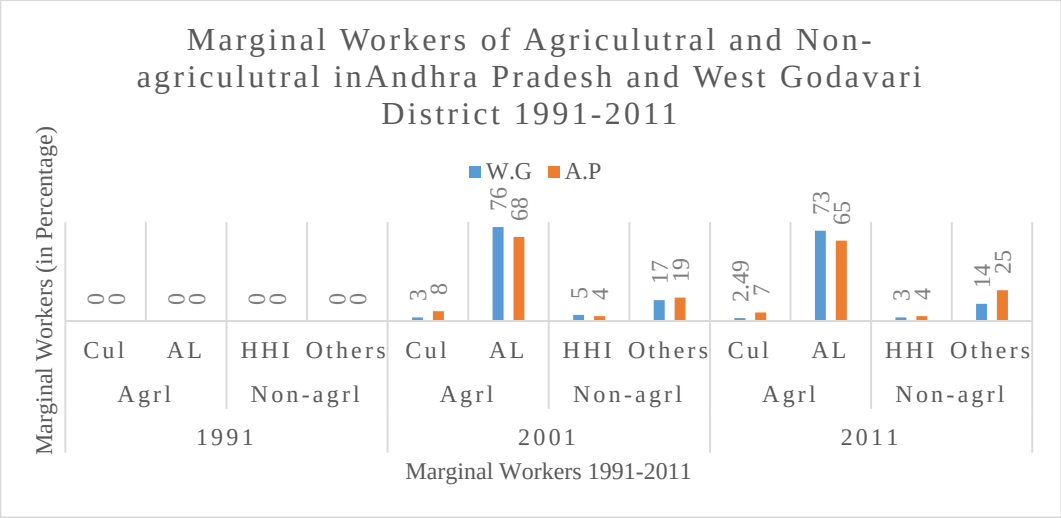


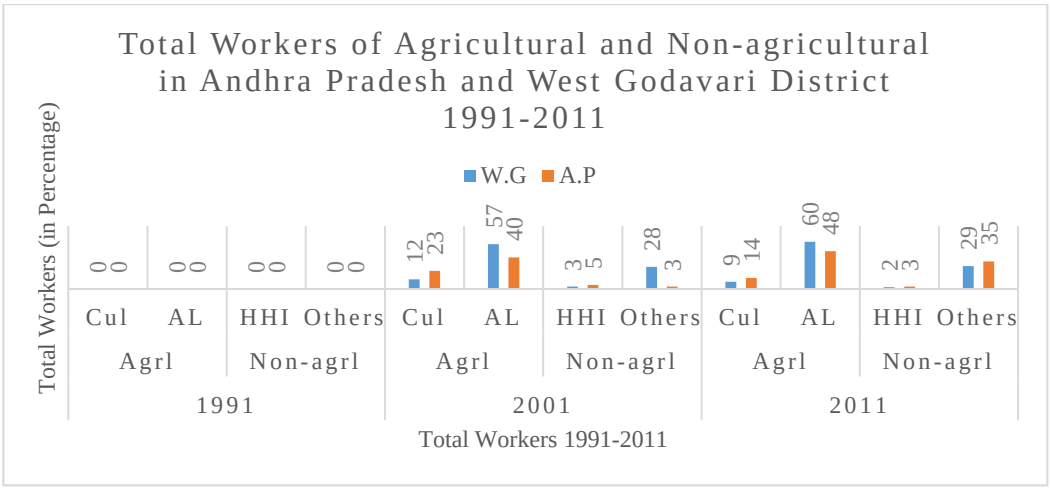
Table-3.3.2 Main Workers of Agricultural and Non-agricultural in Andhra Pradesh and West Godavari District 2001 and 2011 in Percentage

State	Main Workers 2001					Marginal Workers 2001					Total Workers 2001				
	Main	Cul	Agrl	HHI	Others	Main	Cul	Agrl	HHI	Others	Main	Cul	Agrl	HHI	Others
W.G	37.5	14.2	53.24	2.67	29.88	6.6	2.59	76.24	4.59	16.58	44.1	12.46	56.71	2.96	27.88
A.P	38.1	25.4	33.83	4.66	36.04	7.7	7.89	68.49	4.49	18.67	45.7	22.52	39.64	4.71	33.13
	Main Workers 2011					Marginal Workers 2011					Total Workers 2011				
W.G	39.13	9.86	58.26	1.66	30.21	6.12	2.49	2.75	3.37	14.33	45.26	8.86	60.22	1.89	29.02
A.P	39.96	16.01	44.5	2.74	36.67	7.59	6.56	64.84	3.56	5.04	46.56	14.47	47.89	87	4.77

Source: Census of India, 2001 and PCA, Directorate of Census operations, AP, Hyderabad.







This table 3.3.1 shows the main workers of agricultural and non-agricultural details of West Godavari district and Andhra Pradesh. In 1991 Andhra Pradesh cultivators are 27.24 but percentage continuously decreased in 2001 to 25.47 and in 2011 to 16 percent. In agricultural labour point of view, in 1991, 41 percent are working as agricultural labour, in 2001 it decreased to 34 and again it increased to 45 percent in 2011. In non-agricultural employment point of view, household industry worker of Andhra Pradesh in 1991 is 3.36, increased to 53 percent in 2001 above table. In other workers of non-agricultural in Andhra Pradesh is 28.03, it increased in 2001 to 36 percent and in 2011 it increased to 37 percent.

In 1991 West Godavari cultivators are 15.06 but percentage continuously decreased in 2001 to 14.2 but in 2011 it is only 10 percent. In agricultural labour point of view, in 1991, 56 percent are working as agricultural labour, in 2001 it decreased to 53.24 and again it increased to 58 percent in 2011. In non-agricultural employment point of view, household industry worker of West Godavari in 1991 is 2.21, increased to 3 percent. In other workers of non-agricultural in West Godavari district is 27.54 and increased in 2001 to 30 percent and by 2011 remained the it neither decreased nor increased.

This table shows the marginal worker details of West Godavari District and Andhra Pradesh from 1991-2011. But for 1991, no data is available for marginal workers in Andhra Pradesh as well as West Godavari district. In 2001, Andhra Pradesh cultivators are 8 but percentage decreased in 2011 to 7 percent. In agricultural labour point of view, in 2001 it decreased to 68 and again decreased to 65 percent in 2011. In non-agricultural employment point of view, household industry worker of Andhra Pradesh in 2001 is 4 percent as is the same in 2011. In other workers of non-agricultural in Andhra Pradesh is 19 and increased in 2001 and 2011 to 25 percent.

In 2001 West Godavari cultivators are 3 percent but tis percentage continuously decreased from 2011 to 2.49 percent. In agricultural labour point of view, in 2001 it 76 percent and again it was decreased to 73 percent in 2011. In non-agricultural employment point of view, household industry worker of West Godavari in 2001 was 5 and decreased to 3 percent in 2011. In other workers of non-agricultural in West Godavari district is 17 and decreased in 2011 to 14 percent.

This table shows the total worker details of West Godavari District and Andhra Pradesh from 1991-2011. But in 1991 no data available of marginal works in Andhra Pradesh as well as West Godavari district. In 2001 Andhra Pradesh cultivators are 23 but tis percentage decreased in 2011 to 14 percent. In agricultural labour point of view, in 2001 it was 40 percent and it was increased to 48 percent in 2011. In non-agricultural employment point of view, household industry worker of Andhra Pradesh in 2001 is 5 percent it decreased to 3 percent in 2011. In other workers of non-agricultural in Andhra Pradesh is 3 percent it was increased in 2001 to 35 percent in 2011.

In 2001 West Godavari cultivators are 12 percent but tis percentage continuously decreased from 2011 to 9 percent. In agricultural labour point of view, in 2001 57 percent and again it was increased to 60 percent in 2011. In non-agricultural employment point of view, household industry worker of West Godavari in 2001 was 3 and decreased to 2 percent in 2011. In other workers of non-agricultural in West Godavari district is 28 and increased in 2011 to 29 percent.

3.4Agricultural Employment of state and district in 1991 in number

Table-3.4.1 Agricultural Employment of State and district-wise 1991 in Number

1991					
	Total Pop	Rural Pop	Main	Marginal	Total
W.G	3,517,568	3,048,686(87)	1,460,792(41.53)	63,919(1.82)	1524711 (43.34)
A.P	66,508,008	55,223,944(83)	28,445,482(42.77)	1,518,166(2.28)	29963648(45.05)
2001					
W.G	38,03,517	3,048,535(80)	14,25,708(37.5)	2,52,627 (6.6)	16,78,335(44.12)
A.P	7,62,10,007	55,296,875(73)	2,90,40,873(38.1)	58,52,986 (7.7)	3,48,93,859(45.78)
2011					
W.G	3,936,966	3,128,189(79)	15,63,867(39.13)	2,44,426(6.12)	18,08,293 (45.26)
A.P	84,580,777	56,361,702(67)	1,93,17,49938.96)	37,63,465(7.59)	2,30,80,964(46.56)

Source: Directorate of Census Operations, Andhra Pradesh. Provisional Population Totals, Paper- 3 of 2001, Series -29, Census of India 2001, issued by Directorate of Census Operations, Andhra Pradesh, Primary Census Abstract, Directorate of Census Operations, AP, Hyderabad.

This table 3.4 shows, main, marginal and total workers including total and rural population of West Godavari district and Andhra Pradesh in 1991. Main workers in Andhra Pradesh is 28, 445, 482 marginal workers are 1,518, 166 and total workers are 29963648. In West Godavari main workers are 1460792, marginal workers are 63 919 and total workers are 1524711. 42 percent of West Godavari population 42 percent are main workers but in Andhra Pradesh 43 percent are main workers. In marginal workers point of view, West Godavari marginal workers are 1.82 Andhra Pradesh marginal workers are 2.28. In total, 43 percent are workers from West Godavari and 45 percent from Andhra Pradesh.

In this table, main, marginal and total workers details is shown. In West Godavari district and in Andhra Pradesh, main workers are 38 percent in 2001. Marginal workers are 6.6 in West Godavari and 7.7 in Andhra Pradesh and total workers are 44 percent in West Godavari and 46 percent in Andhra Pradesh. In this table, total population and rural population is also shown. Total population of the West Godavari is 38, 03, 517 and Andhra Pradesh population is 76210007. Rural population of the west Godavari district is 3048535 and Andhra Pradesh rural population is 55 296875.

Main, marginal and total workers of West Godavari and Andhra Pradesh details is shown in this table. The total main workers of both West Godavari district and Andhra Pradesh is 39 percent. Marginal workers are 6 percent in West Godavari district and 8 percent in Andhra Pradesh. In total workers point of view, 45 are West Godavari and 47 percent are Andhra Pradesh is total workers. Total population and rural population details is also shown in this table. Andhra Pradesh total population is 4, 95, 77,103 and West Godavari population is 39, 95,742. Rural population of West Godavari district is 31, 26,191 and Andhra Pradesh is 5, 63, and 11,788.

Table-3.4.2Agricultural and Non-agricultural Employment State and District-wise in Number

1991							
State	Main	Cul	Agrl Labour	HHI	Others	Marginal	T.Workers
WG	1460792 (41.53)	219955 (15.06)	806226 (55.9)	32253 (2.21)	402358 (27.54)	63919 (1.82)	1524711 (43.34)
AP	28445482 (42.77)	7891167 (27.24)	11625159 (40.87)	955507 (3.36)	7973649 (28.03)	1518166 (2.28)	2996348 (45.05)

Source: Directorate of Census Operations

Table- 3.4.1 shows in West Godavari District and Andhra Pradesh main, marginal and total workers details in 1991 is shown in the above table 3.9. In West Godavari district, total main workers are 42 percent but in Andhra Pradesh is slightly highest by 43 percent. Cultivators in West Godavari is 15 percent but in Andhra Pradesh is 27 percent. In Agricultural labour point of view, in West Godavari 56 percent are agricultural labour and in Andhra Pradesh is 41 percent. From Household Industry point of view, in West Godavari, 2.21 percent working in household industry but in Andhra Pradesh is 3.36 percent. In others, 27.54 percent are working in West Godavari and 28 percent in Andhra Pradesh. In marginal workers it is 1.82 in west Godavari district and 2.28 in Andhra

Pradesh. In total workers point of view, 43.34 percent are total workers in West Godavari and 45 percent in Andhra Pradesh.

Table-3.4.3 Main Marginal and Total Workers 2001 and 2011 in Number

Main Workers 2001						Marginal Workers 2001					Total Workers 2001				
State	Main	Cul	Agrl	HHI	Other	Marginal	Cul	Agrl	HHI	Other	Total	Cul	Agrl	HHI	Other
WG	1426	2526	7591	3804	4260	2527	6552	1926	1160	4188	1678	2091	9517	4964	4679
AP	2904	5853	9823	1353	1047	5853	4618	4009	2894	1093	3489	7860	1383	1642	1156
	Main Workers 2011					Marginal Workers 2011					Total Workers 2011				
WG	1564	2444	9112	2598	4725	2444	6090	1778	8239	5228	1808	1603	1089	3422	5248
AP	1931	3763	8612	5287	7083	3763	2467	2440	1339	9425	2308	3340	1105	6626	8526

Source: Census of India 2001 and PCA,AP, Hyd

Table- 3.4.2 shows in 2001, main workers in West Godavari district is 1425708 (38) percent and in Andhra Pradesh is 29040873 (38) percent. In West Godavari district, out of 38 percent of main workers, 14 are cultivators, 53 percent are agricultural labourers, 3 percent are household industry workers and 30 percent are others. In Andhra Pradesh out of 38 percent main workers, 24 percent are cultivators, 34 percent are agricultural labour, 5 percent are household industry workers and 36 percent are others.

Marginal workers details of West Godavari and Andhra Pradesh is shown in this table 3.10. Total marginal workers of west Godavari district is 6.6 percent where cultivators are 2.59, agricultural labour are 76 percent, household industry is 5 percent and others are 17 percent. In Andhra Pradesh, total marginal workers are 7.7 percent 8 percent are cultivators, 68 percent are agricultural labour, 5 percent are household industry workers and 19 percent are others.

Total workers of west Godavari and Andhra Pradesh details is shown in this table. West Godavari total workers are 44 percent and Andhra Pradesh total workers are 45 percent in total population according to 2001 census. In West Godavari out of 44 percent of total workers, 12 percent are cultivators, 57 percent are agricultural labour, 3 percent are household industry workers and 28 percent are others. In the same way, out of 46 percent of total workers of Andhra Pradesh, 23 percent are cultivators, 40 percent are agricultural labour, 5 percent are household industry workers and 33 percent are others.

Main workers of West Godavari and Andhra Pradesh in 2011 details is shown in this table. In West Godavari, main workers are 39 percent and in Andhra Pradesh also is 39 percent also. From 39 percent main workers of west Godavari, 10 percent are cultivators, 58 percent are agricultural labour, 2 percent are Household industry and remaining 30 percent are other. In Andhra Pradesh from the 39 percent of main workers, 16 percent are cultivators, 45 percent are agricultural labour 3 percent are household industry workers and 37 percent are other workers.

Marginal workers of 2011 Andhra Pradesh and West Godavari details is shown. Marginal workers of West Godavari district is 6 percent and Andhra Pradesh is 8 percent. From 6 percent marginal workers of West Godavari district, 2 percent are cultivators, 73 percent are agricultural labour, 3 percent are household industry workers and 14 percent are others. In 8 percent of Andhra Pradesh marginal workers, 7 percent are cultivators, 65 percent are agricultural labour, 4 percent are household industry workers and 25 percent are others.

Total workers of West Godavari district and Andhra Pradesh details is shown in this table. Total workers of West Godavari district are 45 percent and Andhra Pradesh is 47 percent. Total workers of West Godavari is 45 percent, 9 are cultivators, 60 are agricultural labour, 2 are household industry workers and 29 are others. In total 47 percent workers of Andhra Pradesh, 14 percent are cultivator, 48 percent are agricultural labour, 3 percent household industry workers and 35 percent are others.

Table-3.4.4 Agricultural and non-agricultural activity Social groups in Andhra Pradesh in Percentage

Percentage of workforce between agriculture and non-agricultural										
Sector	Activity	2004-05					1993-94			
		ST	SC	OBC	other	Total	ST	SC	others	Total
Rural	Agriculture	88.5	80	67.7	67.6	71.8	89.1	89.7	75	79.3
	non-agriculture	11.5	20	32.3	32.4	28.2	10.9	10.3	25	20.7
Total	Agriculture	84	70.7	56.1	50.8	59.4	84.5	84.3	61.3	67.5
	non-agriculture	16	29.3	43.9	49.2	40.6	15.8	15.7	38.5	32.5

: Estimation using 61st round and 50th round employment and unemployment

This 3.4.3 table shows, agricultural and non-agricultural employment of Andhra Pradesh in the years, a 1993-94 and 2004-05. Rural and different castes employment is shown among 1993-94 ST agricultural employment in rural is 90 percent but it was decreased to 89 in 2004-05. In SCs 90 percent, 80 percent agricultural employment decreased in the same year 1993-94 to 2004-05. In 1993-94 OBC include in others, others total employment is 75 percent but in 2004-05 OBC and others with 68 percent are engaged in agricultural employment. In total irrespective of caste, 79 percent are working in agricultural sector in the year 1993-94 and it decreased to 68 percent in the year of 2004-05 in rural. In 1993-94 ST non-agricultural employment in rural is 11 percent but it increased to 12 in 2004-05. Among SCs, 20 percent non-agricultural employment increased in the same year 1993-94 to 2004-05. In 1993-94 OBC include in others, others total employment is 25 percent but in 2004-05 OBC and others with 32 percent are engaged in non-agricultural employment. In total, irrespective of caste 21 percent are working in non-agricultural sector in the year 1993-94 and it decreased to 28 percent in the year of 2004-05 in rural.

In 1993-94, ST agricultural employment in rural is 86 percent but it decreased to 84 percent in 2004-05. Among the SCs, 84 percent; 71 percent agricultural employment decreased in the same year 1993-94 to 2004-05. In 1993-94 OBC include in others, others total employment is 61 percent but in 2004-05 OBC and others with 56 and 51 percent are engaged in agricultural employment. In total, irrespective of caste, 68 percent are working in agricultural sector in the year 1993-94 and it decreased to 60 percent in the year of 2004-05 in both rural and urban. In 1993-94, ST non-agricultural employment in rural is 15.8 percent but increased to 16 in 2004-05. In SCs, 15.7 percent of 29.3 percent non-agricultural employment increased in the same year 1993-94 to 2004-05. In 1993-94 OBC include in others, others total employment is 38.5 percent but in 2004-05 OBC and others with 44 and 49 percent are engage in non-agricultural employment. In total, irrespective of caste, 33 percent are working in non-agricultural sector in the year 1993-94 and increased to 41 percent in the year of 2004-05 in rural and urban.

The two major crop groups are food grains (food crops) and non-food grain (non-food crops). Food crops includes rice, wheat, jowar, bajra, small millets, cerelas, pulses, vegetables and fruits. While non-food crops includes oil seeds (groundnut, linseed,

repassed and mustard, Niger seed), condiments and spices. The major food crops of India is rice and wheat and non-food crops is ground nut and cotton.

3.5 Andhra Pradesh and West Godavari District:

Table-3.5.1Area under Food and Non-food crops 1980-2011

District-wise Distribution of food and non-food crops in various years (Area in '000 hec)						
Year	W.G.			AP		
	Food	Non-food	Total cropped area	Food	Non-food	Total cropped area
1980-81	529 (91)	53 (9)	582 (100)	9554 (78)	2728 (22)	12282(100)
1990-91	563 (90)	62(10)	625 (100)	8851 (67)	4343 (33)	13194(100)
2000-01	652 (94)	44 (6)	696 (100)	9295 (69)	4249 (31)	13544(100)
2010-11	626 (86)	102 (14)	728 (100)	9733 (67)	4579 (33)	14512(100)

Source: Agricultural Situation at a glance various years

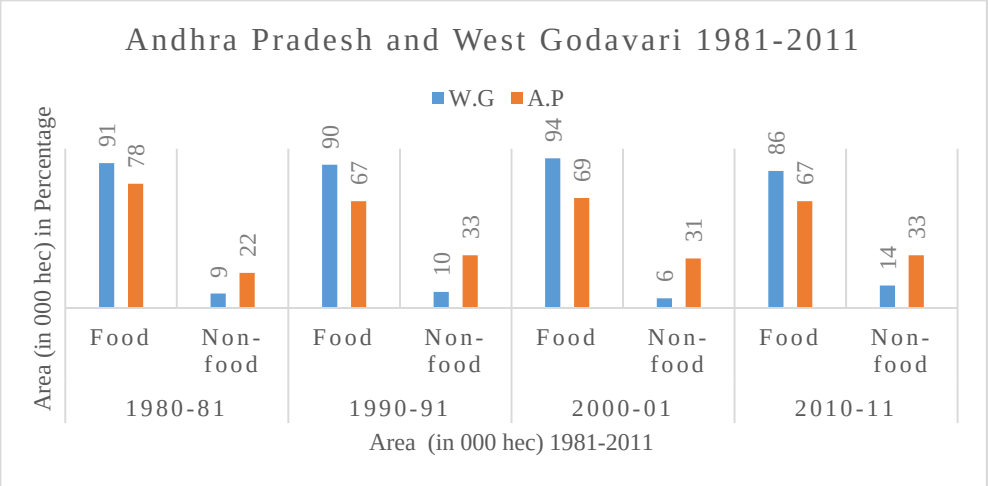


Table 3.5 showsfood and non-foof crops in Andhra Pradesh and West Godavari district from 1980-81 to 2010-11. In West Godavari district, are under food crops continuously increased from 1980-81 to 2010-11 from 529 to 626 and area under non-food crops also increased from 53 to 102 in the same period. In Andhra Pradesh area under food crops decreased in 1980-81 to 1990-91 from 9554 hectares to 8851 hectares and again increased

to 9295 in 2000-01 and 9733 in 2010-11. Non-food crops, in 1980-81 is 2728 hectares and it continuously increased 2010-11 from 4343 to 4579 hectares. But in both West Godavari and Andhra Pradesh, area under food crops is higher than non-food crops area.

3.6Cropping Pattern in Andhra Pradesh and West Godavari District:

Table-3.6.1 Principal Crops in Andhra Pradesh 1980-81

Principal Crops	1980-81					
	W.G.Dt			A.P		
	Area	Production	Yield	Area	Production	Yield
Rice	422 (12)	1060 (52.7)	2585 (129.83)	3600 (100)	2011 (100)	1991 (100)
Wheat	0 (0)	0 (0)	0 (0)	15 (100)	10 (100)	392 (100)
Jowar	7 (0.3)	3 (0.27)	45 (2.94)	2054 (100)	1082 (100)	1527 (100)
Bajra	1 (0.19)	1 (0.29)	787 (120.70)	515 (100)	336 (100)	652 (100)
Ragi	1 (0.39)	1 (0.40)	973 (100.82)	254 (100)	245 (100)	965 (100)
Maize	2 (0.62)	6 (0.82)	3106 (137.31)	321 (100)	725 (100)	2262 (100)
Small Millet	N	N	109 (85.8)	68 (100)	8 (100)	127 (100)
Bengalgram	N	N	411 (137.91)	45 (100)	14 (100)	298 (100)
Redgram	2 (0.88)	1 (2.27)	199 (102.5)	227 (100)	44 (100)	194 (100)
Greengram	1 (0.17)	1 (0.54)	468 (146.25)	571 (100)	183 (100)	320 (100)
Blackgram	2 (0.86)	1 (0.93)	557 (121)	232 (100)	107 (100)	460 (100)
Horsegram	14 (4.37)	3 (4.91)	264 (138.2)	320 (100)	61 (100)	191 (100)
Chillies	7 (4.32)	12 (8.05)	1646 (178.9)	162 (100)	149 (100)	920 (100)
Groundnut	6 (0.46)	6 (0.69)	994 (150.6)	1304 (100)	860 (100)	660 (100)
Seasamum	15 (8.10)	3 (9.67)	238 (143.3)	185 (100)	31 (100)	166 (100)

Source: Agricultural Statistics at Glance

Note:Area in ‘000 Hectares, Production in ‘000 Tonnes,Yield in Kilograms per Hectares

Cropping pattern of Andhra Pradesh and West Godavari district is (1980-81) shown table 3.6.1. Principal crops (Rice, Wheat, Jowar, Bajra, Ragi, Maize, Small Millet, Bengalgram, Redgram, Greengram, Blackgram, Horsegram, Chillies, Groundnut, Sesasmum) are taken

to explain the cropping pattern system. But Major Crops rice, Maize, Jowar, Black Gram and, Groundnut details was shown (see table 3.17)

In West Godavari district Rice crop is 422 thousand hectares are used for rice production, 1060 tonnes of production and 2585 kilograms of productivity per hectare is produced. There is no wheat production in West Godavari district but in Andhra Pradesh it is 15 thousands of hectares are used for wheat, 2011 tonnes of wheat production in 1980-81 and 392 kilograms of wheat productivity.

For Jowar crop there is an area 7 thousands hectare, production 3 tonnes and yield per hectare is 4 kilogrms, in Andhra Pradesh area 2052, production 1082 and yield is 1527.

For Bajra crop, 1 thousand hectare area used, 1 thousand tonnes produced and yield per hectare is 787 kilograms but in Andhra Pradesh it is 515 thousand hectares area, 336 tonnes of production and 652 kilograms of yield per hectare is produced.

For Ragi crop, one thousand hectare area used, 1 thousand tonnes was produced and yield per hectare is 973 kilograms but in Andhra Pradesh 254 thousand hectares area, 245 tonnes of production and 965 kilograms of yield per hectare was made.

For Maize crop, two thousand hectare area used, 6 thousand tonnes is produced and yield per hectare is 3106 kilograms but in Andhra Pradesh it is 321 thousand hectares area, 725 tonnes of production and 2262 kilograms of yield per hectare produced.

For Small Millet crop, area and production is negligible and yield per hectare is 109 kilograms but in Andhra Pradesh it is 68 thousand hectares area, 8 tonnes of production and 127 kilograms of yield per hectare produced.

For Bengalgram crop, area and production is negligible and yield per hectare is 411 kilograms but in Andhra Pradesh it is 45 thousand hectares area, 14 tonnes of production and 298 kilograms of yield per hectare produced.

For Redgram crop, two thousand hectare area used, 1 thousand tonnes is produced and yield per hectare is 199 kilograms but in Andhra Pradesh it is 227 thousand hectares area, 44 tonnes of production and 194 kilograms of yield per hectare produced.

For Greengram crop, one thousand hectare area used, 1 thousand tonnes is produced and yield per hectare is 468 kilograms but in Andhra Pradesh 571 thousand hectares area, 183 tonnes of production and 320 kilograms of yield per hectare produced.

For Blackgram crop, two thousand hectare area used, 1 thousand tonnes is produced and yield per hectare is 557 kilograms but in Andhra Pradesh it is 232 thousand hectares area, 107 tonnes of production and 460 kilograms of yield per hectare produced.

For Horsegram crop, 14 thousand hectare area is used, 3 thousand tonnes is produced and yield per hectare is 264 kilograms but in Andhra Pradesh it is 320 thousand hectares area, 61 tonnes of production and 191 kilograms of yield per hectare produced.

For Chilies crop, 7 thousand hectare area is used, 12 thousand tonnes is produced and yield per hectare is 1646 kilograms but in Andhra Pradesh it is 162 thousand hectares area, 149 tonnes of production and 920 kilograms of yield per hectare is produced.

For Groundnut crop, 6 thousand hectare area used, 6 thousand tonnes is produced and yield per hectare is 994 kilograms but in Andhra Pradesh it is 1304 thousand hectares area, 860 tonnes of production and 660 kilograms of yield per hectare produced.

For Seasamum crop, 15 thousand hectare area is used, 3 thousand tonnes is produced and yield per hectare is 238 kilograms but in Andhra Pradesh itis 185 thousand hectares area, 31 tonnes of production and 166 kilograms of yield per hectare produced.

Table-3.6.2 Andhra Pradesh 1990-91 Principal Crops

Principal Crops	1990-91					
	W.G.Dt			A.P		
	Area	Production	Yield	Area	Production	Yield
Rice	437 (10.8)	1007 (10.4)	2367 (96.9)	4036 (100)	9654 (100)	2442 (100)
Wheat	0 (0)	0 (0)	0 (0)	10 (100)	9 (100)	912 (100)
Jowar	2 (0.16)	1 (0.11)	610 (85.3)	1190 (100)	852 (100)	715 (100)
Bajra	0 (0)	0 (0)	0 (0)	231 (100)	168 (100)	728 (100)
Ragi	0 (0)	0 (0)	0 (0)	164 (100)	192 (100)	1166 (100)
Maize	1 (0.32)	5 (0.77)	2752 (123.3)	309 (100)	645 (100)	2086 (100)
Small Millet	0 (0)	0 (0)	0 (0)	15 (100)	6 (100)	416 (100)
Bengalgram	0 (0)	0 (0)	0 (0)	89 (100)	57 (100)	643 (100)
Redgram	1 (0.28)	N	289 (135.04)	346 (100)	74 (100)	214 (100)
Greengram	2 (0.40)	1 (0.73)	298 (108)	493 (100)	136 (100)	277 (100)
Blackgram	14 (2.59)	10 (2.73)	732 (1076.4)	539 (100)	366 (100)	68 (100)
Horsegram	5 (3.87)	2 (3.9)	358 (91.79)	129 (100)	51 (100)	390 (100)
Chilles	7 (3.36)	7 (2.01)	1081 (664.9)	208 (100)	347 (100)	1665 (100)
Groundnut	9 (0.37)	11 (0.48)	1199 (126.6)	2394 (100)	2267 (100)	947 (100)
Seasamum	4 (2.39)	1 (3.03)	266 (133.6)	167 (100)	33 (100)	199 (100)

Source: Agricultural Statistics at Glance

Table- 3.6.2 shows For Rice crop, 437 thousand hectare area is used, 1007 thousand tonnes is produced and yield per hectare is 2367 kilograms but in Andhra Pradesh it is 4036 thousand hectares area, 9654 tonnes of production and 2442 kilograms of yield per hectare is produced.

For Wheat crop, there is no production, yield and area but in Andhra Pradesh is 10 thousand hectares area, 9 tonnes of production and 912 kilograms of yield per hectare is produced.

For Jowar crop, 2 thousand hectare area is used, 1 thousand tonnes produced and yield per hectare is 610 kilograms but in Andhra Pradesh it is 1190 thousand hectares area, 852 tonnes of production and 715 kilograms of yield per hectare is produced.

For Bajra there is no area, production and yield but in Andhra Pradesh it is 231 thousand hectares area, 168 tonnes of production and 728 kilograms of yield per hectare is produced.

For Ragi there is no area, production and yield but in Andhra Pradesh is 164 thousand hectares area, 192 tonnes of production and 1166 kilograms of yield per hectare is produced.

For Maize crop, 1 thousand hectare area is used, 5 thousand tonnes was produced and yield per hectare is 2752 kilograms but in Andhra Pradesh it is 309 thousand hectares area, 645 tonnes of production and 2086 kilograms of yield per hectare is produced.

For Small Millet crop, there is no area, production and yield but in Andhra Pradesh is 309 thousand hectares area, 645 tonnes of production and 2086 kilograms of yield per hectare is produced.

For Bengalgram crop, there is no area production and yield in West Godavari district but in Andhra Pradesh it is 89 thousand hectares area, 57 tonnes of production and 643 kilograms of yield per hectare is produced.

For Redgram crop, 1 thousand hectare area used, production negligible and yield per hectare is 289 kilograms in West Godavari district but in Andhra Pradesh it is 346 thousand hectares area, 74 tonnes of production and 214 kilograms of yield per hectare is produced.

For Greengram crop, 2 thousand hectare area used, 1 thousand tonnes was produced and yield per hectare is 298 kilograms but in Andhra Pradesh it is 493 thousand hectares area, 136 tonnes of production and 277 kilograms of yield per hectare is produced.

For Blackgram crop, 14 thousand hectare area used, 10 thousand tonnes is produced and yield per hectare is 732 kilograms but in Andhra Pradesh it is 539 thousand hectares area, 366 tonnes of production and 68 kilograms of yield per hectare is produced.

For Horsegram crop, 5 thousand hectare area used, 2 thousand tonnes is produced and yield per hectare is 358 kilograms but in Andhra Pradesh it is 129 thousand hectares area, 51 tonnes of production and 390 kilograms of yield per hectare is produced.

For Chilies crop, 7 thousand hectare area used, 7 thousand tonnes is produced and yield per hectare is 1081 kilograms but in Andhra Pradesh it is 208 thousand hectares area, 347 tonnes of production and 1665 kilograms of yield per hectare is produced.

For Groundnut crop, 9 thousand hectare area used, 11 thousand tonnes is produced and yield per hectare is 1191 kilograms but in Andhra Pradesh it is 2394 thousand hectares area, 2267 tonnes of production and 947 kilograms of yield per hectare is produced.

For Seasamum crop, 4 thousand hectare area used, 1 thousand tonnes is produced and yield per hectare is 266 kilograms but in Andhra Pradesh it is 167 thousand hectares area, 33 tonnes of production and 199 kilograms of yield per hectare is produced.

Table-3.6.3Area, Production and Yield of Principal Crops 2000-01

Principal Crops	2000-01					
	W.G.Dt			A.P		
	Area	Production	Yield	Area	Production	Yield
Rice	472 (11.2)	1653 (13.26)	3504 (119.3)	4213 (100)	12458 (100)	2936 (100)
Wheat	0 (0)	0 (0)	0 (0)	14 (100)	8 (100)	570 (100)
Jowar	N	N	401 (43.87)	677 (100)	619 (100)	914 (100)
Bajra	0 (0)	0 (0)	0 (0)	143 (100)	1491 (100)	1033 (100)
Ragi	0 (0)	0 (0)	0 (0)	99 (100)	120 (100)	1210 (100)
Maize	19 (3.59)	94 (59.49)	5037 (168.1)	528 (100)	158 (100)	2996 (100)
Small Millet	0 (0)	0 (0)	0 (0)	2 (100)	2 (100)	629 (100)
Bengalgram	N	N	2378 (208.9)	201 (100)	229 (100)	1138 (100)
Redgram	1 (0.19)	N	554 (129.7)	513 (100)	218 (100)	427 (100)
Greengram	3 (0.57)	1 (0.54)	338 (95.4)	520 (100)	184 (100)	354 (100)
Blackgram	6 (1.08)	2 (0.51)	384 (54.5)	555 (100)	390 (100)	704 (100)
Horsegram	N	N	220 (84.9)	79 (100)	20 (100)	259 (100)
Chilles	5 (2.10)	8 (1.52)	1481 (66.98)	238 (100)	526 (100)	2211 (100)
Groundnut	4 (0.21)	7 (0.32)	1799 (157.1)	1874 (100)	2143 (100)	1145 (100)
Seasamum	1 (0.54)	N	273 (133.8)	183 (100)	37 (100)	204 (100)

Source: Agricultural Statistics at Glance

Table-.3.6.3 shows that for Rice crop, 472 thousand hectare area is used, 1653 thousand tonnes is produced and yield per hectare is 3504 kilograms but in Andhra Pradesh it is 4213 thousand hectares area, 12458 tonnes of production and 2936 kilograms of yield per hectare is produced.

For Wheat crop, there is no area production and yield in West Godavari district butit is Andhra Pradesh 14 thousand hectares area, 8 tonnes of production and 570 kilograms of yield per hectare is produced.

For Jowar crop, there is no area production and yield is 401 kilograms per hectare it is West Godavari district but in Andhra Pradesh it is 677 thousand hectares area, 619 tonnes of production and 914 kilograms of yield per hectare is produced.

For Bajra crop, there is no area production and yield in West Godavari district but it is Andhra Pradesh it is 143 thousand hectares area, 1491 tonnes of production and 1033 kilograms of yield per hectare is produced.

For Ragi crop, there is no area production and yield in West Godavari district but it is Andhra Pradesh it is 99 thousand hectares area, 120 tonnes of production and 1210 kilograms of yield per hectare is produced.

For Maize crop, 19 thousand hectare area used, 94 thousand tonnes is produced and yield per hectare is 5037 kilograms but in Andhra Pradesh it is 528 thousand hectares area, 158 tonnes of production and 2996 kilograms of yield per hectare is produced.

For Small Millet crop, there is no area production and yield in West Godavari district but in Andhra Pradesh it is 2 thousand hectares area, 2 tonnes of production and 629 kilograms of yield per hectare is produced.

For Bengalgram crop, there is negligible area production and yield is 2378 kilograms per hectare is West Godavari district but in Andhra Pradesh it is 201 thousand hectares area, 229 tonnes of production and 1138 kilograms of yield per hectare is produced.

For Redgram crop, 1 thousand hectare area used negligible production and yield is 554 kilograms per hectare in West Godavari district but in Andhra Pradesh it is 513 thousand hectares area, 218 tonnes of production and 427 kilograms of yield per hectare is produced.

For Greengram crop, 3 thousand hectare area used,1 thousand tonnes is produced and yield per hectare is 338 kilograms but in Andhra Pradesh it is 520 thousand hectares area, 184 tonnes of production and 354 kilograms of yield per hectare is produced.

For Blackgram crop, 6 thousand hectare area used, 2 thousand tonnes is produced and yield per hectare is 384 kilograms but in Andhra Pradesh it is 555 thousand hectares area, 390 tonnes of production and 704 kilograms of yield per hectare is produced.

For Horsegram crop, there is negligible area production and yield is 220 kilograms per hectare in West Godavari district but in Andhra Pradesh it is 79 thousand hectares area, 20 tonnes of production and 259 kilograms of yield per hectare is produced.

For Chilies crop, 5 thousand hectare area used, 8 thousand tonnes is produced and yield per hectare is 1481 kilograms West Godavari district but in Andhra Pradesh it is 238 thousand hectares area, 526 tonnes of production and 2211 kilograms of yield per hectare is produced.

For Groundnut crop, 4 thousand hectare area used, 7 thousand tonnes is produced and yield per hectare is 1799 kilograms West Godavari district but in Andhra Pradesh it is 1874 thousand hectares area, 2143 tonnes of production and 1145 kilograms of yield per hectare is produced.

For Seasmum crop, 1 thousand hectare area used, negligible production and yield per hectare is 273 kilograms West Godavari district but in Andhra Pradesh it is 183 thousand hectares area, 37 tonnes of production and 204 kilograms of yield per hectare is produced.

Table-3.6.4 Andhra Pradesh 2010-11Principal Crops

Principal Crops	2010-11					
	W.G.Dt			A.P		
	Area	Production	Yield	Area	Production	Yield
Rice	456 (9.5)	1491 (10.33)	3265 (106.8)	4752 (100)	14420 (100)	3055 (100)
Wheat	0 (0)	0 (0)	0 (0)	10 (100)	13 (100)	1322 (100)
Jowar	N	1 (0.32)	1447 (119.48)	254 (100)	308 (100)	1211 (100)
Bajra	0 (0)	0 (0)	0 (0)	67 (100)	102 (100)	1512 (100)
Ragi	0 (0)	0 (0)	0 (0)	42 (100)	50 (100)	1188 (100)
Maize	45 (6.04)	308 (7.79)	6885 (129.49)	744 (100)	3953 (100)	5317 (100)
Small Millet	0 (0)	0 (0)	0 (0)	29 (100)	28 (100)	-
Bengalgram	0 (0)	0 (0)	0 (0)	584 (100)	719 (100)	92 (100)
Redgram	1 (0.15)	N	506 (121.6)	638 (100)	265 (100)	416 (100)
Greengram	3 (0.79)	1 (1.58)	551 (125.5)	378 (100)	63 (100)	439 (100)
Blackgram	7 (1.5)	2 (0.79)	285 (52.1)	464 (100)	253 (100)	547 (100)
Horsegram	N	N	417 (94.3)	38 (100)	17 (100)	442 (100)
Chilles	2 (1)	5 (0.78)	2801 (85.7)	195 (100)	638 (100)	3265 (100)
Groundnut	6 (0.36)	1 (0.06)	2032 (226.2)	1622 (100)	1457 (100)	898 (100)
Seasamum	2 (2.22)	N	225 (107.6)	90 (100)	26 (100)	209 (100)

Source: Agricultural Statistics at Glance

Table- 3.6.4 shows that for Rice crop, 456 thousand hectare area used, 1491 thousand tonnes is produced and yield per hectare is 3265 kilograms West Godavari district but in Andhra Pradesh it is 4752 thousand hectares area, 14420 tonnes of production and 3055 kilograms of yield per hectare is produced.

For Wheat crop, there is no area, production and yield in West Godavari district but in Andhra Pradesh it is 10 thousand hectares area, 13 tonnes of production and 1322 kilograms of yield per hectare is producee.

For Jowar crop, there is no area, 1 thousand tonnes production and yield is 1447 in West Godavari district but in Andhra Pradesh it is 254 thousand hectares area, 308 tonnes of production and 1211 kilograms of yield per hectare is produced.

For Bajra crop, there is negligible area production and yield in West Godavari district but in Andhra Pradesh it is 67 thousand hectares area, 102 tonnes of production and 1512 kilograms of yield per hectare is produced.

For Ragi crop, there is negligible area production and yield in West Godavari district but in Andhra Pradesh it is 42 thousand hectares area, 50 tonnes of production and 1188 kilograms of yield per hectare is produced.

For Maize crop, 45 thousand hectare area used, 308 thousand tonnes was produced and yield per hectare is 6885 kilograms West Godavari district but in Andhra Pradesh it is 744 thousand hectares area, 3953 tonnes of production and 5317 kilograms of yield per hectare is produced.

For Small Millet crop, there is negligible area production and yield in West Godavari district but in Andhra Pradesh it is 29 thousand hectares area, 28 tonnes of production there is no yield data.

For Bengalgram crop, there is negligible area production and yield in West Godavari district but in Andhra Pradesh it is 584 thousand hectares area, 719 tonnes of production and 92 kilograms of yield per hectare is produced.

For Redgram crop, 1 thousand hectare area used, negligible production and yield per hectare is 506 kilograms West Godavari district but in Andhra Pradesh it is 638 thousand hectares area, 265 tonnes of production and 416 kilograms of yield per hectare is produced.

For Greengram crop, 3 thousand hectare area used, 1 thousand tonnes is produced and yield per hectare is 551 kilograms West Godavari district but in Andhra Pradesh it is 378 thousand hectares area, 63 tonnes of production and 439 kilograms of yield per hectare is produced.

For Blackgram crop, 7 thousand hectare area used, 2 thousand tonnes is produced and yield per hectare is 285 kilograms West Godavari district but in Andhra Pradesh it is 464

thousand hectares area, 253 tonnes of production and 547 kilograms of yield per hectare is produced.

For Horsegram crop, there is negligible area production and yield is 417 kilograms in West Godavari district but in Andhra Pradesh it is 38 thousand hectares area, 17 tonnes of production and yield is 442 kilograms.

For Chilies crop, 2 thousand hectare area used, 5 thousand tonnes is produced and yield per hectare is 2801 kilograms West Godavari district but in Andhra Pradesh it is 195 thousand hectares area, 638 tonnes of production and 3265 kilograms of yield per hectare is produced.

For Groundnut crop, 6 thousand hectare area used, 1 thousand tonnes is produced and yield per hectare is 2032 kilograms West Godavari district but in Andhra Pradesh it is 1622 thousand hectares area, 1457 tonnes of production and 898 kilograms of yield per hectare is produced.

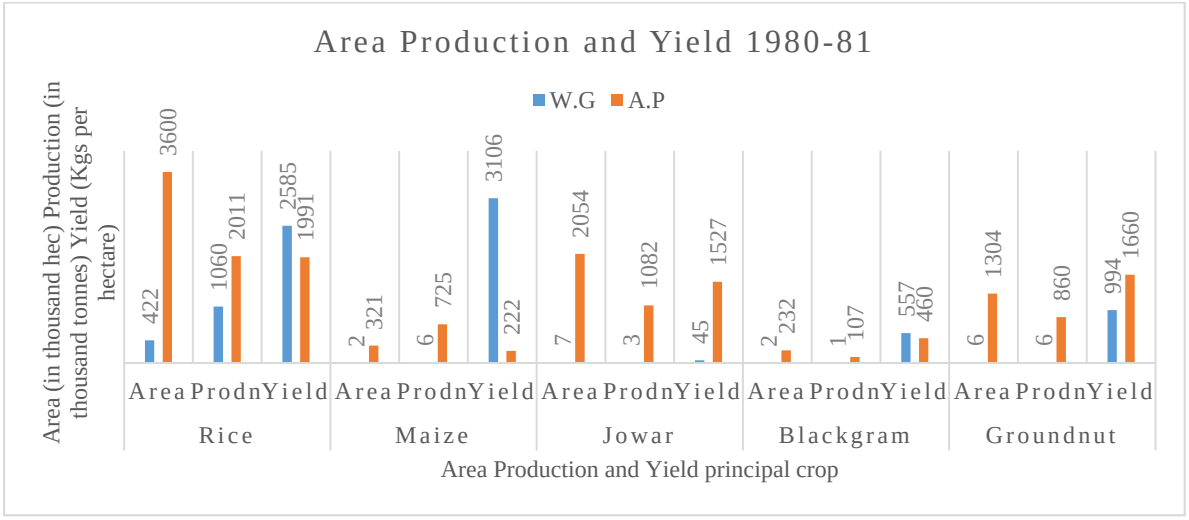
For Sessamum crop, 2 thousand hectare area are used, production negligible and yield is 225 kilograms per hectare in West Godavari district but in Andhra Pradesh it is 90 thousand hectares area, 26 tonnes of production yield is 209 kilograms per hectare.

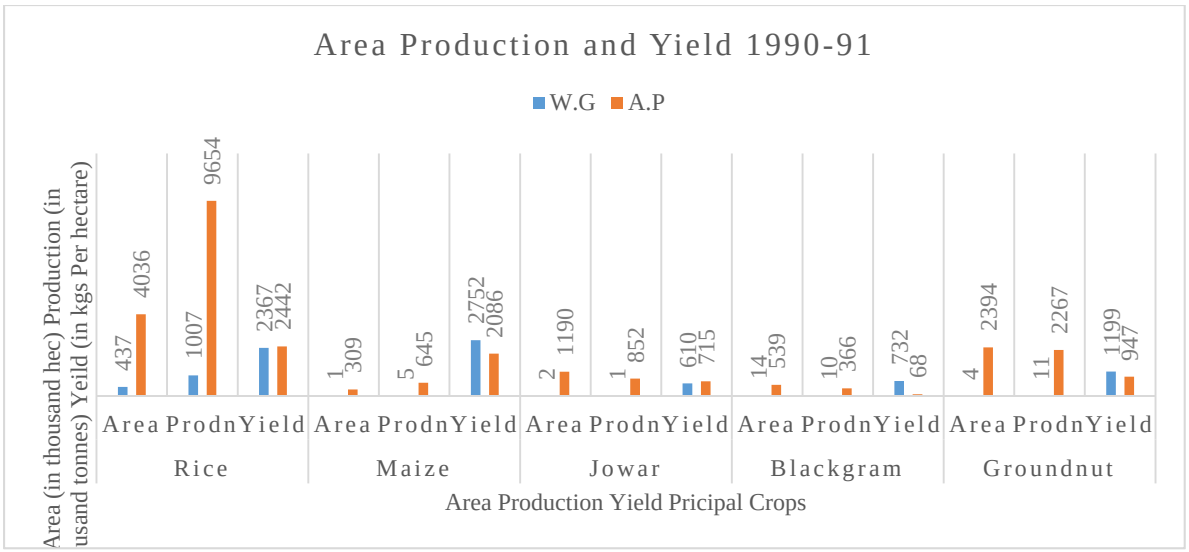
Table-3.6.5 Area Production and Yield in Andhra Pradesh and West Godavari District 1980-81 to 2010-11

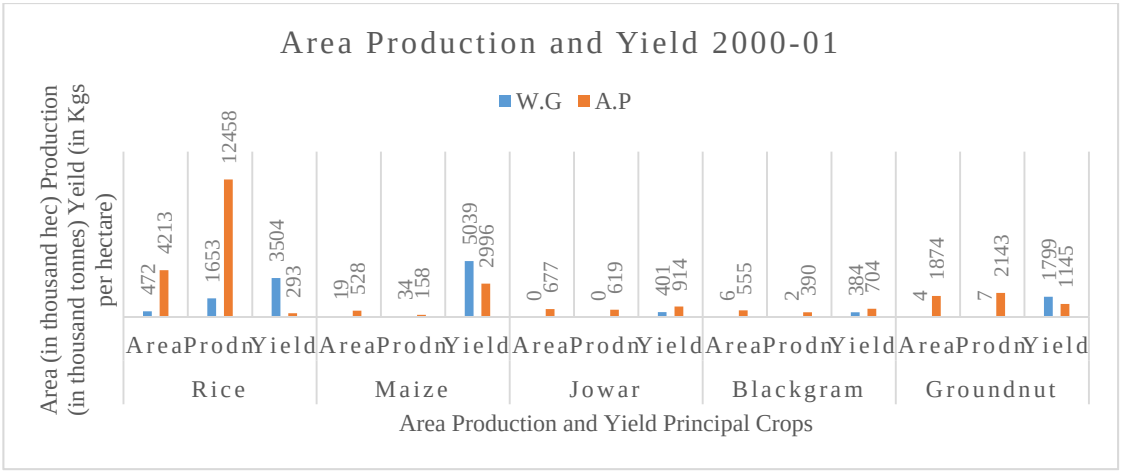
	Rice			Maize			Jowar			Blackgram			Groundnut		
	Area	Prodn	Yield	Area	Prodn	Yield	Area	Prodn	Yield	Area	Prodn	Yield	Area	Prodn	Yield
1980-81															
W.G	422 (12)	1060 (53)	2585 (130)	2 (0.6)	6 (0.8)	3106 (137)	7 (0.3)	3 (0.3)	45 (2.9)	2 (0.8)	1 (0.9)	557 (121)	6 (0.4)	6 (0.7)	994 (60)
A.P	3600 (100)	2011 (100)	1991 (100)	321 (100)	725 (100)	2262 (100)	2054 (100)	1082 (100)	1527 (100)	232 (100)	107 (100)	460 (100)	1304 (100)	860 (100)	1660 (100)
1990-91															
W.G	437 (11)	1007 (10)	2367 (97)	1 (0.3)	5 (0.7)	2752 (131)	2 (1.7)	1 (0.1)	610 (85)	14 (2.6)	10 (2.7)	732 (1076)	4 (0.16)	11 (0.4)	1199 (126)
A.P	4036(100)	9654 (100)	2442 (100)	309 (100)	645 (100)	2086(100)	1190(100)	852 (100)	715 (100)	539 (100)	366 (100)	68 (100)	2394(100)	2267(100)	947 (100)
2000-01															
W.G	472 (11)	1653 (132)	3504 (1195)	19 (3.5)	34 (22)	5039 (168)	N	N	401 (44)	6 (1.8)	2 (0.5)	384 (54)	4 (0.2)	7 (0.3)	1799 (157)
A.P	4213(100)	12458(100)	293 (100)	528 (100)	158 (100)	2996(100)	677 (100)	619 (100)	914 (100)	555 (100)	390 (100)	704 (100)	1874(100)	2143(100)	1145(100)
2010-11															
W.G	456 (9.6)	1491 (103)	3265 (106)	45 (6)	308 (8)	6885 (129)	N	1 (0.3)	1447 (119)	7 (1.5)	2 (0.79)	285 (52)	6 (0.3)	1 (0.06)	2032 (226)
A.P	4752(100)	14420(100)	3055(100)	744(100)	3953(100)	5317(100)	254(100)	308(100)	1211(100)	464(100)	253(100)	547(100)	1622(100)	1457(100)	898(100)

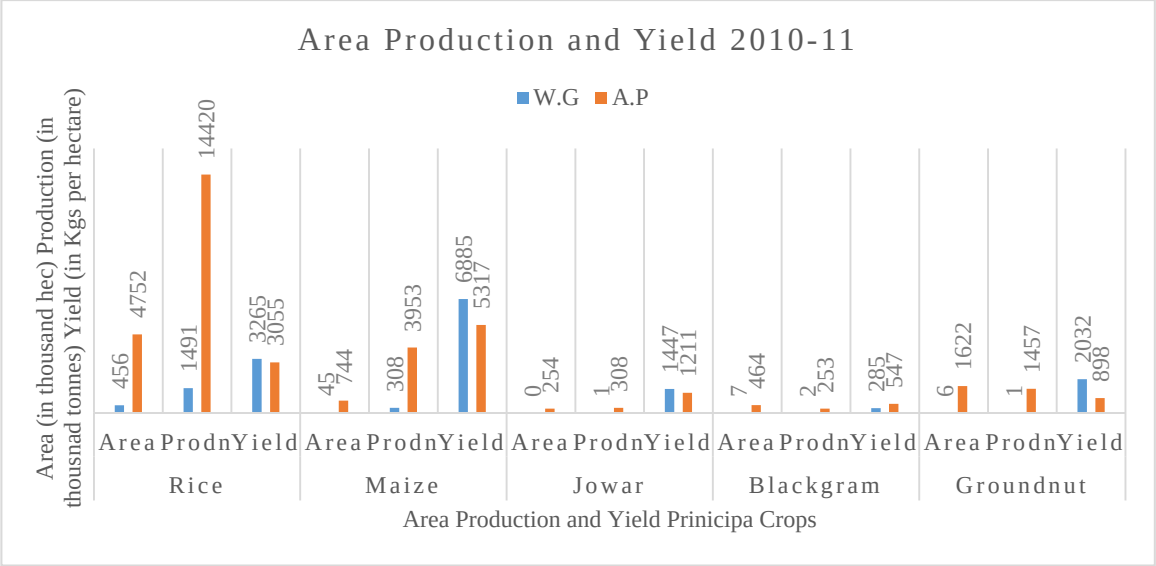
Source: Agricultural Statistics at Glance

Note: Area in thousand Hectares, Production in thousand tonnes, Yield in Kilograms per Hectares




Area Production and Yield 1990-91
W.G
A.P
Area (in thousand hec) Production (in
usand tonnes) Yeild (in kgs Per hectare)
437
4036
1007
9654
2367
2442
1
309
5
645
2752
2086
2
1190
1
852
610
715
14
539
10
366
732
68
4
2394
11
2267
1199
947
Area Prodn Yield
Rice
Maize
Jowar
Blackgram
Groundnut
Area Production Yield Pricipal Crops


Area Production and Yield 2000-01
W.G
A.P
Area (in thousand hec) Production
(in thousand tonnes) Yeild (in Kgs
per hectare)
472
4213
1653
12458
3504
293
19
528
34
158
5039
2996
0
677
0
619
401
914
6
555
2
390
384
704
4
1874
7
2143
1799
1145
Area Prodn Yield
Rice
Maize
Jowar
Blackgram
Groundnut
Area Production and Yield Principal Crops



Area, Production and Yield

Area, production and yield per hectare comparison among rice, maize, jowar, black gram and groundnut details of West Godavari district and Andhra Pradesh is shown from 1980-81 to 2010-11(table 3.6.5 shows).

Rice

In West Godavari district from 1980-81, rice production area is 422 (thousand hectares) to 456 (thousand hectares) in 2010-11 but in Andhra Pradesh, it is 3600 (thousand hectares) to 4752 (thousand hectares). In West Godavari district from 1980-81, rice production is 1060 (thousand tonnes) to 1491 (thousand tonnes) in 2010-11 but in Andhra Pradesh, it is 2011 (thousand tonnes) to 14420 (thousand tonnes). In West Godavari district from 1980-81, yield per hactare is 2585 (kilograms per hectare) to 3265 (kilograms per hectare) in 2010-11 but in Andhra Pradesh, it is 1991 (kilograms per hectare) to 3055 (kilograms per hectare).

Maize

In West Godavari district 1980-81 maize production area is 2 (thousand hectares) to 45 (thousand hectares) in 2010-11 but in Andhra Pradesh, it was 321 (thousand hectares) to 744 (thousand hectares).In West Godavari district 1980-81 maize production is 6 (thousand

tonnes) to 308 (thousand tonnes) in 2010-11 but in Andhra Pradesh, it was 725 (thousand tonnes) to 3953 (thousand tonnes). In West Godavari district 1980-81 maize yield per hactare is 3106 (kilograms per hectare) to 6885 (kilograms per hectare) in 2010-11 but in Andhra Pradesh, it was 222 (kilograms per hectare) to 5317 (kilograms per hectare).

Jowar

In West Godavari district from 1980-81, jowar production area is 7 (thousand hectares) but not available in 2010-11 but in Andhra Pradesh, it is 2054 (thousand hectares) to 254 (thousand hectares). In West Godavari district from 1980-81, jowar production is 3 (thousand tonnes) to 1 (thousand tonnes) in 2010-11 but in Andhra Pradesh, it is 1082 (thousand tonnes) to 308 (thousand tonnes). In West Godavari district from 1980-81, yield per hectare is 45 (kilograms per hectare) to 1447 (kilograms per hectare) in 2010-11 but in Andhra Pradesh, it is 1527 (kilograms per hectare) to 1211 (kilograms per hectare).

Black gram

In West Godavari district from 1980-81, Black gram production area is 2 (thousand hectares) it was 7 (thousand hectare) in 2010-11 but in Andhra Pradesh, it is 232 (thousand hectares) to 464 (thousand hectares). In West Godavari district from 1980-81, Black gram production is 1 (thousand tonnes) to 2 (thousand tonnes) in 2010-11 but in Andhra Pradesh, it is 107 (thousand tonnes) to 253 (thousand tonnes). In West Godavari district from 1980-81, Black gram yield per hectare is 557 (kilograms per hectare) to 285 (kilograms per hectare) in 2010-11 but in Andhra Pradesh, it is 460 (kilograms per hectare) to 547 (kilograms per hectare).

Groundnut

In West Godavari district from 1980-81, Ground nut production area is 6 (thousand hectares) it was (thousand hectare) in 2010-11 not increase but in Andhra Pradesh, it is 1304 (thousand hectares) to 1622 (thousand hectares). In West Godavari district from 1980-81, Groundnut production is 6 (thousand tonnes) to 1 (thousand tonnes) in 2010-11 decreased but in Andhra Pradesh, it is 860 (thousand tonnes) to 1457 (thousand tonnes). In West Godavari district from 1980-81, Groundnut yield per hectare is 994 (kilograms per

hectare) to 2032 (kilograms per hectare) in 2010-11 but in Andhra Pradesh, it is 1660 (kilograms per hectare) to 898 (kilograms per hectare) decreased (see table-3.17).

Conclusion:except marginal size of holdings remaining all size of holdings decreased in the period of 1980-81 to 2010-11.Marginal size was increased 1980-81 50122 (56.3) thousand hectare to 2010-11 92826 (67.09) thousand hectares in India. Marginal, small and semi-medium sizes operates area was increased 19735 (12.04) to 35908 (22.49), 23169 (24.14) to 35244 (22.08), 34645 (21.15) to 37705 (23.62) respectively from 1980-81 to 2010-11. But medium and large sizes are decreased in all India level. In Andhra Pradesh marginal size and small sizes of number and area operated land was increased but in s-medium, medium and large size of holdings are different so many flucvcations occur. In West Godavari main, marginal and total workers increased from 1990-91 to 2010-11, Andhra Pradesh also main, marginal and total workers increased. In non-agricultural employment household industry and others are treated as non-agricultural employment but when we look at the data lot of flucvations can see from 1990-91 to 2010 and 2011. Area under food and non-food crops, from 1980-81, 1990-91, 2000-01 and 2010-11; area under food crops was increased in West Godavari and Andhra Pradesh. Non-food crops area was also increased in West Godavari and Andhra Pradesh. In West Godavari cropping pattern, rice production area of increased in the year 1980-81, 422 thousand hectares to 456, rice production is increased 1060 thousand tonnes to 1491 thousand tonnes and yield per hectare 2585 kilogram per hectare to 3625 kilogram per hectare were increased. Maize, Jowar, Black gram cultivation area was increased except ground nut it is stable not increased in West Godavari. In production of Maize production increased, jowar very less in 1981-81 and 1991-91 but 2000-01 and 2010-11 not available Blackgram production also very less except in the year 1990-91, 10 thousand tonnes. Groud nut production is increased 6 tonnes to 11 tonnes in the year 1990-91 but after that it was decreased.Maizeof yieldin kilogram per hectare is continuously increased from 19800-81 to 2010-11. Jowar continuously increased, Black gram increased up to 1990-91 later it was decreased. Ground nut yield in kilogram is also increased continuously in West Godavari.

In Andhra Pradesh, rice cultivated area, production and yield also increased 1980-81 to 1990-91.Maize cultivated are increased, production increased up to 1990-91 but later 2000-

01 it was decreased again raised in the year 2010-11; yield per hectare increased continuously. Jowar cultivated are, production decreased continuously but yield per hectare continuously decreased up to 2000-01 later it was increased.Black gram, cultivated are increased continuously, production continuously increased up to 2000-01 but later it was decreased. Yield per hectare, except in the 1990-91 it is increased continuously.Gorund nut, cultivated are, production, increased up to 1990-91 but later it was decreased. Yield per hectare, it was decreased in the period of 1980-81 to 1990-91 again raised in the year 2000-01 but later it was decreased.

Non-farm Employment is heterogeneity in character, from state to state, region to region, village to village and household to household also. In the state of Andhra Pradesh, the non-farm sector has been supported by the agriculture sector in various forms.Fertilizers shops, pesticides and tractors related shops was also established.The rising agricultural wages in rural areas are leads to increase non-farm activities. The rising agricultural productivity is thus instrumental in inducing a structural transformation of the rural non-farm economy. The direct impact of increase in agriculture production to the growth of non-farm sector can be sustained by way of supplying more raw materials to industries and creating demands for inputs and allied services. The indirect impact can also be visualized in the form of increasing consumption demand and generating surplus for investment.The Non-Farm sector is increasingly playing an important role in the development of rural areas in Andhra Pradesh from decades onwards. Specifically,the Non-Farmsector has provided of employment and income to many rural peoples. However, the efforts are needed to identify appropriate and effective institutional means for development of non-farm sector policy and interventions for creating employment opportunities.

The role of Non-Farm sector is crucial, especially in the provision of necessary infrastructure and other support services in the Andhra Pradesh. It is also vital to improve the marketing links between the village entrepreneurs and the larger business firms located in the towns/cities. Such strategic alliances or partnerships can contribute to the sustainability of small village and tiny enterprises in the rural areas. Other important considerations that need to be focused on may include human resource development, financial/credit facilities, research and development and women’s participation with a view

to making the activities self-sustaining in the changing competitive environment on the basis of Non-Farm sector in rural Andhra Pradesh.In West Godavari District, rural non-farm employment was from 19.8 percent to 22.41 percent during 1983-84 to 2004-05. In Andhra Pradesh rural non-farm employment was increased from 18.62 to 24.96 percent during the same period.

Chapter-IV

FACTORS DETERMINING NON-FARM EMPLOYMENT IN KODURUPADU VILLAGE

Introduction: Non-farm employment plays a very predominant role in rural development. Rural non-farm in Andhra Pradesh was significant in providing employment, increasing share of income and decreasing rural poverty. Agricultural sector alone cannot provide sufficient employment to all the rural people because there is seasonal unemployment and non-farm sector work as a bridge in period of unemployment. Landless labour and small farmers are dependent upon rural non-farm employment as a relief work. Agricultural sector, mainly depend on rains, so there is a lot of uncertainty in cultivation, production and employment also. Due to uncertainty in incomes, which leads to poverty rural people search for other jobs. Insufficient education may induce to enter into poor non-farm activities like traditional occupations. Rural non-farm is heterogeneity in character and there is no universal characteristic. It differs from one country to another country, one state to another state, one area to another area even one household to another household. This rural non-farm employment has close relation with farm, education, age, land, infrastructure, family size, migration and so on.

In this chapter, Economic and Demographic details is given including workers and non-workers of the selected village Kodurupadu.Those who are working more than 6 months in one financial year is called as main workers,but those who workfor below 6 months is called marginal worker. Total workers (main and marginal workers) are 503 in this village. Here, head of the household, family members and working status details arealso given. Workers are divided broadly into agricultural and non-agricultural workers. Cultivators and casual labour in agriculture are agricultural workers. Cultivators are again divided into own cultivators and lease cultivators. Non-agricultural workers are divided into traditional non-farm employees and modern non-farm employees.

In the selected village agricultural workers are 363 and non-farm employees are 140. Total non-farm employees are divided into two 1) traditional non-farm employees and 2) modern non-farm employees. Traditional non-farm employees are againdivided as vegetables sellers, shepherding, mason, pastor, washer man, coconut sellers, and maid servants in

households. They also do, Laundry, toddy tappers, band music, tailoring, anganwadi workers, kirana shop runners, rickshaw pullers, tree cutting, drama actors, public distribution system workers, wood sellers, dairy farm runners and snail sellers.

Modern non-farm employees are tractor driver. Village Revenue Officer (VRO), Catering, Private Jobs (sales men in cloth shops etc.,). Painting, Centering, Photo Studio Worker, Constable, Ties Factory Worker, Lighting, Electric shop, Tractor own, Auto Own, Military, Car Driver, Field Worker, Dwakra Worker, Auto Driver, Gang Work. Shop Worker, Mill Worker, Cycle Vendor, Bricks Worker, Hotel Worker, Bricks Owners, Electric Workers, Central Reserved Police Force (CRPF).

Out of 298 households, agricultural households are 184 (62); non-farm households are 99 (33) and pension households are 15 (5). Agricultural households 184 (45)again divided in to two types' cultivators 83 and causal labour in agricultural 101(55) households. Non-farm households are 99, traditional non-farm 58 (59) and modern non-farm 41 (41). Pension holders are 15, 13 (86) are belongs to Scheduled Caste (SCs) remaining two;1 (7) isother caste (OCs) and another 1 (7) is other backward caste (OBCs).

4.1 Socio-economic characteristics

Head of Household Work-division caste and sub-caste

Table- 4.1 Working and Non-working Heads

Caste	Working Heads	Non-working(Pension) Heads	Total
SC	209 (94)	13 (6)	222 (100)
OBC	44 (98)	1 (2)	45(100)
OC	30 (97)	1 (3)	31(100)
Total	283 (95)	15 (5)	298(100)

Note: the figures in the brackets are percentage

Table 4.1 shows the working and non-working heads of Koduruadu village and their caste. Scheduled caste are 222 heads, 209 (94) are working, remaining 13 (6) only depends on pension of Andhra Pradesh. Other backward caste are 45 heads, in this; 44 (98) are working and remaining 1(2) are pension dependents. Other Caste (OCs) are 31 heads, in this; 30

(97) are working and remaining 1 (3) are non-working heads. Highly pension dependents belongs to Scheduled Caste (SCs) (6%) next is Other Caste (OCs) (3%) and other backward caste (OBCs) (2%) are low dependence of pensions.

Total workforce of the village is 503, agricultural workforce is 363 (72) and non-farm employs is 140 (28). Out of 363 agricultural workers, 86 (24) works as cultivators and remaining 277 (76) works as casual labour in agriculture. Total cultivators of 86, 58 (67) are belongs Scheduled Caste (SCs); 9 (10) are Other Backward Caste (OBCs) and 19 (22) are Other Caste (OCs).Total Casual labour in agricultural 277, 221 (80) are belongs Scheduled Caste (SCs); 41 (15) are Other Backward Caste (OBCs) and 15 (5) are Other Caste (OCs).Total non-farm employs 140 are divided into traditional non-farm employs 78 (56) and modern non-farm employs 62 (44). Out of 78 traditional non-farm employs, Scheduled Caste 60 (77), Other Backward Caste 14 (18) and Other Caste 4 (5). In Modern 62 non-farm employs,Scheduled Caste 49 (79), Other Backward Caste 9 (15) and Other Caste 4 (6) are engaged.

Table. 4.2: Demographic characteristic of at household level

Social Group	No. of HHs	Population						Total Population
		Above 7			Child Population			
		M	F	T	M	F	T	
SC	222 (75)	346 (75)	328 (78)	674 (75)	45 (75)	45 (71)	90 (73)	765 (75)
OBC	45 (15)	66 (14)	67 (15)	133 (15)	12 (20)	13 (21)	25 (20)	158 (15)
OCs	31 (10)	50 (11)	45 (10)	95 (11)	3 (5)	5 (8)	8 (7)	102 (10)
Total	298 (100)	462 (100)	440 (100)	902 (100)	60 (100)	63 (100)	123 (100)	1025 (100)

Source: Field Survey, 2015

Note: the figures in the brackets are percentage, Scheduled Caste=SC, Other Backward Caste=OBC, Other= Other Caste

This 4.2 table shows the total households of Kodurupaduvillage, age and sex caste-wise details. Total households are 298 and population is village 1025 (see table-4.2). Out of 298 households, 75 percent households are scheduled caste (SCs), 15 percent of households are other backward caste (OBCs) and remaining 10 percent of households belong to other caste (OCs). In the same way, total population of the village is 1025, in this scheduled caste (SCs) population is 75 percent; other backward caste (OBCs) population is 15 percent and other caste (OCs) population is 10 percent in the village including child population. Scheduled caste (SCs) total population is 765, above 7 years of age population is 674 and

child population is 90. In 674 above 7 years population, males are 51 percent and female are 49, 90 percent are child population. Other backward caste (OBCs) caste total population is 158, above 7 years of age population is 133 and child population is 25. In 133 above 7 years population, males are 50 percent and female are 50 percent 25 percent child population. Others caste (OCs) total population is 102, above 7 years of age population is 95 and child population is 8. In 95 above 7 years population, males are 53 percent and female are 47 percent and 8 percent child population. Total population irrespective of caste is 1025, above 7 years of age population is 902 and child population is 123. 902 are above 7 years population, males are 51 percent and female are 43 percent 123 percent child population.

4.3 Education

Table.4:3 Education status of the head of the family caste wise

Social Group	Education Status						Total
	Not. Lit	Primary	Middle	Secondary	H.Secon	Tech	
SC	82 (37)	79 (36)	13 (6)	43 (19)	3 (1)	2 (1)	222 (100)
OBC	13 (29)	19 (42)	2 (4)	11 (25)	0 (0)	0 (0)	45 (100)
Others	8 (26)	11 (35)	3 (10)	8 (26)	1 (3)	0 (0)	31 (100)
Total	103 (35)	109 (37)	18 (6)	62 (21)	4 (1)	2 (1)	298 (100)

Source: Field Survey, 2015.

Note: the figures in the brackets are percentage, Scheduled Caste=SC, Other Backward Caste=OBC, Other= Forward Caste

This table 4.3 shows the education status of head of the family. Out of family total 298 heads, scheduled caste are 222; other backward caste are 45 and others are 31. Scheduled caste has 222 households, 37 percent of heads are illiterates. In literates, the highest 36 percent only completed primary education and next is the secondary level education with 19 heads. Only 1 percent of head completed higher secondary level of education and technical education. OBC caste 45 households, 29 percent of heads are illiterates. In literates the highest 42 percent of heads only completed primary education and next is the secondary level education with 25 percent. There is no higher secondary level of education and technical education head in OBC caste. In others caste31 households, 26 percent of

heads are illiterates. In literates the highest 35 percent of heads only completed primary education and next is the secondary level education with 26 percent. Only 1 percent of heads completed higher secondary level of education and no technical education is completed in others. In total households, irrespective of caste out of 298 households, 35 percent of heads are illiterates. In literates, the highest 37 percent of heads only completed primary education and next is the secondary level education with 21 percent. Only one percent of heads completed higher secondary level of education and technical education in total households.

4.4 Land Size

Table. 4:4 Size of land holding at household level.

Social Group	Land Size					Total		Grand Total
	Marginal	Small	Semi-medium	Medium	Large	Land holdings (in hec)	No Land	
SC	78 (35)	4 (2)	0 (0)	0 (0)	0 (0)	82 (37)	140 (63)	222 (100)
OBC	13 (29)	2 (4)	1 (2)	0 (0)	0 (0)	16 (36)	29 (65)	45 (100)
Others	12 (39)	9 (29)	1 (3)	0 (0)	0 (0)	22 (71)	9 (29)	31 (100)
Total	103 (35)	15 (5)	2 (1)	0 (0)	0 (0)	120 (41)	178 (59)	298 (100)

Source: Filed survey, 2015.

Note: SC HHs majority of them operate land, where as other social groups are Own land. The figures in the brackets are percentage, Scheduled Caste=SC, Other Backward Caste=OBC, Other= Forward Caste

This table 4.4 shows theland size of households caste-wise. Aggregate 120 households participates in cultivating, continuing 178 householdsworks as labour in agriculture, non-agriculture and non-farm sector irrespective of caste. In caste wise details, scheduled caste are 222, OBC are 45 and others are 31. In 222 scheduled caste households, only 37 percent partakes in cultivation outstanding the 63 households that does not take part. In OBCs 45 households, 36 percent of households are involved in cultivation and remaining are not. In others 31 households, 71 percent are engaged in cultivation and 29 percent are not. In aggregate, 41 percent are sharing and left over 59 percent are not.

In total 222 scheduled caste households, 37 percent participates in land operation; in this, 35 marginal farmers and 2 small farmers while there is no semi-medium, medium and

large farmers in this caste. In total 45 OBC caste households, 36 percent participates in land operation; in this,29 marginal farmers, 4 small farmers,2 semi-medium and there is no medium and large farmers in this caste. In total 31 others caste households, 71 participates in land operation; in this, 39 marginal farmers, 29 small farmers, 3 percent semi-medium and there is no medium and large farmers in this caste.

Table-4.5 Caste and Type of Operational Holding Households

Social Group	Cultivate Participate HHs			Total
	Own		Tenancy Lease-in	
	Inheritance	Purchased		
SC	34(41)	0(0)	48(59)	82 (100)
OBC	9(56)	3(19)	4(25)	16 (100)
Others	15(68)	5(23)	2(9)	22 (100)
Total	58(48)	8(7)	54(45)	120 (100)

Source: Field Survey; 2015

Note: the figures in the brackets are percentage, Scheduled Caste=SC, Other Backward Caste=OBC, Other= Forward Caste

Table 4.5 enlightens about caste and total operational house holdings details. In 120 total cultivating households, 82 households are SCs; 22 are others and 16 are OBCs. Out of 82 SC households, 41 percent are inheritance land cultivates and 59 percent are leased land cultivating households but there is no purchased land households in SCs. Out of 16 OBC cultivating households, 56 percent are inheritance land cultivated; 19 percent are purchased land cultivated and 25 percent are leased land cultivating households. In 22 others cultivating households, the highest 68 percent are inheritance, 23 percent are purchased land cultivating households and 9 percent are leased land cultivating households. In total irrespective of caste, 48 percent are inheritance land cultivating households 45 percent are leased land cultivating and only 7 percent are purchased land cultivating households.

4.6Working days

In general, there is no difference between the working days of men and women in the village. But there are some differences in their working hours and wages. Actually, women have more responsibilities in family andthey are engaged in unpaid work. Agricultural

work is treated as not valuable if compared with non-farm work. Most young male and female show interest to engage in non-farm thereforeonly aged people and illiterates are engaged in agricultural sector.

Table-4.6Main work of Head of Households Agricultural and Non-agricultural

Caste	Main work of Head of HHs Agriculture and Non-agriculture		Total
	Agricultural	Non-agricultural	
SC	134 (64)	75 (36)	209 (100)
OBC	24 (55)	20 (45)	44 (100)
Other	26 (84)	4 (16)	30 (100)
Total	184 (65)	99 (35)	283(100)

Source: Field Survey; 2015

Note: the figures in the brackets are percentage

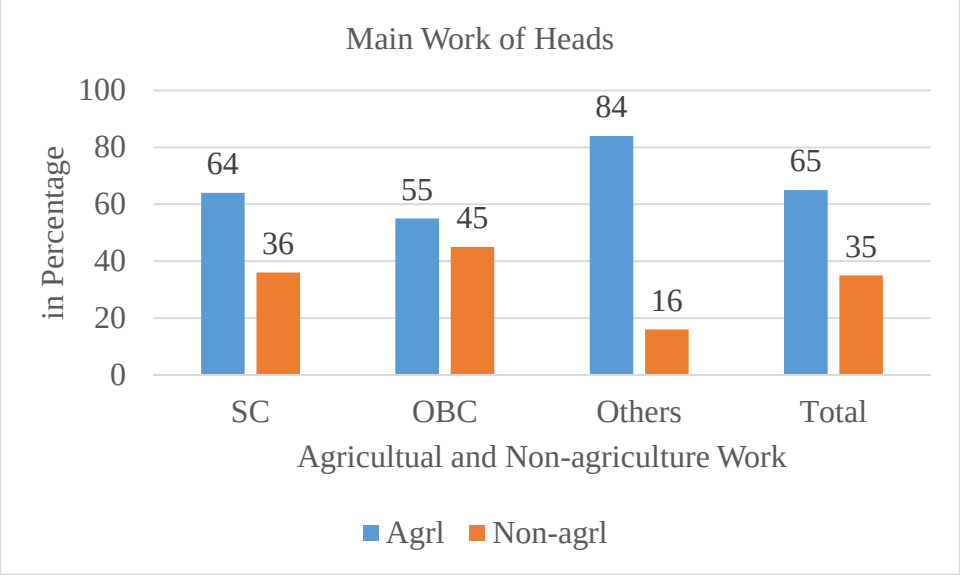


Table 4.6 shows the Main employment of the head and their caste details. Out of 283 household heads,main employment it is divided into agricultural and non-agricultural. Out of the total agricultural and non-agricultural heads of households, Scheduled caste (SCs) are 209; other backward caste (OBCs) are 44 and other caste (OCs) are 31. Out of 283 main employment heads, SC employees are 209; whereagricultural employees are 134 (64) percent and non-agricultural employees are 75 (36) percent. Out of 44 OBC employees,

agricultural employees are 24 (55) percent and non-agricultural employees are 20 (45)percent. In OCs,out of 31 employees; agricultural employees are 26 (84) percent and remaining 4 (16) percent are non-agricultural employees. In total employees, out of 283; agricultural employees are 184 (65) percent and remaining99 (35) percent are non-agricultural employees.

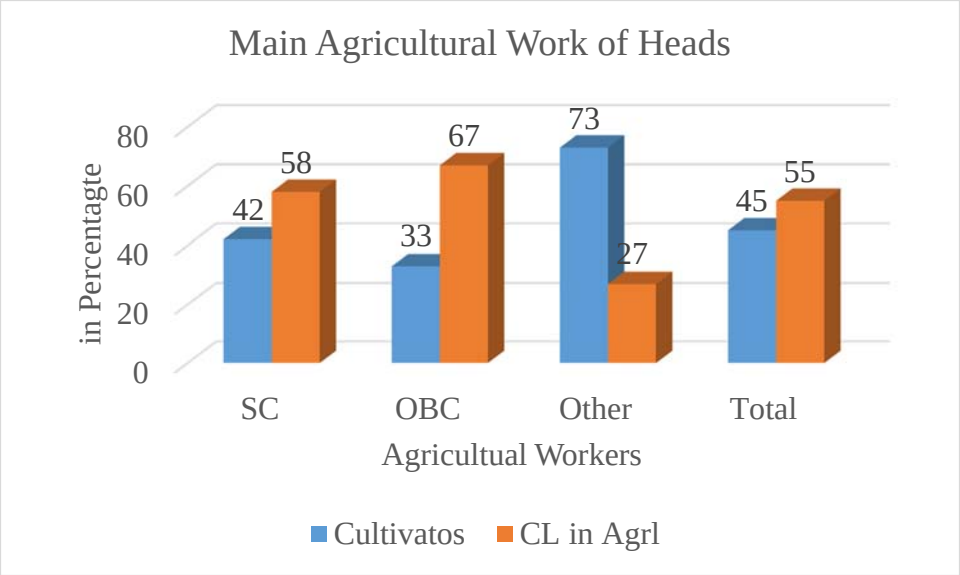
In sub-caste point of view, out of 283 main employees, 209 employees belongs to SC male caste. In this, 64 percent of *Mala* community employees are engaged in agricultural sector and remaining 36 percent employees are non-agricultural employees. In OBCs community of *Gavalla* are 16, 69 percent employees are in agricultural sector and remaining 31 percent are engage in non-agricultural sector. In *Kummari* out of 7, 14 percent are engaged in agricultural sector and remaining 86 percent are engaged in non-agricultural sector. In *Santali*, out of 8; 63 percent of employees are in agricultural sector and remaining 37 in non-agricultural sector. In others, out of 22 *Kapu* community, 86 percent are in agricultural sector and remaining 14 percent works in non-agricultural sector. In *Kamma* caste, out of 7 employees all works in agricultural sector there is no non-agricultural employees in others community. In *Komati* only one member is working as main employee, he also works in non-agricultural sector and there is no agricultural sector employees in *Komati* community (see annexure-2 Table-1).

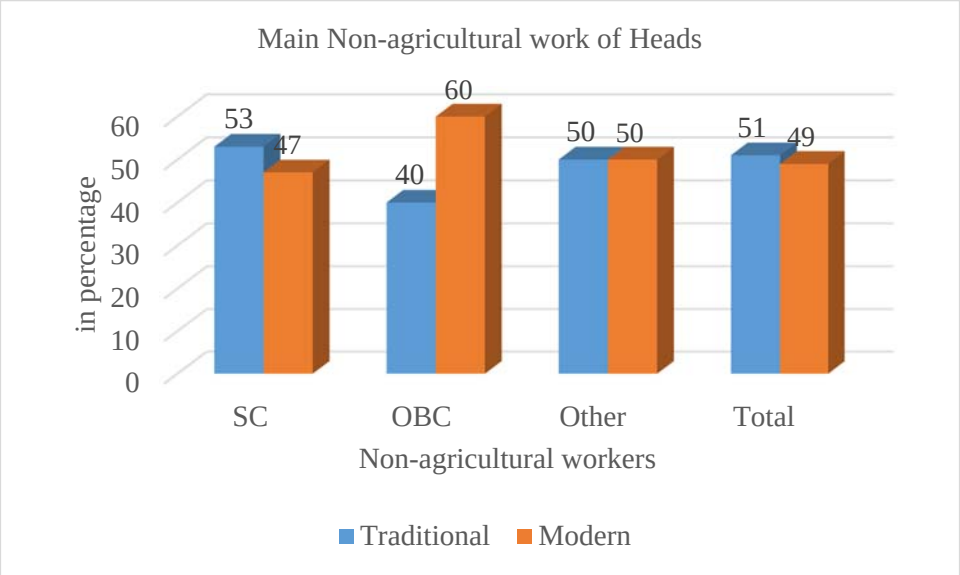
Table-4.7Main work Head of HHs in Agricultural and Non-agricultural work sub-division

Caste	Main work of Head of HHs Agricultural work division		Total	Main work of Head of HHs Non-agricultural Division		Total
	Cultivator	CL in Agriculture		Traditional	Modern	
SC	56 (42)	78 (58)	134 (100)	41 (55)	34 (45)	75 (100)
OBC	8 (33)	16 (67)	24 (100)	13 (65)	7 (35)	20(100)
Other	19 (73)	7 (27)	26 (100)	4 (100)	0 (0)	4 (100)
Total	83 (45)	101 (55)	184(100)	58 (59)	41 (41)	99 (100)

Source: Field Survey; 2015

Note: the figures in the brackets are percentage





Main head agricultural employees' details is shown in table 4.7. Here, total head of main agricultural employees are 184 irrespective of caste in agricultural division. Agricultural employment is divided into cultivators or self or lease and casual labour in agriculture. In caste point of view, out of 134 SC employees both cultivators and casual labour in agricultural employees; cultivators are 42 percent and casual labour in agriculture is 58 percent. Out of 24 OBCs cultivators and casual labour in agricultural employees; 33

percent are cultivators and 67 percent are casual labour in agricultural employees. In others, 26 employees are cultivators and casual labour in agricultural employees. Agricultural employees are 73 percent and 27 percent in non-agricultural employees. In total, out of 184 cultivators and causal labour in agricultural employees; cultivators are 45 percent and remaining 55 percent are casual labour in agricultural employees. The highest cultivators belongs to others 73 percent and next are SCs with 42 percent cultivators. Casual labour are highestwith 67 percent among OBCs and next is SCs with 58 percent. In total agricultural employees, the highest employees are casual labour.

In head main agricultural division point of view, out of total 184 agricultural workers, cultivators are 45 percent and remaining 55 percent works as casual labour in agricultural sector. In *Chakali*, out of 7; 43 percent are cultivators and remaining 57 percent works as casual labour in agricultural sector. In *Gavalla*, out of 11, 27 percent works as cultivators and remaining 73 percent are casual labour in agricultural sector. In *Kummari* caste, only 1works as casual labour. In *Santali* out of 5; 40 percent of employees works as cultivators and 60 percent works as casual labour in agricultural sector. In *Kapu*, out of 19, 63 percent works as cultivators and 37 percent works as casual labour in agricultural sector. In *Kamma* caste, out of 7 employees all are working as cultivators and there is no casual labour in *Kamma* community.Head main work of non-agricultural employees is shown in this table. Non-agricultural employees are divided into traditional non-farm employees and modern non-farm employees. Traditional employees are 58 and modern employees are 41 percent irrespective of caste and total non-agricultural employees are 99. In caste point of view, SCs are 75; traditional employees are 55 percent and modern employees are 45 percent. In OBCs out of 20 non-agricultural employees, traditional employees are 65 percent and remaining 35 percent are modern employees. In others out of 4, traditional employees are 100 percent. Traditional employees are highest in others with 100 percentSCs with 53 percent and next. In modern non-farm employees the highest 45percent belongs to SCs and next isOBCswith 35 percent (see annexure-2 Table-2).

Head main non-agricultural division is shownin thistable, 99 employees'works in non-agricultural sector. In sub-castes, out of 58 traditional non-farm employs, 41 (71) percent are Mala from Scheduled caste (SCs). From other backward caste 13, 5 (9) are *Rajaka*, 3

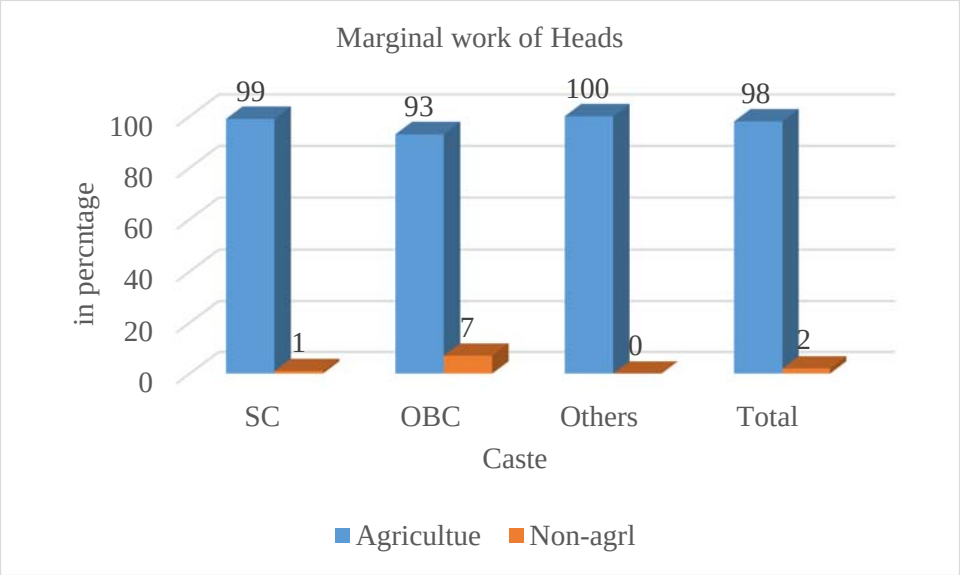
(5) *Gavalla*, 2 (3) are *Kummari*, 3 (5) are *Santani*. Out of 4 other caste (OCs), 3 (5) are Kapu and Vysya or *Komati* 1 (2) percent. In 41 modern non-farm employs, 34 (83) Mala Scheduled caste (SCs), 7 are other backward caste (OBCs), 1 (2) *Rajaka*, 2 (5) are Gavalla, 4 (10) *Kummari* and there is no modern non-farm employs from the *Kapu* and *Vysya* sub-castes. Irrespective of traditional or modern non-farm employs in total 99 households, 75 (76) are Scheduled caste (SCs), other backward caste (OBCs) 20, Rajaka are 6 (6), 5 (5) are Gavalla, 6 (6) are Kummari, 3 (3) are Santani, 3 (3) are Kapu and 1 (1) are Vysya or *Komati* belongs to sub-castes. (see annexure-2 Table-3).

Table-4.8Marginal work of Head of HHs agricultural and non-agricultural division

	Marginal work of Head of HHs agricultural and non-agricultural division		
Caste	Agricultural	Non-agricultural	Total
SC	92 (99)	1 (1)	93 (100)
OBC	14 (93)	1 (7)	15 (100)
Other	5 (100)	0 (0)	5 (100)
Total	111(98)	2 (2)	113 (100)

Source: Field Survey; 2015

Note: the figures in the brackets are percentage



Marginal work of heads is shown in table 4.8. Marginal work of head is divided into agricultural and non-agricultural work. Head marginal employees are 113, irrespective of caste and work division. Irrespective of caste, total agricultural employees are 111 and non-agricultural employees are 2 out of 113 marginal employees. In caste point of view, out of 93 marginal employees, agricultural employees are 99 percent and only one percent are non-agricultural employees. In OBCs, out of 15 marginal employees, the highest 93 percent are agricultural employees and remaining 7 percent are non-agricultural employees. In others, out of 5 marginal employees, all are agricultural employees and there is no non-agricultural workers. In total 113 marginal workers irrespective of caste, 98 percent are agricultural employees and only two percent are non-agricultural employees. Agricultural employees are the highest in SCs, 99 percent than OBC and others. In same way, non-agricultural employees are the highest in OBCs than SCs. But there is no marginal non-agricultural employees in others. In details of head marginal work,out of 113 marginal employees; 98 percent are agricultural employees and remaining 2 percent are non-agricultural employees irrespective of caste.

In sub-caste point of view, out of 93 SC employees: 99 percent works as agricultural employees and remaining only 1 percent is non-agricultural employee. Out of 5 *Gavalla* community, all works as agricultural employees. In *Kummari,* one employee is there working in agricultural sector. In *Santali,* all works in agricultural sector. In *Kamma,* out of 5 all works in agricultural sector. In total head marginal employees 113, 98 percent are

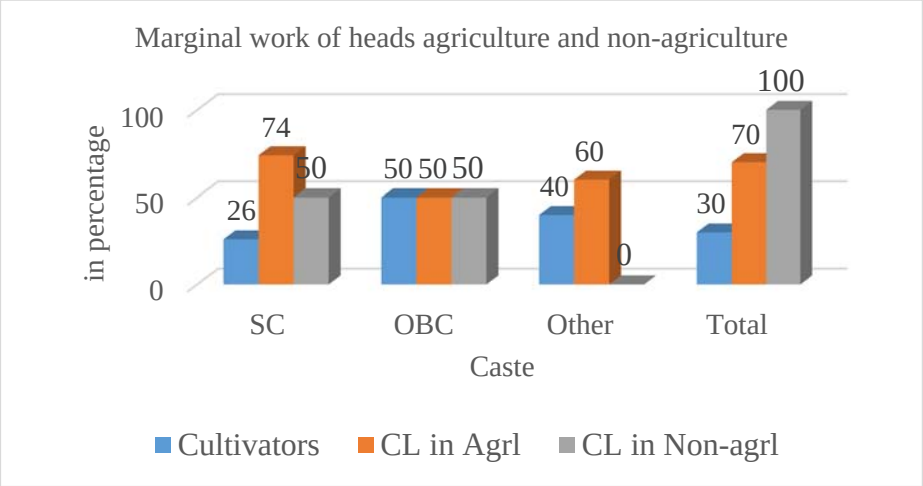
working in agricultural and remaining 1 percent works in non-agricultural sector (see annexure-2 Table-4).

Table-4.9Marginal work of Head of HHs agricultural and non-agricultural sub-Division

Caste	Marginal work of Head of HHs agricultural Division		Total	Head Marginal Work	Total
	Cultivator	CL in agricultural		CL in non-agriculture	
SC	24 (26)	68 (74)	92 (100)	1 (50)	1 (50)
OBC	7 (50)	7 (50)	14 (100)	1 (50)	1 (50)
Other	2 (40)	3 (60)	5 (100)	0 (0)	0 (0)
Total	33 (30)	78 (70)	111(100)	2 (100)	2 (100)

Source: Field Survey; 2015

Note: the figures in the brackets are percentage



Marginal agricultural work of head is shown in this table 4.9. Irrespective of caste and agricultural division of work, 111 employees are agricultural employees. Agricultural employees again is divided into cultivators and casual labour in agriculture. Irrespective of caste, total cultivators are 33 and CL in agricultural are 78 out of 111 agricultural employees. In total 33 agricultural employees of cultivators; SCs are 26 percent, OBCs are 7 percent and 2 percent are others. In casual labour out of 78, the highest 74 percent are

SCs. Others occupied next place with 60 percent casual labour in agriculture.Head marginal agricultural employees division is shown in this table. Agricultural employees are sub-divided into cultivators and casual labour in agriculture. Total head marginal workers are 111. In 111, agricultural marginal employees heads of 30 percent are cultivators and remaining 70 percent are casual labour in agricultural sector.

Sub-caste point of view, *Mala* are 92 agricultural employees. Out of 92 *Mala* agricultural employees, 26 percent employees are cultivators and remaining 74 percent is works as casual labour. In *Kapu,* out of 5; 40 percent are cultivators and remaining 60 percent are casual labour in agriculture. In *Chakali,* out of 4, 25 percent works as cultivators and remaining 75 percent works as casual labour in agricultural sector. In *Gavalla* out of 5; 40 percent works as cultivators and remaining 60 percent are casual labour in agriculture. In *Kummari* one employee is there working as cultivator. But in *Santali* caste, out of 4; 75 percent works as cultivators and 25 percent works as casual labour in agricultural sector. In total out of 111, 30 percent works as cultivators and remaining 70 percent of employeesworks as casual labour in agricultural sector (see annexure-2 Table-5).

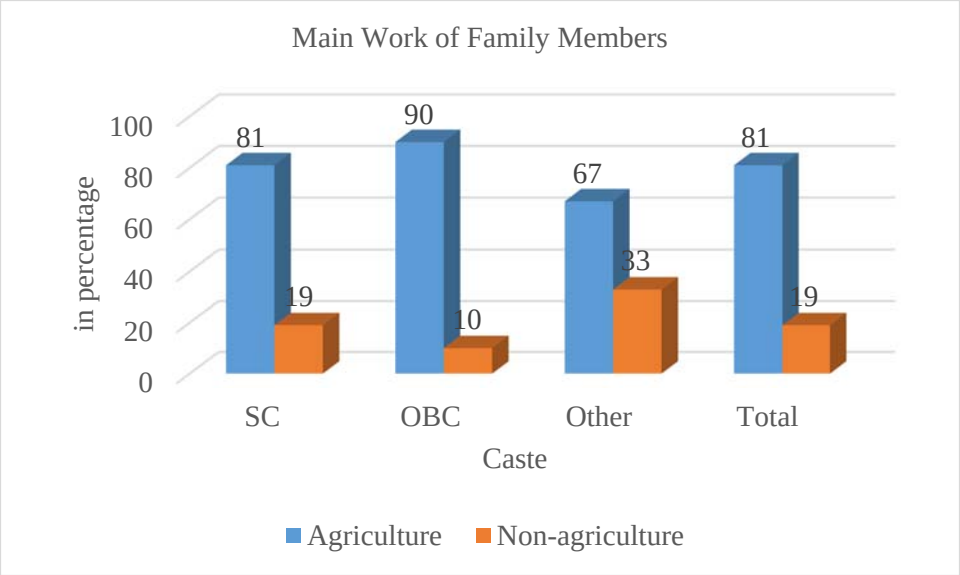
Family Members work-division of caste and sub-caste

Table-4.10Main work of Family Members

Caste	Main work of Family Members		Total
	Agriculture	Non-agriculture	
SC	145 (81)	34 (19)	179 (100)
OBC	26 (90)	3 (10)	29 (100)
Other	8 (67)	4 (33)	12 (100)
Total	179 (81)	41 (19)	220 (100)

Source: Field Survey; 2015

Note: the figures in the brackets are percentage



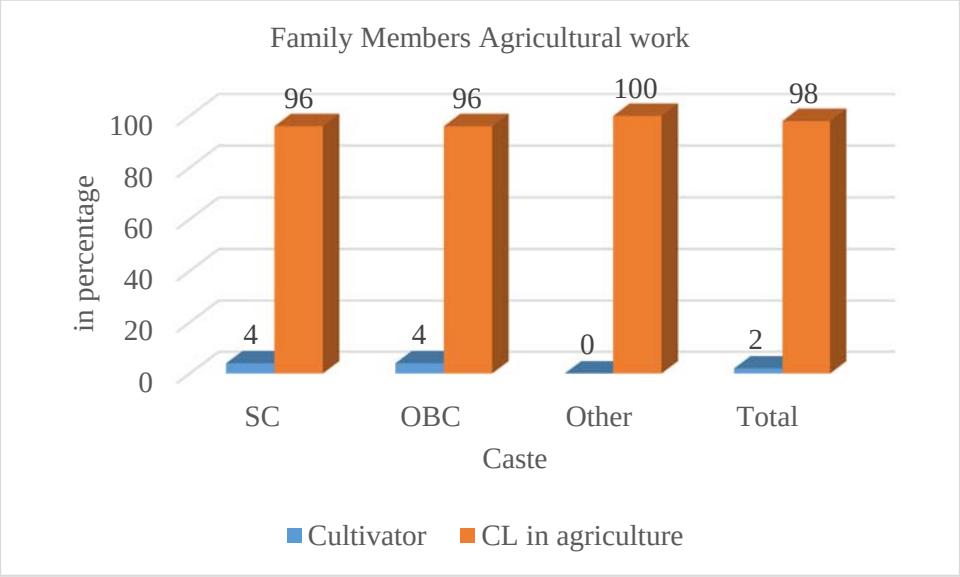
Main work of family members is shown in this table 4.10. Main work of family members is divided into agricultural and non-agricultural employees. Main workers of family members are 220 irrespective of caste in agricultural division. Agricultural employees are 179 and non-agricultural employees are 41 irrespective of caste. In 179 agricultural employees irrespective of caste, the highest are SCs with 145 (81) percent and next place occupied by agricultural employees are OBCs with 26 (90) percent. Non-agricultural employees are 41, in this the highest are others with 4 (33) percent and next place occupied by SCs 19 percent. In total agricultural and non-agricultural employees, the highest are agricultural employees and next place occupied by non-agricultural employees.Member main work are divided into agricultural and non-agricultural employees. Member main employees are 220. In this 220 main member employees, 81 percent are agricultural workers and remaining 19 percent are non-agricultural employees. In SC *Mala*, 179 members are working. In 179 workers agricultural employees are 81 percent and remaining 9 percent are non-agricultural employees. In *Chakali* out of 12 family members main work; 75 percent are agricultural and 2 percent are non-agricultural employees. In *Gavalla* out of 14 all works as cultivators as is the in*Kummari* 2, *Santali* one and *Kapu* 8 employees. But of the 4 *Kummari* all works as non-agricultural employees (see annexure-2 Table-6).

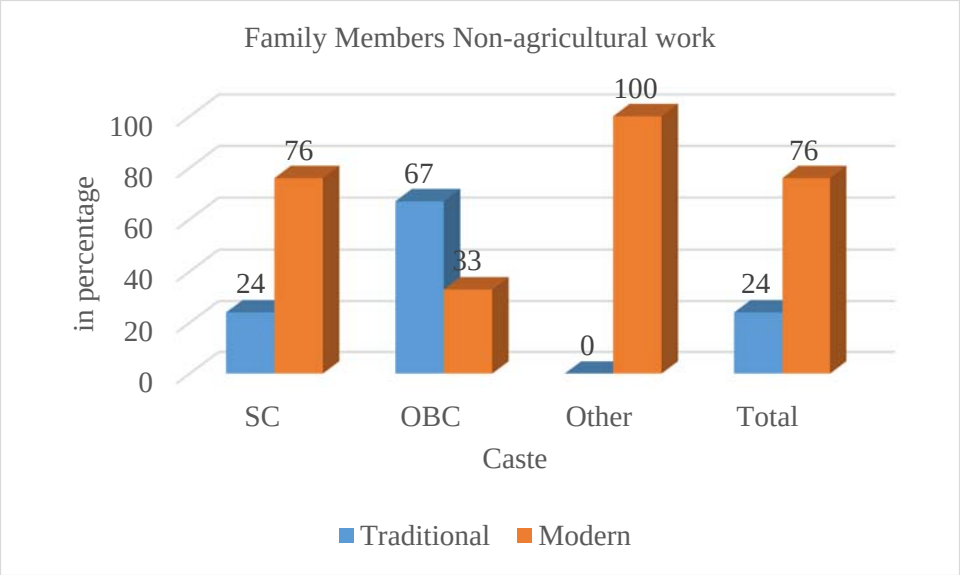
Table-4.11Main work of Family Members agricultural and Non-agricultural sub-division

Caste	Main work of Family Members agricultural division		Total	Main work of Family Members Non-agricultural division		Total
	Cultivator	CL in agriculture		Traditional	Modern	
SC	2 (4)	43 (96)	45 (100)	8 (24)	26 (76)	34 (100)
OBC	1 (4)	25 (96)	26 (100)	2 (67)	1 (33)	3 (100)
Other	0 (0)	8 (100)	8 (100)	0 (0)	4 (100)	4 (100)
Total	3 (2)	176 (98)	179 (100)	10(24)	31 (76)	41(100)

Source: Field Survey; 2015

Note: the figures in the brackets are percentage





Main agricultural work of family member's details is shown in table 4.11. Family member's agricultural work is divided into cultivators and casual labour in agriculture. Total agricultural employees are 179 irrespective of caste and division of agricultural employees. In total 179 of agricultural employees, cultivators are 3 and casual labour in agriculture are 176 in family member's main work. In caste point of view, out of 3 cultivators; the highest percent are in SCs and OBCs with 4 percent from each caste. But casual labour are higher than cultivators. Casual labour in agriculture are 176 irrespective of caste. In this, the highest 96 percent are SCs and OBCs from each caste works as casual labour. In total family members of main work 98 percent works as casual labour in agriculture and remaining 2 percent works as cultivators.Member agricultural employees', division details out of 178 total family members' agricultural division; agricultural employees are divided into cultivators and casual labour in agriculture. There are 178 members working as agricultural employees. In this 178 members, 1 percent of employees'works as cultivators and remaining 99 percent are working as casual labour in agricultural sector. In SC *Mala*, 145membersworks, in this 1 percent are cultivators and remaining 99 percent are casual labour in agriculture. In *Chakali* 8, *Gavalla* 14; *Kummari* 2, *Santali* 1 and *Kapu* 8 members all works as casual labor in agriculture (see annexure-2 Table-7).

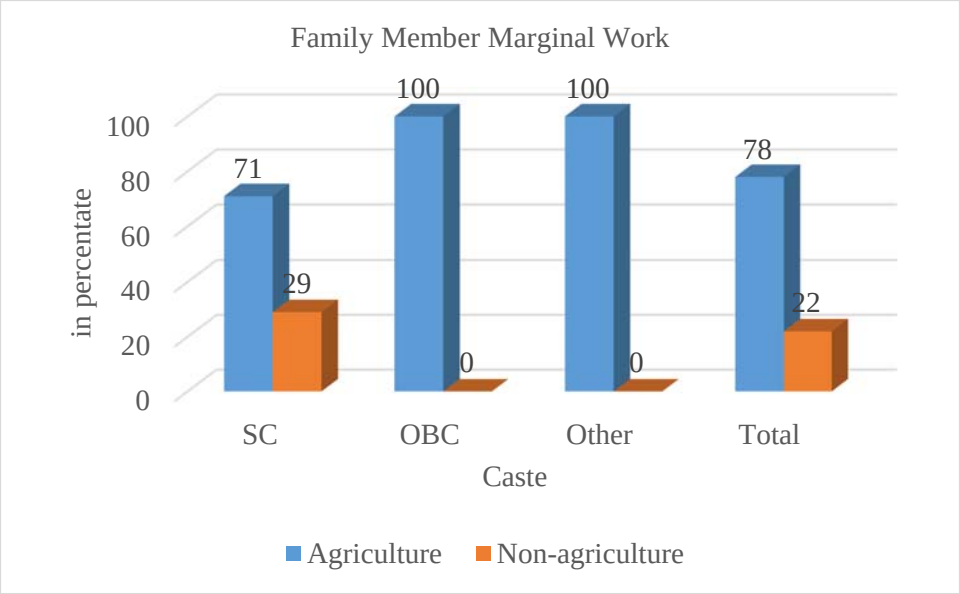
In this table non-agricultural employees of family members main work details is shown. Family member main non-agricultural work is divided into traditional non-farm and modern non-farm. Total traditional and modern non-farm employees of family members are 41. In this 41, traditional non-farm employees are 10 and modern non-farm employees are 31, out of 41 non-agricultural employees. Irrespective of traditional and modern non-farm total SCs are 34, OBCs are 3 and others are 4 family members in non-agricultural employees. In Non-farm employees division point of view, traditional non-farm employees are 10 and modern non-farm employees are 31. In 10 traditional non-farm employees, the highest 24 percent of SCs are traditional non-farm employees and remaining 67 percent are belongs to OBCs. Out of 31 modern non-farm employees, the highest 76 percent modern SCs. In total out of 41 percent of non-farm employees, the highest 76 percent are modern and remaining 24 are traditional non-farm employees.Member non-agricultural employees are divided into traditional and modern non-farm employees. There are 41 non-agricultural non-farm employees working, in this male are 34 *Chakali* are 3 and *Kamma* are 4. In *Mala*, 34 main non-agricultural employees; 24 percent are traditional non-farm employees and remaining 76 percent works in modern non-farm employment. In *Chakali* out of 3; 67 percent are working traditional non-farm and remaining 33 percent works in modern non-farm employment. In *Kamma* out of 4, all are working as modern non-farm there is no traditional non-farm employees in *Kamma* caste. In total out of 41, 24 percent works as traditional non-farm and remaining 76 percent is works in modern non-farm employment (see annexure-2 Table-8).

Table-4.12Marginal work of Family Member agriculture and non-agricultural division

Caste	Marginal work of Family Member agriculture and non-agriculture division		Total
	Agriculture	Non-agriculture	
SC	5 (71)	2 (29)	7 (100)
OBC	1 (100)	0 (0)	1 (100)
Other	1 (100)	0 (0)	1 (100)
Total	7 (78)	2 (22)	9 (100)

Source: Field Survey; 2015

Note: the figures in the brackets are percentage



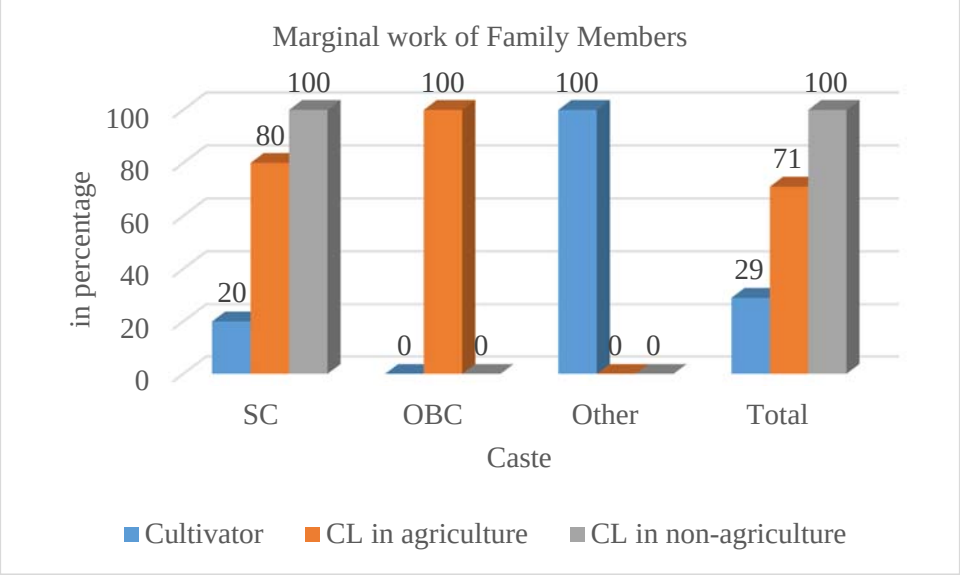
Family members' marginal work agricultural and non-agricultural details is shown in table 4.12. In this out of 9 agricultural employees, the highest 7 are SCs and remaining 2,1is from OBC and one from other caste. Employees are divided into agricultural employees and non-agricultural employees. Agricultural employees are 7 and non-agricultural employees are only two, out of 9 irrespective of caste. In 7 agricultural employees the highest are OBCs and other caste. In non-agricultural employees out of 2 all are non-agricultural SC employees.Member marginal work is divided into agricultural and no-agricultural employees. In this there are 7 employees working. Out of 9 employees, *Mala* caste has 7 employees. In *Mala* 7 employees, 71 percent are agricultural employees and remaining 29 percent are non-agricultural employees. In *Chakali* and other caste one member is there from each caste, working in agricultural sector only (see annexure-2 Table-9).

Table-4.13Marginal work of Family Member agricultural and Non-agricultural sub-division

Caste	Marginal work of Family Member agricultural division		Total	Family Member Marginal Work	Total
	Cultivator	CL in agriculture		CL in non-agriculture	
SC	1 (20)	4 (80)	5 (100)	2 (100)	2 (100)
OBC	0 (0)	1 (100)	1 (100)	0 (0)	0 (0)
Other	1 (100)	0 (0)	1 (100)	0 (0)	0 (0)
Total	2 (29)	5 (71)	7 (100)	2 (100)	2 (100)

Source: Field Survey; 2015

Note: the figures in the brackets are percentage



Marginal workers of family members. Agricultural employee's sub-division as cultivators and casual labour in agriculture (see table-4.13). Cultivators are two, in this 1 from SC and one from other caste. But casual labour in agriculture is 5, in this the highest 4 (80) are SCs and remaining one employee belongs to OBCs. Casual labour is 71 percent and remaining 29 percent are cultivators irrespective of caste and division of work.Member marginal agricultural work is divided into cultivators and casual labour in agricultural. Out of 7 marginal family agricultural employees; 5 belongs to SC *Mala* community. Out of the other

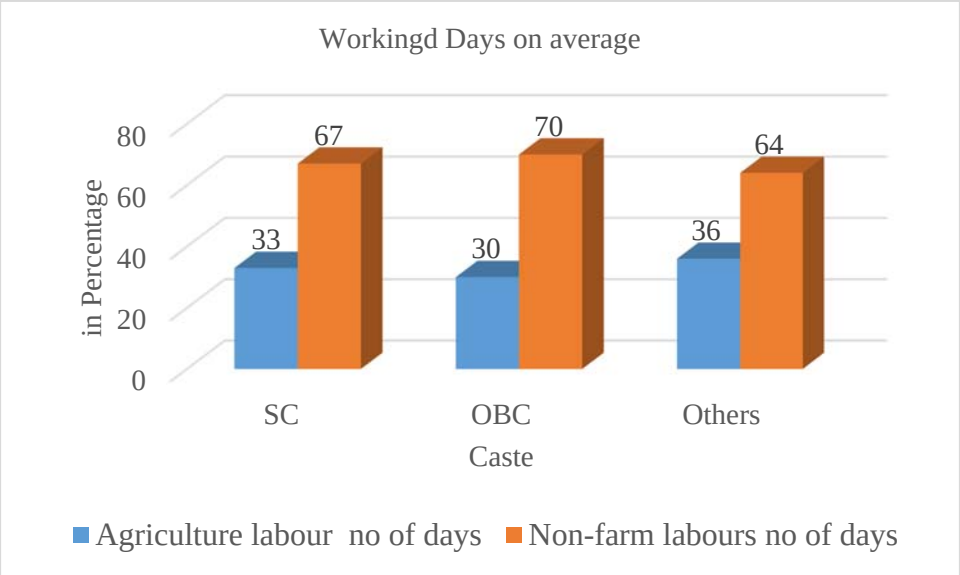
two employees one is from *Chakali* and another is from *Kamma* community. Out of 5 *Mala* community agricultural employees, 20 percent is works as cultivators and remaining 80 percent are casual labour in agriculture. In *Chakali* community there is only one member is working as casual labour in agriculture. In *Kamma* community there is onlyone member working as cultivator. In total 7 members, 29 percent are cultivators and remaining 71 percent works as casual labour in agriculture (see annexure-2 Table-10).

Table- 4.14 Head of the HH working days caste-wise on average

Social Group	Working Days		Total no of Days
	Agriculture labour no of days	Non-farm labours no of days	
SC	95 (33)	190 (67)	285 (100)
OBC	75 (30)	175 (70)	250 (100)
Others	100 (36)	180 (64)	280 (100)

Source: Field Survey, 2015.

Note: the figures in the brackets are percentage, Scheduled Caste=SC, Other Backward Caste=OBC, Other= Forward Caste



This table 4.14 showsand informed about the working days of head of the family caste-wise on average. In total year, Scheduled Caste worksfor 285 days; OBC worksfor 250 days and others worksfor 280 days. In scheduled caste from 285 working days of head of family, 95 days are spent working in agricultural sector and 190 are working days in non-farm sector. In OBC, out of 250 working days of head, 75 days are spent working in agricultural sector

and 175 days are working in non-farm sector. In the same way, 280 days of other working days of the year, 100 days are work for agriculture and 180 days are working days in non-farm sector. Irrespective of caste, working days in non-farm than agriculture are high. In agricultural sector, working days are very less where they participates only at the time of harvesting. Now mechanization in agriculture is also one of the factor to decrease working days in the non-farm sector because it is used for sowing and reaping. So cultivators are giving priority to mechanization instead of human labour. Non-farm sector is a very low quality production and a lot of heterogeneity character. Working days are high when compared with agriculture but earnings are little high but actually low.

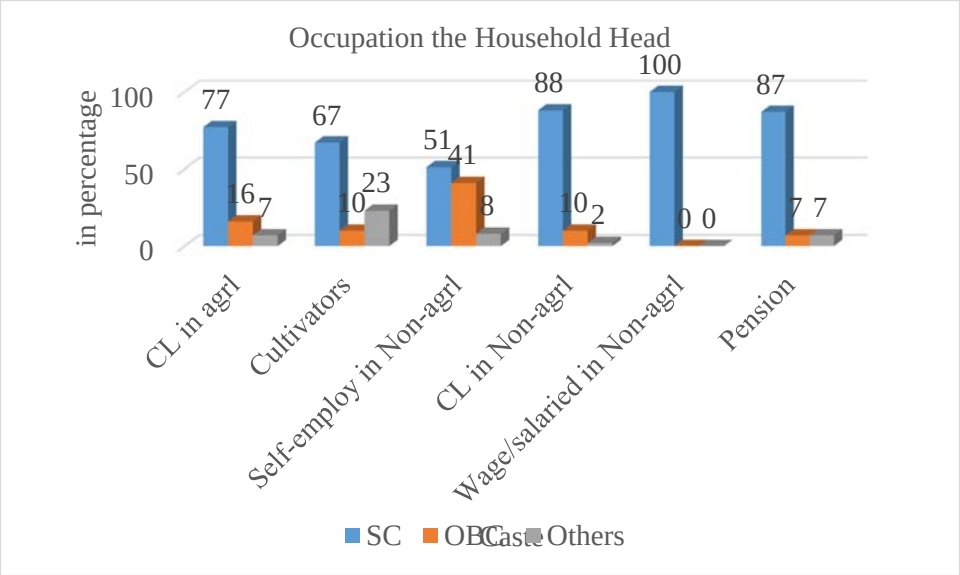
4.7 Occupation

Table.4:15 Occupation the household head.

Share of Employment	Social Group			
	SC	OBC	Others	Total
Agriculture				
Casual Labour	78 (77)	16 (16)	7 (7)	101 (100)
Cultivators/tenant	56 (67)	8 (10)	19 (23)	83 (100)
Non-farm				
Self-employed	20 (51)	16 (41)	3 (8)	39 (100)
Casual Labour	35 (88)	4 (10)	1 (2)	40 (100)
Wage/salaried	20 (100)	0 (0)	0 (0)	20 (100)
Others				
Pension	13 (87)	1 (6.66)	1 (6.66)	15 (100)
Total	222 (75)	45 (15)	31 (10)	298 (100)

Source: Field Survey 2015

Note: the figures in the brackets are percentage, Scheduled Caste=SC, Other Backward Caste=OBC, Other= Forward Caste



Different types of employment caste wise particulars is assumed and shown in this table 4.15. Agricultural workers are alienated in to casual labour and cultivators. Non-farm employees are separated as self-employed, casual labour and wage/salaried employees. Certain head of the families was hinge on only pension, which is provide by government of Andhra Pradesh. Agricultural workers are 184, in this causal labour are 101 and cultivators are 83. In 101 casual labour in agriculture, 77 percent are SCs; 16 percent are OBCs and 7 percent are others. Cultivators or tenants are 83, in this 67 percent are SCs; 10 percent are OBCs and 23 percent are others. In non-farm employees 99, self-employees are 39; casual labour are 40 and wage or salaried are 20. In 39 self-employees, 51 percent are SCs; 41 percent are OBCs and remaining 8 percent are others. In casual labour 40, 88 percent are SCs; 10 percent are OBCs and remaining 2 percent are other caste. Pension dependent heads are 15, in this 87 percent are SCs; 6. 6 percent are OBCs and 6.6 percent are others. In total households of 298, 75 percent are SCs, 15 percent are OBCs and remaining 10 percent are forward caste households irrespective of occupation.

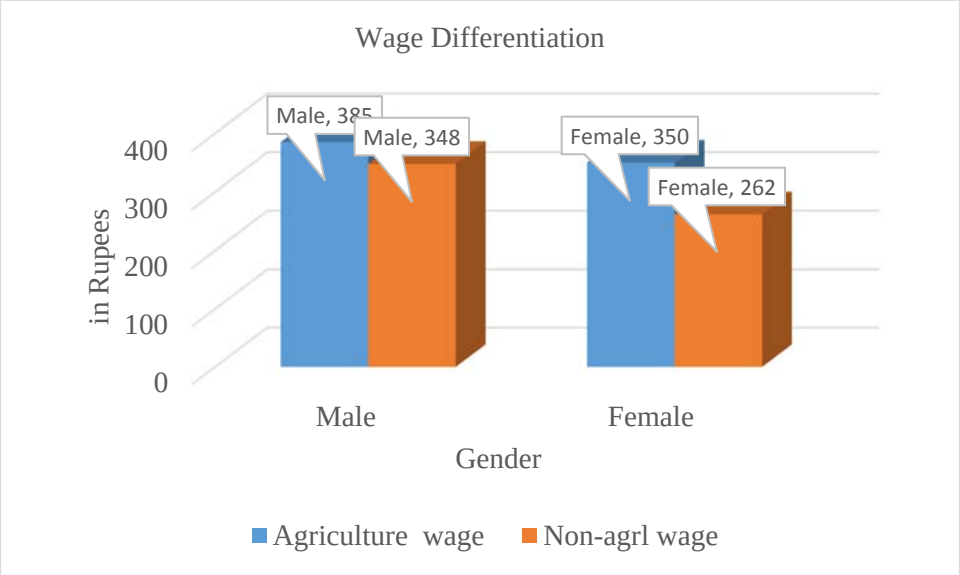
4.8 Wage and Wage Difference

Table.4:16 Wage difference between male and female

Sector	Gender		Wage different between M/F
	Male	Female	
Agriculture wage	385	350	35
Non-agrl wage	348	262	86

Source: Field Survey 2015

Note: the figures in the brackets are percentage, Scheduled Caste=SC, Other Backward Caste=OBC, Other= Forward Caste



In the selected village Kodurupadu, workers are engaged in agriculture; non-agriculture and MGNREGA programme. In this table 4.16 wage differentiation is shown between male and female. In agriculture male and female are receiving different wages in different works, for example sowing, reaping, harvesting etc., As per the table male gets 400 rupees but female gets 350 rupees wage difference is 50 rupees. In non-agriculture sector also, male accepts more wages than female workers.As per the table male gets 300 rupees but female gets 240 rupees with 60 rupees wage difference.Generally, males are being paid higher than female workers, whether in agriculture and non-agriculture.But at the MNREGA programme, male and female receives same amount of wage and there is no difference and that wage also not fixed wage and flucsvations occurs.

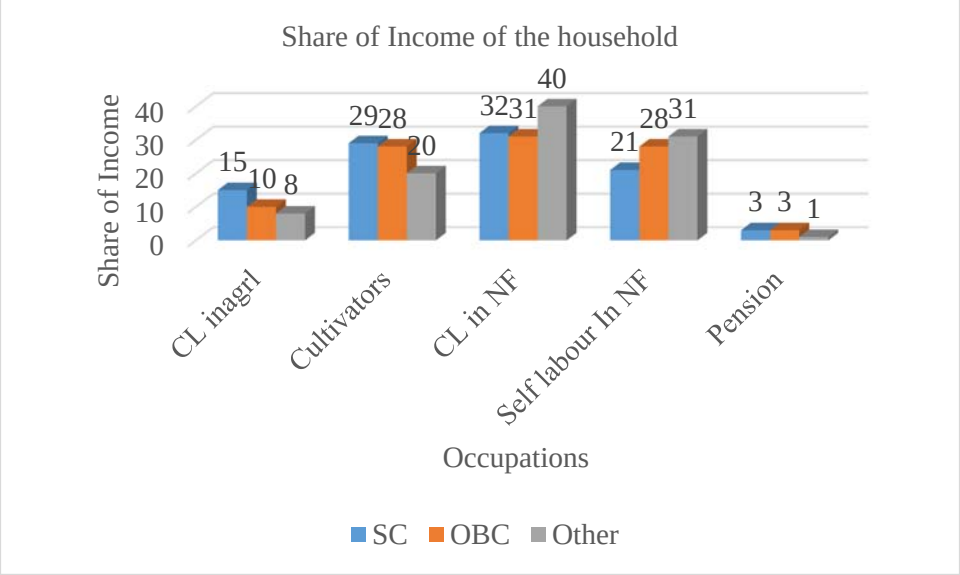
4.9Share of income

Table.4.17Share of income of the household

Source of income	Type of Employment	Social Group		
		SC	OBC	Others
Agriculture	Casual Labour	8074 (15)	5250 (10)	6171 (8)
	Cultivators	15344 (29)	14112 (28)	16289 (20)
Non- farm	Casual Labour	16568 (32)	15425 (31)	32000 (40)
	Self labour	11067 (21)	14218 (28)	25000 (31)
others	Pension	1346 (3)	1500 (3)	1000 (1)
Total		52399 (100)	50505 (100)	80460 (100)

Source: Field Survey 2015

Note: the figures in the brackets are percentage, Scheduled Caste=SC, Other Backward Caste=OBC, Other= Forward Caste



Here, the above table 4.17 shows the share of income of household. Agricultural, non-agricultural and other (pension) income details is given. Among the scheduled caste, the highest income share is coming from rural non-farm, casual labour is almost 32 percent

after cultivators that are getting the highest income, that is 29 percent. But the lowest income in scheduled caste is from pension dependents of only 3 percent. In other backward caste also, the highest income is from casual labour of non-agriculture and the next place occupied by cultivators as well as self-employees in non-farm, both are getting equal income that is 28 percent. But in other backward caste also the pension holders lowest gets the income only 3 percent.In forward caste, the highest income is from casual labour of non-farm of 40 percent, next place occupied by self-employees of non-farm but cultivators are getting only 20 percent in total income. Pension holders of forward caste gets very small percent of only 1 percent.

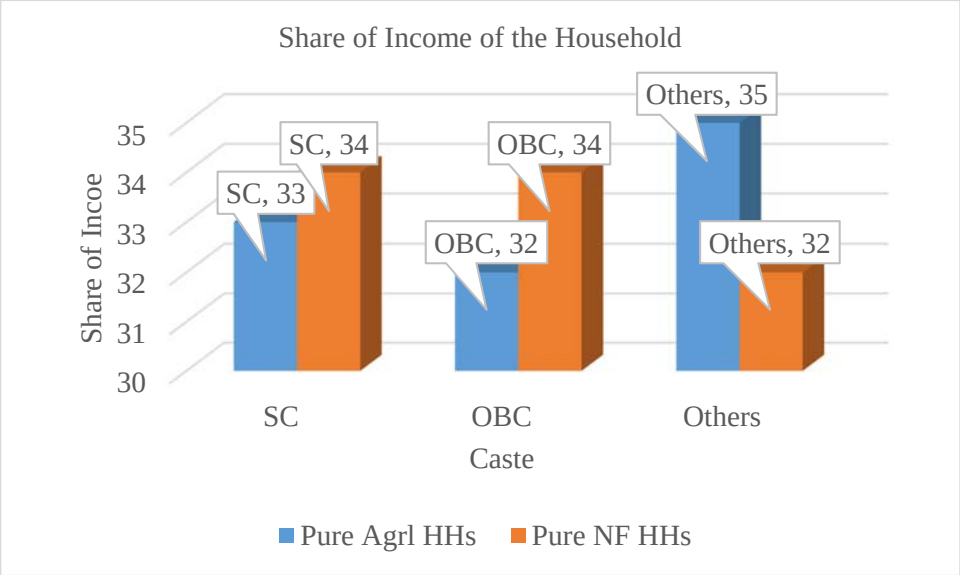
This explains the pure non-farm households and their income levels in caste-wise. Total pure non-farm households are 36, in this scheduled caste households are 25, other backward caste households are 9 and remaining two households are forward caste. Now in scheduled caste households details, out of 25; casual labour are 5 and wage or salaried households are 5. Traditional occupation engaged households are 3 and trade or business households are 5. Private Job households are 4 and government job households are 1 and household head does maiden servant in scheduled caste.

Table- 4.18 Pure Non-farm and Agricultural Households Income Share on average

Pure	Social Group			
	SC	OBC	Others	Total
Agricultural Labour HHs	5818 (33)	5643 (32)	6171 (35)	17632 (100)
Non-Farm HHs	11360 (34)	11722 (34)	11000 (32)	34082 (100)
Total	17178 (33)	17364 (34)	17171 (33)	51713 (100)

Source: Field Survey 2015

Note: the figures in the brackets are percentage, Scheduled Caste=SC, Other Backward Caste=OBC, Other= Forward Caste



This table 4.18 shows share of income in agricultural households and non-farm households' of caste-wise details. Total pure agricultural households are 82, scheduled caste are getting 33 percent, other backward caste are getting 32 percent and remaining 35 percent are getting by other caste on average. In total 36 non-farm households, scheduled caste receives 34 percent, other backward caste receives 34 percent and remaining 33 percent of income is received by forward caste. Here, the highest income from agricultural labour households belongs to forward caste and the highest non-farm income households are scheduled and other backward caste on average.

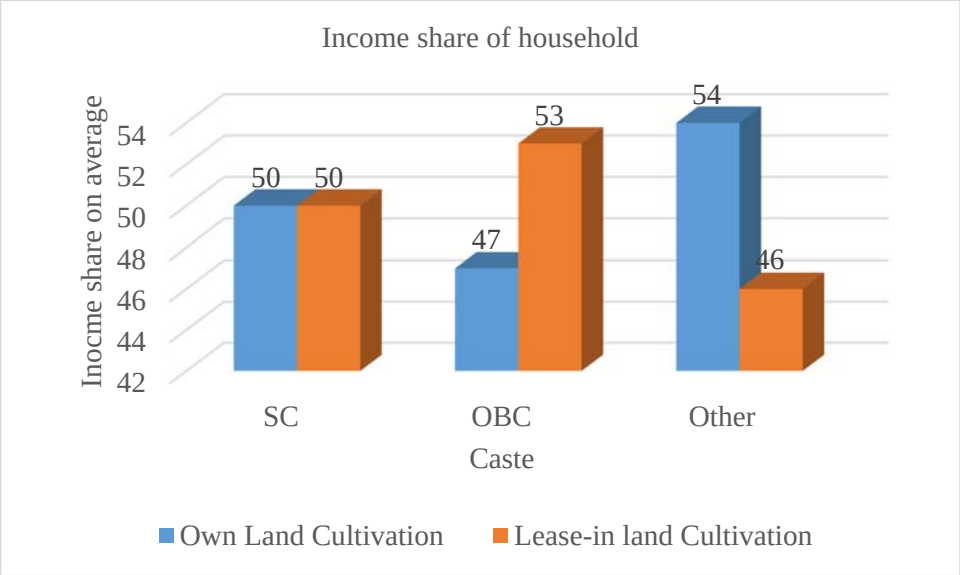
Share of incomes own cultivation and lease cultivation

Table- 4.19 Cultivation (own or lease) Income share on average

Type of Cultivation	Social Group		
	SC	OBC	Others
Own Land cultivation	16635 (49.6)	15091 (46.6)	16750 (54)
Lease-in land cultivation	16854 (50.4)	1250 (53.4)	14250 (46)
Total	33489 (100)	32341 (100)	31000 (100)

Source: Field Survey 2015

Note: the figures in the brackets are percentage, Scheduled Caste=SC, Other Backward Caste=OBC, Other= Forward Caste



This table 4.19 shows income shares of scheduled caste, other backward caste and forward caste of own land and lease-in cultivation. Scheduled caste land cultivators are earning 49.6 percent by own land cultivation and 50.4 percent earning through lease-in cultivation. Other backward caste land cultivators are earning 46.6 percent by own land cultivation and 53.4 percent earning through lease-in cultivation. Forward caste land cultivators are earning 54 percent by own land cultivation and 46 percent earning through lease-in cultivation.

4.10 Poverty

Table-4.20 Total agricultural, non-farm and pension holders' poverty

Social Group	Total HHs Poverty		Agricultural HHs Poverty		NF HHs Poverty		Pension HHs Poverty	
	above	below	above	below	above	below	above	below
SC	183 (74)	39 (76)	110 (74)	24 (69)	73 (75)	2 (100)	0 (0)	13 (93)
OBC	38 (15)	7 (14)	18 (12)	6 (17)	20 (21)	0 (0)	0 (0)	1 (7)
Others	26 (11)	5 (10)	21 (14)	5 (14)	4 (4)	0 (0)	1 (100)	0 (0)
Total	247 (100)	51 (100)	149 (100)	35 (100)	97 (100)	2 (100)	1 (100)	14 (100)

Source: Field Survey, 2015

Note: the figures in the brackets are percentage, Scheduled Caste=SC, Other Backward Caste=OBC, Other= Forward Caste

In total agricultural, non-agricultural and pension households of 298, above poverty are 247 and below poverty are 51 irrespective of caste (see table-4.20). Out of 247 of above poverty households, 183 are scheduled caste; 38 are other backward caste and 26 are forward caste

households. Below poverty households are 51, in this 39 are scheduled caste; other backward caste are 7 and forward caste are 5 households. Agricultural households are 184, the details is given in this table. Out of 184 total agricultural households 149 are above poverty and 35 are below poverty irrespective of caste. Now in 149 of above poverty households, scheduled caste households are 110; other backward caste households are 18 and remaining 21 belongs to forward caste. But in below poverty line households of 35, 24 are scheduled caste; other backward caste are 6 and remaining 5 are forward caste.

In details of non-farm households, there are 99 households engaged in this sector. Out of 99 households, 97 are above poverty and only 2 households are below poverty irrespective of caste. In caste details, out of 97 above poverty households; scheduled caste households are 73. Other backward are 20 households' and forward caste households are 4. But in below poverty, out of 2 households both belongs to scheduled caste. After agricultural and non-agricultural poverty details discussthe pension holders of households' poverty. Out of 298 total households of the selected village Kodurupadu, 15 households heads are only depending upon pensions, which is provide by the government of Andhra Pradesh. Out of 15 household head pensions, above poverty is only one household from forward caste. Below poverty households are 14, in this 13 are scheduled caste and one household belongs to other backward caste.

Table 4.21 Casual labour of Agricultural, Non-agricultural and Cultivators households Poverty Details

Social Group	CL in Agricultural Poverty		CL in Non-agriculture Poverty		Cultivators Poverty	
	above	below	below	above	above	below
SC	61 (80)	17 (68)	0 (0)	35 (100)	49 (67)	7 (70)
OBC	11 (15)	5 (20)	0 (0)	4(100)	7 (10)	1 (10)
Others	4 (5)	3 (12)	0 (0)	1(100)	17 (23)	2 (20)
Total	76 (100)	25(100)	0 (0)	40(100)	73 (100)	10 (100)

Source: Field Survey, 2015

Note: the figures in the brackets are percentage, Scheduled Caste=SC, Other Backward Caste=OBC, Other= Forward Cast

Casual labour in agricultural sectors are 101, this table shows poverty details of agricultural labour (see table- 4.21). Out of 101 agricultural labour households, 76 households are poverty and remaining 25 households are below poverty irrespective of caste. In caste details, out of above 76 above poverty households, 61 are scheduled caste; other backward caste are 11 and forward caste households are 4. In the same, out of 25 below poverty households, 17 are scheduled caste; other backward caste are 5 and remaining 3 households are forward caste. Casual labour in non-agricultural are 40 in total of 99 non-farm households. This table showsthose engaged in non-agricultural as a casual labour who are all above poverty irrespective of caste. Out of 40 non-farm casual labour households, 35 are scheduled caste; other backward caste 4 and one household from forward caste.

Total head cultivators are 83, this table shows cultivators' poverty details.Out oftotal 83 cultivators, 73 are above poverty and 10 households are below poverty irrespective of caste. In caste details of poverty households' cultivators, out of 73 above poverty household; 49 households are scheduled caste. Other backward caste are 7 and forward caste households are 17. In details of below poverty cultivators out of 10, the highest 7 households are below poverty. Other backward caste is one and 2 households are forward caste poverty cultivators.

Table- 4.22 Pure households of Agricultural Labour and Non-farm Poverty

Social Group	Pure AL HHs Poverty		Pure NF HHs Poverty	
	above	below	above	below
SC	44 (76)	17 (71)	25(100)	0 (0)
OBC	10 (17)	4 (17)	9(100)	0(0)
Others	4 (7)	3 (12)	2(100)	0(0)
Total	58 (100)	24 (100)	36(100)	0(0)

Source: Field Survey, 2015,

Note: the figures in the brackets are percentage, Scheduled Caste=SC, Other Backward Caste=OBC, Other= Forward Caste

Pure agricultural labour households are 82, above poverty are 58 and below poverty are 24 irrespective of caste (see table- 4.22). Above poverty ofpure agricultural households of 58,

scheduled caste are 44. Other backward caste above poverty are 10 and 4 households are forward caste. In details of below poverty 24 households, 17 are scheduled caste. Other backward caste are 4 and 3 households are forward caste. Pure non-farm households are 36 irrespective of caste. In caste details, out of 36 non-farm households, 25 are scheduled caste, other backward caste are 9 and forward caste are 2 households. There is no below poverty households who are working in pure non-farm.

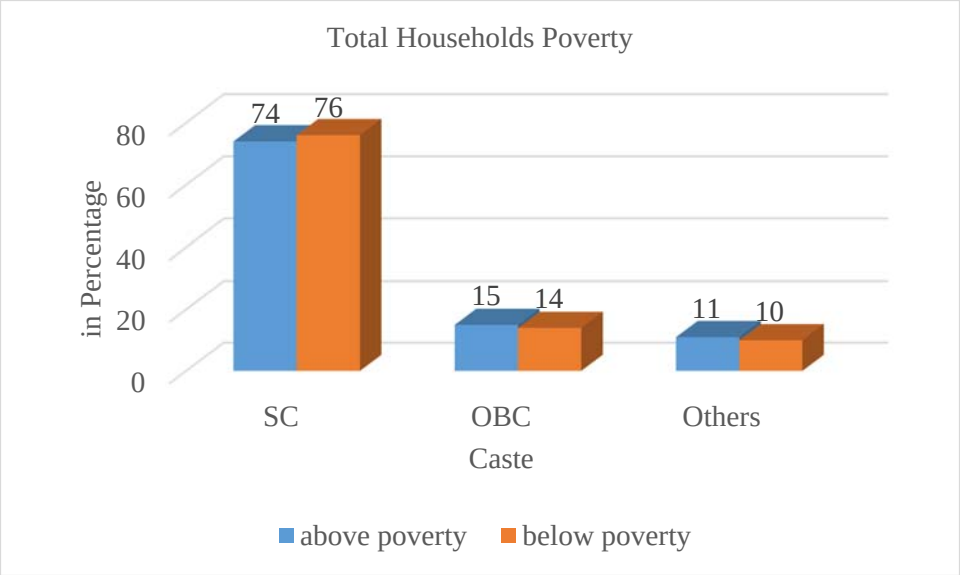
Table-4.23 Traditional and Modern non-farm Poverty households Caste-wise

Social Group	Traditional NF		Modern NF	
	below Poverty	Above poverty	Below Poverty	above poverty
SC	1 (100)	40 (70)	1 (100)	33 (83)
OBC	0 (0)	13 (23)	0 (0)	7(17)
Others	0(0)	4(7)	0 (0)	0 (0)
Total	1(100)	57(100)	1 (100)	40(100)

Source: Field Survey, 2015,

Note: the figures in the brackets are percentage, Scheduled Caste=SC, Other Backward Caste=OBC, Other= Forward Caste

Non-farm employees are divided into traditional non- farm and modern non-farm employees see table- 4.23. This table shows the poverty households of traditional and modern non-farm. Out of total 58 traditional non-farm employees, below poverty households are only household belonging to scheduled caste and remaining 57 are above poverty. In Traditional non-farm out of above poverty of 57 households, 40 households are scheduled caste, 13 are other backward caste and remaining 4 are forward caste. In modern non-farm details, out of 41, only one household is below poverty and remaining 40 are above poverty irrespective of caste. In caste details of modern non-farm poverty, one household below poverty belonged to scheduled caste. Out of 40 above poverty non-farm households, 33 are scheduled caste and 7 are other backward caste.



In total households irrespective of agricultural or non-agricultural, scheduled caste above poverty is 74 and below poverty is 76. In other backward caste (OBCs) above poverty is 15 and below poverty is 14 percent and other caste (OCs) above poverty is 11 and 10 is below poverty as per graph.

4.11 Age

Table- 4.24 Age Non-farm Employs Heads

Age	Non-farm Age Heads		Total
	Traditional	Modern	
16-30 Years	09 (16)	10 (24)	19(19)
31-45 Years	22 (38)	21 (51)	43(43)
46-60 Years	19 (33)	08 (20)	27(27)
60 and above	8 (13)	02 (5)	10(10)
Total	58(100)	41(100)	99(100)

Source: Filed Survey, 2015

Above table 4.24 shows Age and non-farm households point of view, out of 99 non-farm households, 19 (19) are 16-30 years, 43 (43) are 31-45 years, 27 (27) are 46-60 years and above 60 years 10 (10) households are engaged in two traditional and modern non-farm. In traditional 58 non-farm households, 09 (16) are illiterates, 22 (38) are 31-45 years, 19 (33) are 46- 60 years, 8 (13) are 60 and above years are engaged. In modern 41 non-farm households, 10 (24) are illiterates, 21 (51) are 31-45 years, 8 (20) are 46- 60 years, 2 (5) are 60 and above years are engaged.

4.12 Family size

Table4.25 Family size Non-farm Employs Heads

Family size	Non-farm Family size Heads		Total
	Traditional	Modern	
1 Member	2 (3)	1 (2)	3(4)
2 & 3 Members	26 (45)	11 (27)	37(37)
4 & 5 Members	27 (47)	25 (61)	52(52)
6 & above Members	3 (5)	4 (10)	7(7)
Total	58(100)	41(100)	99(100)

Source: Filed Survey, 2015

Table 4.25 shows Family size and non-farm view, out of 99 non-farm headed households, 1 member family households are 3 (4), 2 and 3 member families are 37 (37), 4 and 5 members families households are 52 (52) and 6 and above 6 members households are 7 (7) irrespective of type of employment. Traditional non-farm households are 58 and modern non-farm households are 41. In 58 traditional non-farm households, 2 (3) are 1 member family households, 26 (45) are 2 and 3 member families, 27 (47) are 4 and 5 members families and 6 and above 6 families are 3 (5).

4.13 Gender

Table-4.26 Non-farm Gender Total

Gender	Non-farm Gender Total		Total
	Traditional	Modern	
Male	60 (77)	58 (96)	118(84)
Female	18 (23)	04 (6)	22(16)
Total	78(100)	62(100)	140(100)

Source: Filed Survey, 2015

Above table 4.26 says that in 140 non-farm employs, male non-farm are 118 (84) and female non-farm households are 22 (16) irrespective of type of non-farm. In type of non-farm, 78 traditional and 62 are modern non-farm employs. In 58 traditional non-farm employs, 60 (77) are male 18 (23) are female employs. In 62 modern non-farm employs, 58 (96) are male 4 (6) are female employs.

Conclusion: total households are 298, working 283 (95) and non-working 15 (5) heads.Among three castes SCs, OBCs; OCs,Scheduled Caste (SCs) households are high 222 (75) than 45 (15) Other Backward Caste (OBCs) and 31 (10) Other Caste (OCs). Education status of household head, the highest 103 (35) are illiterates, next secondary education completed are 62 (21) will take place. Cultivation participation households are 120 (41) remaining 178 (59) have no cultivating land. Out of 120 land cultivation households, 58 (48) from inheritance; 8 (7) from purchased and remaining 54 (45) are leased in households. Main work and marginal work of head and family members' details were given. Out of 503 workers, 363 (72) agricultural workers and 140 (28) are non-farm employs. Main work of head of household 283 is divided in to agricultural 184 (65) and non-agricultural 99 (35). Main work of family members 220 is divided in to 179 (81) agriculture and 41 (19) non-agricultural. Marginal work of head 113, agriculture 111 (98) and non-agricultural 2 (2). Marginal work of family members 9, agriculture 7 (78) and non-agricultural 2 (2). On averages SCs are working 285, OBCs are working 250 days and OCs are working 280 days in one agricultural year. The highest income share of SCs, OBCs and OCs from non-agricultural casual labour again among these three castes OCs are earn more. Above poverty households are 247 and 51 are below poverty.

4.14 Non-farm Employment Opportunities in the Kodurupadu Village

Traditional Non-farm Employment opportunities are

Traditional non-farm employs are vegetable sellers, laundry, shepherding, mason, pastor, washer man/women, coconut seller and maid servants. Toddy tappers, band music, tailoring, kirana shop runners, rickshaw pullers, tree cuttings, drama acting, wood sellers, and snail sellers.

Traditional non-farm Scheduled Caste employees are belongs to Shepherding, pastor, tailoring, rickshaw pullers, snail sellers, tree cutting, maid servants,wood sellers,mason,.band music. These are non-farm occupations taking by landless agricultural labourer during unseasonal period.

Traditional non-farm employment in Other Caste (OC) are vegetable sellers, coconut sellers,kirana shop. These persons have below half acre of land were in unseasonal period in non-farm.

Traditional non-farm employment in Backward Caste (BC) are laundry,washer man/women,.toddy tappers, drama actor, pot makers. These are all working in their traditional caste occupation but now clay pot makers are slowly diversified into some other occupation in this village.

Modern Non-farm Employment opportunities are

Tractors/car/lorry/auto drivers, VRO, catering, private job, painter, centering, photo studio, constables, tiles factory workers, lighting, electric shop, tractor/auto/car own, filed officers, dwakra worker, gang man, shop workers (sales promoters), mill workers, flower sellers, RMP, bricks own, electric workers, CRPF, Public Distribution system (PDS), anganwadi workers and dairy farm.

Modern nonfarm employees of Scheduled Caste (SC)are, Tractors/car/lorry/auto drivers,tiles factory workers,shop workers (sales promoters), mill workers,flower sellers,catering, painter,dwakra worker andelectric workers. These modern non-farm employees are only dependent on non-farm they have no cultivated land and also not educated.

Modern nonfarm employees of Scheduled Caste (SC)who are educated are working as government employees like VRO,constables,gang man,CRPF, and also working in private sector like private bank job,Registered Medical Practioner (RMP).

Modern nonfarm employees of Other Backward Caste (OBC)are working as photo studio, lighting and filed officers.

Modern nonfarm employees of Other Caste (OC)areelectric shop, tractor/auto/car own,centering,and bricks own making factory

Determining Factors of Non-farm Employment

In the selected village Kodurupadu, main determining factors of non-farm employment are caste, education, land, age, gender, family size, Income (poor/non-poor).

Caste occupations like washing of cloths, laundry are run by washer man/women, kirana shops running by Vysya, drama actors are BCs, priest hood of temples are done by

Brahmins, toddy tapping are run by Gavalla. These non-farm occupations are decided by caste only.

Education play main role in determining of traditional or modern non-farm employment. Highly educated people are engage in modern non-farm employment and less educated people are in traditional non-farm employment. For example, degree and above educated people are engaged in government jobs like Village Revenue Officer (VRO),Police constables,gang man jobs in Railway,Central Reserve Police Force (CRPF) and private jobs like some private Bank Jobs,Registered Medical Practioner (RMP), Filed officer in anganwadi.

Ownership of land is also one of the important determining factor of non-farm employment. Land owners have own tractors to cultivate their own land and transport paddy bags to city. If the head of the family are engaged in agriculture remaining male members in their family are running some agricultural related fertilizers shops, pesticide shops, tractor repair related shops in the village. These tractors are useful not only to own village people but to nearer village people also who are engaged in agriculture. Some are engaged in bricks making business clay or cement bricks in their land.

Age is also one determining factor of non-farm employment, young and educate people are interest to do modern non-farm employment than traditional non-farm because they can move from one place to another place for example, catering, band mela music, lighting, all type of drivers (tractor/car/auto), painter and flower sellers, vegetable sellers, coconut sellers these are moving come back by evening to their village. These people go to surrounding villages in the morning and come back in the evening after completing their work.

Gender is one of the important determining factor of non-farm employment, especially tailoring, anganwadi workers, maid servants, are only women are working than man. Photo studio and dairy farm are only run by men. Especially, Muslim women are not interest to participate in the non-farm employment.

Family size is the determining factor of non-farm employment. Large size families have more working members and participate in rural non-farm employment than small size of the families from each large family at least two members participate in non-farm employment,

Income (Poor/non-poor) is major important determining factor of non-farm employment, low income people are engaged in traditional shepherding, rickshaw puller, snail sellers and tree cutting.

Chapter-V

MAIN FINDINGS

General Findings:

Kodurupadu village is located at the national highway-5 between Madras to Calcutta, and 25 kilometers away from Eluru, the capital city of West Godavari District in Andhra Pradesh. The prominent occupation of people in the village is agriculture. The village contains various sub-castes namely Mala, Gavalla, Kummari, Santhali, Rajaka, Vysya, Kamma and Kapu. It embraces a total households of 298 or 1025 of total population.

This village has3 major castes such as Other Caste (OC), Backward Caste (BC) and Schedule Caste (SC). Among them, OBC people possessed more number of owned houses, while SC people held with scant number of houses. As a result, most of them from SC community stays in rented houses. In case of OBC sub-castes, people not staying in rented house were attributed to Gavalla, and Kummari. For OC, they are Kamma and Vysya but SCs are split into these two categories of own and rented. Those people who split into these categories are Mala in SC community, Santhali and Rajika in OBC, and eventually Kapu in OC.

Most people from these castes resides in pucca houses. In comparison, huge number of OC households resides in pucca house when compared to the two other castes. There were a large number of households from OBC residing in katcha houses, followed by OC and SC, respectively. For SC, a considerable proportion of households compared with the rest of two castes were residing in semi-pucca houses. Followed by household of caste was OBC and none of the households from OC was pertained to this category of housing structure.

Most SC households, resided in pucca houses but there are very few number resided in kutcha house. Among all sub-castes including Rajaka, Gavalla, Kummari and Santhali, a huge number resides in pucca-houses. In the case of OC category, all households of two castes namely, Vysya and Kamma is totally resides in pucca-houses, whereas, Kapu were mostly living in pucca and a mere proportion of households live in kutcha houses.

There are 40 pension holders in this village. Thereare two types of house holders such as head of the household and member of the family. Among them, few completely rely on pension to meet their basic needs, while some of them work in economic activities in addition to availing the pension scheme. Among these caste quintiles, SCs has a huge number of pension benefices, followed by OBC and OC. There were pension holders who are simultaneously associated with availing pension and participating in earning activities. In this regard, those pension holders from OC category stands, first followed by SC and OBC categories, respectively. In case of OBC, family members were considerable number of pension holders rather than head of the households. For OC, they were the highest number of pension holders with regard to head of household rather than family members. For pension holders the household head the number among the SCs is huge, followed by OBCs and OCs. In case of pension holders, of family members except head of household, OBCs stood for first place followed by SCs and Others (OCs), respectively.

Sub-caste wise pension holders:

With regard to sub-castes, holders exclusively depending on this scheme to meet their basic needs are, Gavalla in OBC category and Kamma in OC. In case of family member, pension holders exclusively depending on pension, are Kummari and Santhali in OBC, and Kapu in OC. The final category of pension holders who simultaneously relates to availing pension and engaging with economic activities are Rajaka in OBC and Kapu in OC.

Out of the total of 298 households, all households have different types of ration cards, received from the Government of Andhra Pradesh like Antyodaya, poverty line decide then cards provide, except 6 households. These 6 households, 5 belongs to Scheduled Caste (SCs), 1 from Other Backward Caste (OBCs). Total land cultivate households are 120, own land cultivation are 66 and leased in are 54. Livestock households are 22 all the remaining have no livestock assets.

Land is a major factor to determine occupation in the rural areas, who have no cultivation (own or lease) land where they work as agricultural labourer.Scheduled caste occupation is agricultural labour. Landless, marginal and small farmers are belongs to scheduled caste (SCs) and there is no certainty in their incomes in agricultural. So they shift from agricultural to non-agricultural sector to increase their incomes.

Land and Non-farm

Out of 58 traditional non-farm households there are 17 (29) marginal farmers households and 3 (5) small farmers householdsengaged in traditional non-farm. Remaining 38 (66) households have no cultivating land. Out of 41 modern non-farm households, 6 (15), marginal farmers households are engaged in modern non-farm but remaining 35 (85) households have no cultivating land. Both traditional and modern non-farm households have no cultivated land. If there is land to traditional or modern non-farm households the highest belongs to marginal farmers. But there is no small farmers in modern non-farm employment.

Age and Non-farm

In 58 traditional non-farm employs, 9 (15) are 16-30 years, 22 (38) are 31-45 years, 19 (33) years of age. 8 (14) are 60 and above years of age. In 41,modern non-farm employs, 10 (24) are 16-30 years, 21 (51) are 31-45 years, 8 (20) yearse. 2 (5) are 60 and above years.

Either in traditional or modern non-farm the highly engaged age group are 31-45 years group. 46-60 age group in traditional non-farm, 16-30 years group in modern non-farm take the next place. 60 and above 60 years participation in non-farm both traditional and modern are less.

Male and female headed households

In total 58 traditional non-farm households, 52 (90) are male 6 (10) are female headed households. In total 41 modern non-farm households, 40 (98) are male and 1 (2) are female headed

Both traditional and modern male participation is higher than the female participation. In comparison of male participation, modern non-farm higher 40 (98) than the traditional non-farm 52 (90). Female participation is higher 6 (10) than modern 1 (2) non-farm participation.

Both traditional and modern male participation is higher than the female participation. In comparison of male participation, modern non-farm is higher 58 (96) than the traditional

non-farm 60 (77). Female participation is higher 18 (23) than modern 4 (6) non-farm participation in total non-farm employs.

Family size and Non-farm

In total 58 traditional non-farm households, 2 (3) are single member families, 26 (45) are two and three member families, 27 (47) are four and five member families, 3 (5) are 6 and above member families. In total 41 modern non-farm households, 1 (2) are single member families, 11 (27) are two and three member families, 25 (61) are four and five member families, 4 (10) are 6 and above member families.

Head and son and daughter occupation

In total 78 traditional non-farm employs, 60 (77) are male, 18 (23) are female headed. In total 62 modern non-farm employs, 58 (94) are male and 4 (6) are female headed

Caste based diversification:

Traditional caste occupations and Heads of the family:

According to the caste occupation of history scheduled caste (SCs) occupation is agricultural labourers. In our study village Kodurupadu three caste are existing, scheduled caste (SCs), other backward caste (OBCs) and other caste (OCs) no Scheduled Tribe (STs). The highest (71%) diversified caste is scheduled caste (SCs). Next place are occupied by other backward caste (22%) and (7%) are other caste (OCs) respectively in traditional non-farm employment. But in modern non-farm employment, the highest (83%) diversified caste is scheduled caste (SCs). Next place is occupied by other backward caste (17%) and (10%) are other caste (OCs) respectively. Both in traditional and modern non-farm employment,Scheduled Caste (SCs) are highly diversified than the two other castes like other backward caste (OBCs) and other caste (OCs). Within the Scheduled Caste (SCs), most of the heads are diversified into modern, but in Other Backward Caste (OBCs) arehighly diversified from their caste occupation. In other caste (OCs), most adiversified into traditional non-farm.

Sub-caste

OBC:

The occupation of Rajaka caste is washing clothes.In this village out of 5 heads traditional non-farm employees, 4 are engaged in washing clothes and 1 head runs laundry and they are not diversified from their caste occupation.

Gavalla caste occupation is toddy tapping, in this out of 3 heads traditional non-farm employees,2 are engaged in toddy tapping and 1does toddy tree cutting and they are not diversified.

Kummari caste occupation is making clay utensils, like pots, cooking utensils but in this village out of the 2 heads, 1 is works as mason and another 1 is works as drama actor. They are diversified from caste occupation.

Santani caste occupation is providing flowers to temple are flower sellers. Out of 3 Santani heads in this village, one is from each occupation of kirana, PDS and wood seller.

OCs:

Kapu traditional occupation is cultivating of land. Out of the 3 heads, they are diversified into one from each occupation as vegetable seller, mason and pastor.

Vysya or Komati caste occupation is Kirana shop maintenance. In this village, one head is there he runs Kirana shop and no diversification. He is engaged in his own caste occupation.

Modern non-farm occupations heads of the family:

OBCs:

Rajaka caste occupation is washing clothes out of which 6 heads,1 is diversified in to modern non-farm that is centering.

Gavalla caste occupation is toddy tapping, out of which 5 heads 2is diversified; 1 from each occupation of military and bricks owner.

Kummari caste occupation is making clayutensils, like pots, plates, cooking utensils where out of 6, 4 are diversified, 3 are works in hotel and 1 head is works as electric repair.

Family member's details:

Traditional: Out of 78 traditional non-farm employees, 58 are head of the family, remaining 20 are family members.

Of the 20 family members, 19 is belongs to Scheduled Caste (SCs) and 1 is belongs Other Backward Caste (OBCs). In 19 family members of SCs, 8 works as maid servants, 5 works as mason, 2 from each occupation as shepherded and Kirana maintained, 1 from each occupation as pastor and Kirana maintained.

One member belongsOBCs,he works as washer man.

Modern: Out of 62 modern non-farm employees, 41 are heads and remaining 21 are family members.

From 21 family members, 15 are SCs, 2 are OBCs and 4 are OCs.

From the 15 family members of SCs, 5 are working in private jobs, 4 are tractor drivers, two from each occupation of lighting and car driver and one is works in the rice mill. In 2 OBCs family members, one from each occupation does catering and centering. In 4 OCs family members, three does private jobs and one person runs has own tractor.

Class based diversification:

Agricultural workers are divided in to two categories, agricultural casual labour and agricultural cultivators.Non-agricultural employees are divided into two categories, non-agricultural casual labour and self-labour.

In scheduled caste (SCs) income shares are, agricultural casual labour income is 15, cultivators income share is 29. But non-farm casual labour share is 32, non-farm self-labour share is 21 and pension income share is 3.

Inother backward caste (OBCs) income shares are, agricultural casual labour income is 10, cultivators income share is 28. But non-farm casual labour share is 31, non-farm self-labour share is 28 and pension income share is 3.

Inother caste (OCs) income shares agricultural casual labour is8, cultivators income share is 20.

But non-farm casual labour share is 40, non-farm self-labour share is 31 and pension income share is 1. Agricultural income shares, casual labour highly share was earned by scheduled caste (15%) than other two other backward caste (OBCs) (10%) and other caste (OCs) (8%).

According to the income shares, in cultivators high share was earned by scheduled caste (29%) than the other two; other backward caste (OBCs) (28%) and other caste (OCs) (20%). Non-farm income shares, casual labour high share was earned by other caste (OCs) (40%) than other two other scheduled caste (SCs) (32%) backward caste (OBCs) (31%).

According to the income shares, in self-labour high share was earned by other caste (OCs) (31%) than the other two backward caste (OBCs) (28%)and scheduled caste (SCs) (21%). From pension, 3 percent scheduled caste (SCs), 3 percent other backward caste (OBCs) and 1 percent are earning by other caste (OCs).

Pure agricultural households are 82, the highest 35 percent are earned by other caste (OCs), 33 percent are earned by scheduled caste and 32 percent are earned by other backward caste (OBCs).

Pure non-farm households are 36, 34 percent earned by scheduled caste (SCs) and other backward caste (OBCs) and 32 percent are earned by other caste (OCs).

Own land cultivation and lease-in land cultivation income shares, scheduled caste highly (50.4) earned from lease-in land cultivation. Other backward caste (OBCs) also earned 53.4 high income from lease-in land cultivation but other caste (OCs) are different as they earned high 54 percent from cultivation. Out of 298, above povertyhouseholds are 247 and below poverty are 51. In 184 agricultural households, 149 are in above poverty and remaining 35 are in below poverty. In 99 non-farm households, above poverty are 97 and only 2 are below poverty. In 15 pension depending households, only one household is above poverty and remaining 13 are below poverty. Casual labour in agricultural households are 101, in this 76 are above and remaining 25 are below poverty. Casual labour in non-agricultural households are 40, where all are above poverty. But in

cultivators of 83 households, 73 are above and 10 are below poverty. Pure agricultural labour households are 82, in this 58 are above and 24 are below poverty. Pure non-farm households is 36 and all are above poverty. Traditional non-farm households are 58, one is below poverty and remaining 57 are above poverty. In modern 41 households, 40 are above poverty and one is below poverty.

The relationship between caste and non-farm is negative because, structure of the society is totally different. Among Scheduled Caste (SCs), Other Backward Caste (OBCs) and Other Caste (OCs) lot of social and economic differences can see. Some of the caste occupation forward one generation to another generation their occupation for example, chapels making belongs to SC Madiga caste, washing clothes is by chakali (OBCs).

The relationship between education and non-farm showing always positive on non-farm who are completed secondary level of education they can enter into modern non-farm but who completed primary level of education are engage in only in traditional non-farm.

The relationship between land and non-farm is negative. Small and marginal farmers are only engage in non-farm but semi-medium, medium and large farmers are not showing any interest to enter into non-farm. But land less and agricultural labour only enter into non-farm. In this study no high cultivated land owners.

The relationship between age and non-farm is negative, young and educated people are engage in modern non-farm low educated people are engage in traditional non-farm only. But above 60 and 60 age employs are very less. The people who can move or migrate one place to another place are young people only.

The relationship between gender and non-farm is positive or negative. Positive relation in the case of male and negative relation in the case of female. So many obligations to female persons to enter into non-farm,like social and economic problems.

The relationship between family size and non-farm is positive, if family members are high automatically their participation in non-farm also high. In the caste single members families this shows negative relation.

Poor or non-poor division makes by their income levels according to the per capita income of the members can’t compete with minimum needs we treat as poor above all are non-poor. Poor or poverty relation with modern non-farm is negative but positive relation with traditional non-farm.

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WEST GODAVARI
DISTRICT
N
EAST
GODAVARI
TELANGANA
Errakalava
Errakaleva
Polavaram
Jilugumilli
Kannapuram
Gutala
Koyyalgudem
Gopalapuram
Borrampalem
Chintalapudi
Pothavaram
Kamavarapukota
Chigallu
Kovvuru
Dwarka
Tirumala
Guntupalli
Dubacherla
Nidadavole
Bhogulu
Tadikalapudi
Madhavaram
Tadepallegudem
Dharmajigudem
Bhimadolu
NH-5
Kaikaram
Pentapadu
Duvvu
Tanuku
To Rajahmundry
Denduluru
Gundugolanu
Piphara
ELURU
Ganapavaram
Velpuru
Attili
Tammileru
Kolleru Lake
Metichili
Relangi
To Vijayawada
Penugonda
Maruteru
Undi
NH-214
Akividu
Viravasaram
Kolleru
Bhimavaram
Gummaturu
To Gudivada
Palakollu
To Kakinada
NH-214
Narasapur
KRISHNA
To Machilipatnam
NH-214A
Mogalturru
BAY
OF
BENGAL
LEGEND
National Highway
Major Road
Railway
District Boundary
State Boundary
River
District HQ
Other Town
Major Town
Map not to Scale
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RURAL NON-FARM EMPLOYMENT: A CASTE STUDY OF KODURUPADU VILLAGE IN WEST GODAVARI

By

A.Srinivasa Rao[1]

Chapter I. Introduction:

Introduction; In India, Andhra Pradesh is one of the largest state and it was formed in 1956. The highest income 60% coming from agricultural only. In the last 50 years, the annual growth rate of agriculture was only 2.88%. Both agricultural production and diversification[2] strategies (education, caste etc.,) an important to the development of three regions i.e., Coastal Andhra, Rayalaseema and Telangana of the state. Basically, our study conducted in south coastal Andhra Pradesh.

1.1 Rural employment increases (agriculture to non-agriculture)

Changing agricultural to non-agricultural of the Indian economy has been slow due to differences in both agricultural and non-agricultural labourer. Urban manufacturing sector is not providing labour-intensive[3] employment. Agricultural employment in rural areas is insufficient for the rapidly growing population. Share of agricultural employment was decreased for example, in 1972-73 it was 74.58 percent but in 1993-94 it was decreased to 63.84 again it was decreased to 51.76 percent in 2009-10. Share of Industry employment was increased, in 1972-73 it was 06.75 percent but in 1993-94 it was increased to 15.01 again it was increased to 21.93 percent in 2009-10. Share of Service sector employment was increased, in 1972-73 it was 18.67 percent but in 1993-94 it was increased to 21.16 again it was increased to 26.30 percent in 2009-10 (Deepak Kumar Behra and Mitali Tiwari, 2012[4]).

1.2 Sectors Contribution to Gross Domestic Product (GDP)

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[2] Diversification can be regarded as the re-allocation of some of a farm's productive resources, such as land, capital, farm equipment and pices to other farmers and, particularly in richer countries, non-farming activities such as restaurants and shops.

[3] . Needing a large workforce or a large amount of work in relation to output.

[4] . Structural transformation of Employment in India, 1983-2012, Artha Vijnana, Vol.LIV,No.3, Sep-2012,pp 342-356.

The agricultural sector share has declined in Gross Domestic Product (GDP), it is lower than industry and service sectors. Labour is pulled out from agriculture and got dependent on industry and service sectors. Agricultural sector contribution in GDP was decreased. The rural labour preferred move from agriculture to non-agriculture, because low income of agriculture and seasonal unemployment. Irrespective of gender, both male and female are not interest to continue in agricultural sector as bonded and attached labour. Now a days the rural people not showing any interest do work as daily wage labour but trying to increase bargaining power with contractual work. In this situation, infrastructure is playing key role; through development of roads, transportation, communication and literacy non-farm development occur. In this process government intervention is very important, so most of the people in rural areas trying to shift their occupation. Especially, landless, marginal and small farmers who are receiving low incomes are diversified farm to non-farm. Scheduled caste mainly, who have no caste occupation mostly work as agricultural labourer. Non-farm can control rural to urban migration through self-employment creation.

Currently, non-farm sector is no longer a residual sector it is emerging as a driver of rural development and transformation and contributing around 65% to the rural Net Domestic Product in 2010 (Papola, et, al 2013[5]).The agriculture share in GDP 1972-73 is 41%, but it was decreased to 2011-12 to 14%. But tertiary increased from 35% to 58%. However, still agriculture plays main in rural workforce it is 68% in 2009-10. Share of Industry in GDP was 13% by 1950-51, but increased to 24% by 1983 further increased to 28% by 2010-11. Share of Service sector in GDP was 28% in the year 1950-51, but increased to 40% by the year 1983 further increased to 58% in the year of 2010-11 (Deepak Kumar Behra and Mitali Tiwari[6]).

1.3 Village Diversification agriculture to non-agriculture

Villages are diversified farm to non-farm. Agricultural employment, since 1980s to 2012, the rate was decreased to 2% to 0.4%. Labour force and agricultural employment also

[5] . Papola TS. 2013. Employment Growth during the Post-Reform Period. *The Indian Journal of Labour Economics*, 56(1):1-13.

[6] . Structural transformation of Employment in India, 1983-2012, Artha Vijnana, Vol.LIV, No.3, Sep-2012,pp 342-356.

decreased. But comparison of male and female, female workforce decreased than male. It is decreased 33 percent to 26.10 percent from 1993 to 2010 (Reddy. Amarender A., 2015[7]).

1.4 The motivating factors for the growth of non-farm sector

Transport development it leads to moving people one place to another place is easily, but before that roads construction is important. Roads develop may positively impact to young and educated people migrate from rural to urban for jobs searching. In this manner, communication skills, personal development will take place. Here, educated people, can get chances to earn good jobs in urban. So, who are getting low wages will get high salaries in non-farm. Generally, among Scheduled Caste (SCs), Other Backward Caste (OBCs) and Other Caste (OCs); Scheduled Caste people percentage was increased in rural non-farm employment than two other(Reddy, Narasimha, D., Reddy, Amarender, A., Nagaraj, N etc., 2014[8]).

1.5 Agriculture

Non-farm making only low quality of goods because the people who are engage in non-farm are belongs to low standard of education and skills. Globalization, market is opening market so these non-farm goods can't compete with that. Non-farm is heterogeneity in character, state to state, region to region, village to village and household to household also. Primary studies are important to describe the rural non-farm employment.

In this context the state-level (AP) land-use pattern data shows that difference in land use pattern in north and south coastal Andhra. Slowly land use for non-agriculture is increasing it mean agricultural sector priority decreasing. Not only in north coastal Andhra Srikakulam but it is happened in south coastal Krishna district also. Land uses from Food crops to non-food crops also increasing the cultivators are giving importance to cultivated commercial crops because increase their income. Agricultural paddy cultivation not getting any reasonable prices

[7] . Growth, structural change and wage rates in Rural India, Economic and Political Weekly, Vol, No.2 Jan 2015, pp: 56-65.

[8] Emerging Trends in Rural Employment Structure and Rural Labour Markets in India, Working Paper Series No.56, ICRISAT Research Program Markets, Institutions and Policies, 2014

and at the same government also not giving any sufficient support to agricultural cultivators. In agricultural most of the cultivators only engage as marginal, small holding cultivators. From the beginning of the cultivation, cultivators are facing so many problems; especially these north coastal Andhra dependence upon rains there is no proper irrigation. Now the people are showing interest to do non-farm activities. Land use in agricultural slowly decrease then it use for non-agricultural purpose (Seethalaxmi, S., 2010[9]).

1.6 Government Policies

To decline rural poverty this non-farm sector plays much role in India. Green revolution is mile stone for technology development, there is lot of varies in pre and post green revolution. Agricultural full of uncertainties, like production, employment, wages, ets., When this green revolution came in to agricultural total the share of agricultural were changed. This first it brings technology into agriculture so food grain production was declined. Irrigation also not certainty so variations among different regions are increased. In Andhra Pradesh, because of improper development of infrastructure like roads, transport cultivators are not getting proper or minimum prices for major crops also.

As literature shows that the rural non-agricultural employees produce only low productivity and low standard of quality of goods. Most of these households are landless, small and marginal farmers and rural non-farm employment provided additional income for their survival. Another problem of is rural poverty, to decrease this poverty the growth of non-agriculture sector is important. Raising of the rural non-agricultural incomes can reduce economic poverty and inequalities. Likewise the other problem is rural- urban migration, non-farm sector would lead to reduce the migration of rural population. Non-farm employers create their own establishment with hired labour and without hired labour establishments. Structural transformation will occur through the rural non-farm sector development. India holds the differences in terms of social, cultural, economic and geographical. In some areas agricultural development leads to non-farm employment likewise in some areas it leads to distress diversification (ADD).

[9] Shifting land use patterns in Andhra Pradesh: Implications for Agriculture and Food Security, Center for Sustainable Agriculture, Hyderabad, Andhra Pradesh

The present thesis has following objectives

Objectives

1. To understand the changes in the agrarian structure of Andhra Pradesh since 1980's
2. Factors determining non-farm employment in Kodurupadu village
3. To study diversification of employment in socio-economic groups in Kodurupadu village

1.9 Research questions

1. Why Rural employment shift agricultural to non-agriculture?
2. What are the causes to increase GDP share of non-agriculture?
3. Why structural changes occur in villages also?
4. What are the factors generate non-farm?
5. What effect of Globalization on agriculture and non-agriculture?

1.8 Hypothesis

1. Agricultural development leads to Rural Non-farm Employment
2. The relationship between education and non-farm employment is positive
3. The lower castes diversify their employment to traditional non-farm and higher castes to modern non-farm

1.11 Data and Methodology

The study is based on the both secondary and primary data. The secondary data were collected from Directorate of Statistics and Economics (DES), Population Census. The primary is collected from selected village namely Kodurupadu. This village was agriculturally developed village in West Godavari District of Coastal Andhra Region.

In the selected village, total population caste-wise, working people, non-working people, education status, land size of holdings, occupation details were taken. If he/she engage in non-farm, it is traditional non-farm or modern non-farm are discussed.

Determinants factors, like income, caste, gender, age, family size, share of income, wage difference, working days all are taken into consideration.

1.12 Organization of the Thesis

In first chapter introduce the topic Rural Non-farm (RNF). The second chapter, review of literature available to relate to the rural non-farm employment is given. Agrarian structure of the Andhra Pradesh was explained in third chapter. In the fourth chapter, determinants of non-farm employment in the village were explained. The fifth chapter gives concluding remarks.

Chapter II. Review of Literature

Introduction: There is no common factor to determine non-farm employment. So there are many variations in rural non-farm employment from state to state, region to region, village to village, household to household and it has heterogeneity in character and not homogenous. In rural areas, people are suffering from poverty, excess labour force in agricultural and seasonal unemployment.

Education

Education plays main role in determining rural non-farm employment. Micevska, Dil Bahadur Rahut (2008) says that, non-farm activities generate on average about 60 percent of rural households' income in the Himalays. The determinants of participation in non-farm activities and Non-farm incomes across rural households was analysed. Education plays a major role in accessing more remunerative non-farm employment. The other factors are land, social status, and geographical location. Investment in agricultural productivity growth is certainly important for poverty reduction in rural areas. The number of adult females in the household and their education affect of labor allocation in systematic fashion, which indicates that women do play important role in the non-farm sector and regional location also affects the sources of income.

Mahendra Dev, S (2007) focused on determinants of Rural Non-farm activities in India. He discusses about rural transformation in the post-reform period. In India non-farm was diversified but slow particularly in female. The results for India show that higher education, higher income, formal vocational training, increased participation in RNFE work. He suggests for a two-pronged strategy for the promotion of RNFE sector, one is for skilled and the other is for unskilled. However, there is unwillingness to spend on pro-poor public investment and services in India.

Rudra Prakash Pradhan (2008) studied trends and determinants of rural non-farm employment in the Indian Economy in two phases. Secondary data used for this study and covered the period from 1970-71 to 2003- 04. The data is mostly collected from Economic Survey, Government of India, Centre for Monitoring Indian Economy (CMIE), Mumbai, Census of India, Hand Books of Statistics, Reserve Bank of India, Mumbai and International Food Policy Research Institute (IFPRI), Washington. In the first phase, 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 phase focuses on the overall trends of rural non-farm employment and its determinants during 1970-71 to 2003-04. It finds that the trends of rural non-farm employment have been increasing in the Indian economy but varies across the states, gender and time period. 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.

Macherla Prasadarao (2002) studied in Andhra Pradesh two village i.e., Anandapuram and Veeravalli. Determinants of differences in probability of a household having in a) modern b) traditional RNFE separately. Education has positive impact on rural non-farm employment.

Valeria Sanchez (2005), explained the gender analysis was in Bolivia study. Education is an important determinant in all three models especially non-agricultural wage employment and highly skilled employment.

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. Secondary education stimulates entrepreneurial capacity, whereas primary education enhances the productivity of the middle-level personnel. Education makes it easier to take up skill development training for particular enterprises.

Takashi Kurosaki (2001), used to examines the effects of education on farm and non-farm productivity micro panel data of rural households in North-West Frontier Province of Pakistan. The human capital effects are estimated both for wages and for self-employed activities on the one hand and both for farm and non-farm sectors on the other hand.

Land

Edna A. Reyes (1987) At the village level due to increased population pressure landless also increased and land reform regulations resulted in decreasing farm size, and unequal size distribution of farms. As an effect, the mobilization of the rural economy can

be achieved even against relatively deteriorating agricultural conditions if the appropriate macro and sector-specific are put in place. Especially, those that would encourage the growth of a dynamic rural non-farm sector.

Tripe Olivia-Paula (1999) found linkages between the assets (Education, land and infrastructure facilities promoting factors) and the economic activities of rural households in developing countries. The study indicates that improved land access is linked to agricultural production. Assets determine the economic activities of a household in a given context. An intervention that improves a household's asset position is not likely to be path neutral. Such interventions are likely to promote participation in certain income generating activities and thus a particular path is needed for improving household welfare.

Caste

Sukhadeo, Thorat and Nidhi Sadana Sabharwal (2006) attempt to assess whether present government policies promote non-farm employment in rural areas particularly for Scheduled Castes. Reservation policy in jobs and services, the improved education is expected to increase their share in regular and salaried jobs. They examined the pattern and changes in the magnitude of non-farm employment among the SCs. Rural non-farm employment participation is analyzed by the 'type' of economic activities. Given the policy focus on education, educational level of the non-farm worker, and type of economic activities, the tried to note down the educational background of those engaged in non-farm. Poverty increase in non-farm activities of employs especially SCs/STs because low education.

Gender

World Bank (2002) focus as on gender effects and Intergenerational linkages on non-farm participation in Nepal. Mother exerts strong influence on daughter's employment choice. Mother is in non-farm sector raises a daughter's probability of non-farm participation.

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 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 impact of female labour force participation 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.

Eduard, B. Vermeer (2003) conducted study in China to identify the main determinants of wage income in rural China. On the basis of 1998 survey, about 3,500 households in 11 villages in Wuxi municipality[10] but Jiangsu province and another 11 in Baoding municipality[11] in Hebei province. During the collective period until the early 1980s, natural resource advantages and location were the main determinants of income differentials between Chinese villages. The average wage earnings per capita in the Wuxi villages were almost four times as high as in Baoding, which was indicative of their different levels of industrialization and income. The gender difference in wage labour participation was large in Qingyuan, but small in Wuxi. Between villages, differences were considerable, particularly in less developed Qingyuan.

Income

Mohammad Abdul Malek and Koichi Usami (2010) studied the importance of the non-farm sector in rural Bangladesh and discussed the comprehensive effects of non-farm incomes on poverty. For the study, data was taken from 214 small households in advanced villages of Bangladesh. Standard micro-econometric techniques were used. It is found that small households in advanced villages were in a stage that their non-farm incomes did not contribute significantly to their household production for either farm or non-farm and food consumption spent on non-food consumption. Finally, overall non-farm income

[10] .Eight of municipality and three in city.
[11] . nine of which are in Qingyuan country and two in the city

significantly mattered for reducing income poverty but could be still low to be realized in reducing education poverty.

Amitabh Kundu, Niranjan Sarangi, and Paritosh Das (2003) studied a process of sectoral diversification in rural India. 1990s liberalization have had a positive impact on growth of non-agricultural activities in India. Data on employment structure obtained from the Population Census and the National Sample Survey reveal certain structural rigidity with regard to workforce distribution over the past four decades since Independence. Main findings of this study is High shares of NFE are not necessarily linked to healthy economic development in rural areas.

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. Nicaragua is the second poorest country in Latin America and Caribbbean islands. The study is based on a multi topic survey that treats in more detail the rural incomes in Nicaragua than most prior surveys. Rural Non-farm Income (RNFI) is much more important than farm wage labour income and Rural Non-farm Income.

Government Policies

Uttam Kumar Deb, G.D. Nageswara Rao, Y. Mohan Rao, Rachel Slater (2002), average on the diversification of rural livelihoods. This study was conducted in Andhra Pradesh in the villages of Aurepalle and Dokur by ICRISAT since 1975. The main findings are that agriculture is the most important source of livelihood. Decrease in crop cultivation leads to occurrence of migration. There are a small number of cases where diversification has enabled households to lift themselves significantly above the poverty line; the overwhelming experience of diversification is a coping strategy. Drought occurred in 1997–98 and between 1999 and 2001 in Mahabubnagar District. The intervening years were characterized by only average rainfall. It remains to be seen, therefore, whether the diversification into non-farm activities is a short-term response to adverse agricultural terms of trade and ecological uncertainty brought about as a result of extended drought or whether diversification represents a long-term move away from agricultural livelihoods in rural areas that will be sustained. Return to agriculture in the future will be diminished if population density continues to rise and limited by the gradual erosion of agricultural

assets, such as land and large livestock like cattle and buffalo. The findings from this re-survey of two villages raise important policy challenges for government and other stakeholders. Only with more appropriate policies that recognize the importance of diversity, it will be possible for more people to make positive exits from poverty through diversification.

Forward Linkages

Micro level study was conducted by Vibhoti Shukla 1991 in Maharashtra. In this study, the author examines consumption linkages between the agricultural and non-agricultural outputs of the rural economy[12]. They give considerations to the stimulus that a prospering agricultural economy can give to consumption demand for the products of local non-farm activity. The model is implemented through multiple regression analysis of the determinants of levels of and changes in overall rural non-farm activity and its industrially disaggregated components across the districts of Maharashtra.

Backward Linkages

There is positive contribution of nonfarm employment, research and development and irrigation agricultural productivity according to

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

[12] Theoretical perspectives on aggregative inter-relationship in a dynamic two-sector framework include Uma Lele and John Mellor, "Technological Change, Distributive Bias and Labour Transfer in a Two-sector Economy', Oxford Economic Papers 33(3) November 1981. An estimation-simulation model of the Japanese economy appears in Yair Mundlak, InterSectored Factor Mobility and Agricultural Growth, Research Report 6, International Food Policy Research Institute, Washington, DC, February 1979. As examples of studies exploring the spatial micro-foundations of these macro Sectored linkages, see Robert P King and Derek Byerlee, 'Factor Intensities and Locational Linkages of Rural Consumption Pattern in Sierra Leone;, American Journal of Agricultural Economics, 60 may 1978; and CS Ahammed and R W Herdt, 'Measuring the Impact of Consumption Linkages on the Employment Effects of Mechanization in Philippine Rice Production', Journal of Development Studies, January 1984.

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.

Chapter III. Agrarian Structure of Andhra Pradesh

Introduction: Agrarian structure of the Andhra Pradesh was discussed. Land is very important factor in rural areas. Land size, agricultural employment, main and marginal workers, area under food and non-food crops, area, production and yield details is given in this chapter. Land is an important in rural areas and according to their land size farmers are divided into marginal, small, Semi-medium, Medium and Large size farmers. The division of main or marginal workers in to cultivators, agricultural labour, household industry and area under food and non-food crops per district-wise details is given. Area, Production and Yield per hectare in India, as well as Andhra Pradesh and West Godavari details is also given in this chapter.

Operational Holdings in India: Number of holdings and size groups from 1980-81 to 2010-11. Marginal size number of holdings increases continuously from 1980-81 to 2010-11 from 50122 to 92826 holdings. In the same way, small size group also increased from 16072 holdings to 24779 holdings in the same years from 1980-81 to 2010-11. But small medium size group condition is different, it increased from 1980-81 to 2000-01 from 12455 to 14021 but later in 2010-11 it was decreased to 13896 holdings. Medium size holdings decreased from 1980-81 to 2010-11 from 8068 holdings to 5875 holdings. In Large size group, holdings also decreased from 2166 holdings to 973 holdings from 1980-81 to 2010-11. All sizes increased from 88883 holdings to 138348 from 1980-81 to 2010-11. Marginal size and small size holdings are increasing but Semi-medium, Medium and large holdings are decreasing continuously in all India level.

Operated Area in India: The operated area and size groups from 1980-81 to 2010-11. Marginal size operated area increased continuously from 1980-81 to 2010-11 from 19735 to 35908 hectares. In the same way, small size group also increase from 23169 hectares to 35244 in the same years from 1980-81 to 2010-11. But small medium size group condition is different, it was increased from 1980-81 to 1990-91 from 34645 to 38375 but later in 2000-01 decreased to 38193 to 33828 in 2010-11. Medium size group decreased from 1980-81 to 2010-11, 48543 to 33828 hectares. In Large size group, holdings also decreasing 37705 hectares to 16907 hectares from 1980-81 to 2010-11. All sizes increased from 163797 hectares to 159592 from 1980-81 to 2010-11. Marginal size and small size are

increasing but Semi-medium, Medium and large operated areas are decreasing continuously in all India level.

Operational Holdings and Area in Andhra Pradesh

The Marginal size group of Andhra Pradesh, total States number and area is shown in the above table 3.4 from the 1980-81 to 2010-11. In Andhra Pradesh, number continuously increased from 3804 in 1980-81 to 8425 in 2010-11; area also increased from 1887 to 3727 from 1980-81 to 2010-11. In total states also, number continuously increased from 50122 in 1980-81 to 92836 in 2010-11; area also increased from 19735 to 35908 from 1980-81 to 2010-11. The Small size group of Andhra Pradesh, total States number and area is shown from the 1980-81 to 2010-11. In Andhra Pradesh, number increased continuously from 1951 in 1980-81 to 2918 in 2010-11; area also increased from 2412 to 4120 from 1980-81 to 2010-11. In total states, also number increased continuously from 16072 in 1980-81 to 24779 in 2010-11; area also increased from 23169 to 35244 from 1980-81 to 2010-11. The Semi-medium size group of Andhra Pradesh, total States number and area is shown from 1980-81 to 2010-11. In Andhra Pradesh, number increased continuously from 1174 in 1980-81 to 1424 in 2000-01 but 2010-11 it was decreased to 1399; area also increased from 326 to 3685 from 1980-81 to 2010-11. In total the states also number increased continuously from 12455 in 1980-81 to 14087 in 2000-01 but in 2010-11 it decreased to 13896; area also increased from 34645 to 38375 from 1980-81 to 1990-91 but in 2000-01 it decreased to 38305 and again increased to 37705 2010-11. The Medium size group of Andhra Pradesh, total States number and area is shown from the 1980-81 to 2010-11. In Andhra Pradesh, number decreased continuously from 646 in 1980-81 to 397 in 2010-11; area also decreased from 3978 to 2209 from 1980-81 to 2010-11. In total states also, number decreased continuously from 8068 in 1980-81 to 5875 in 2010-11; area also decreased from 48543 to 33828 from 1980-81 to 2010-11.

The Large size group of Andhra Pradesh, total States number and area is shown from the 1980-81 to 2010-11. In Andhra Pradesh, number decreased continuously from 7370 in 1980-81 to 36 in 2010-11; area also decreased from 2795 to 552 from 1980-81 to 2010-11. In total states also, number decreased continuously from 88883 in 1980-81 to 973 in 2010-11; area also decreased from 37705 to 16907 from 1980-81 to 2010-11. The all sizes group of Andhra Pradesh, total States number and area is shown from 1980-81 to 2010-11. In

Andhra Pradesh, number increased continuously from 7370 in 1980-81 to 13175 in 2010-11; area also increased from 14313 to 14293 from 1980-81 to 2010-11. In total states also, number increased continuously from 88883 in 1980-81 to 159592 in 2010-11; area also decreased from 163797 to 159592 from 1980-81 to 2010-11.

Agricultural Employment in Andhra Pradesh and West Godavari: Main, marginal and total workers including total and rural population of West Godavari district and Andhra Pradesh in 1991. Main workers in Andhra Pradesh is 28, 445, 482 marginal workers are 1,518, 166 and total workers are 29963648. In West Godavari main workers are 1460792, marginal workers are 63 919 and total workers are 1524711. 42 percent of West Godavari population 42 percent are main workers but in Andhra Pradesh 43 percent are main workers. In marginal workers point of view, West Godavari marginal workers are 1.82 Andhra Pradesh marginal workers are 2.28. In total, 43 percent are workers from West Godavari and 45 percent from Andhra Pradesh.

Main, marginal and total workers details is shown. In West Godavari district and in Andhra Pradesh, main workers are 38 percent in 2001. Marginal workers are 6.6 in West Godavari and 7.7 in Andhra Pradesh and total workers are 44 percent in West Godavari and 46 percent in Andhra Pradesh. In this table, total population and rural population is also shown. Total population of the West Godavari is 38, 03, 517 and Andhra Pradesh population is 76210007. Rural population of the west Godavari district is 3048535 and Andhra Pradesh rural population is 55 296875.

Main, marginal and total workers of West Godavari and Andhra Pradesh details is shown in this table. The total main workers of both West Godavari district and Andhra Pradesh is 39 percent. Marginal workers are 6 percent in West Godavari district and 8 percent in Andhra Pradesh. In total workers point of view, 45 are West Godavari and 47 percent are Andhra Pradesh is total workers. Total population and rural population details is also shown in this table. Andhra Pradesh total population is 4, 95, 77,103 and West Godavari population is 39, 95,742. Rural population of West Godavari district is 31, 26,191 and Andhra Pradesh is 5, 63, and 11,788.

In West Godavari District and Andhra Pradesh main, marginal and total workers details in 1991 is shown in the above table 3.9. In West Godavari district, total main workers are 42

percent but in Andhra Pradesh is slightly highest by 43 percent. Cultivators in West Godavari is 15 percent but in Andhra Pradesh is 27 percent. In Agricultural labour point of view, in West Godavari 56 percent are agricultural labour and in Andhra Pradesh is 41 percent. From Household Industry point of view, in West Godavari, 2.21 percent working in household industry but in Andhra Pradesh is 3.36 percent. In others, 27.54 percent are working in West Godavari and 28 percent in Andhra Pradesh. In marginal workers it is 1.82 in west Godavari district and 2.28 in Andhra Pradesh. In total workers point of view, 43.34 percent are total workers in West Godavari and 45 percent in Andhra Pradesh.

In 2001, main workers in West Godavari district is 1425708 (38) percent and in Andhra Pradesh is 29040873 (38) percent. In West Godavari district, out of 38 percent of main workers, 14 are cultivators, 53 percent are agricultural labourers, 3 percent are household industry workers and 30 percent are others. In Andhra Pradesh out of 38 percent main workers, 24 percent are cultivators, 34 percent are agricultural labour, 5 percent are household industry workers and 36 percent are others.

Marginal workers details of West Godavari and Andhra Pradesh is shown in this table 3.10. Total marginal workers of west Godavari district is 6.6 percent where cultivators are 2.59, agricultural labour are 76 percent, household industry is 5 percent and others are 17 percent. In Andhra Pradesh, total marginal workers are 7.7 percent 8 percent are cultivators, 68 percent are agricultural labour, 5 percent are household industry workers and 19 percent are others.

Total workers of west Godavari and Andhra Pradesh details is shown in this table. West Godavari total workers are 44 percent and Andhra Pradesh total workers are 45 percent in total population according to 2001 census. In West Godavari out of 44 percent of total workers, 12 percent are cultivators, 57 percent are agricultural labour, 3 percent are household industry workers and 28 percent are others. In the same way, out of 46 percent of total workers of Andhra Pradesh, 23 percent are cultivators, 40 percent are agricultural labour, 5 percent are household industry workers and 33 percent are others.

Main workers of West Godavari and Andhra Pradesh in 2011 details is shown in this table. In West Godavari, main workers are 39 percent and in Andhra Pradesh also is 39 percent also. From 39 percent main workers of west Godavari, 10 percent are cultivators, 58 percent are agricultural labour, two percent are Household industry workers and remaining

30 percent are other workers. In Andhra Pradesh from the 39 percent of main workers, 16 percent are cultivators, 45 percent are agricultural labour 3 percent are household industry workers and 37 percent are other workers.

Marginal workers of 2011 Andhra Pradesh and West Godavari details is shown. Marginal workers of West Godavari district is 6 percent and Andhra Pradesh is 8 percent. From 6 percent marginal workers of West Godavari district, 2 percent are cultivators, 73 percent are agricultural labour, 3 percent are household industry workers and 14 percent are others. In 8 percent of Andhra Pradesh marginal workers, 7 percent are cultivators, 65 percent are agricultural labour, 4 percent are household industry workers and 25 percent are others.

Total workers of West Godavari district and Andhra Pradesh details is shown in this table. Total workers of West Godavari district are 45 percent and Andhra Pradesh is 47 percent. Total workers of West Godavari is 45 percent, 9 percent are cultivators, 60 percent are agricultural labour, 2 percent are household industry workers and 29 percent are others. In total 47 percent workers of Andhra Pradesh, 14 percent are cultivator, 48 percent are agricultural labour, 3 percent household industry workers and 35 percent are others.

Area under Food and Non-food Crops in Andhra Pradesh and West Godavari: Area under food and non-food crops in Andhra Pradesh and West Godavari district from 1980-81 to 2010-11. In West Godavari district, are under food crops continuously increased from 1980-81 to 2010-11 from 529 to 626 and area under non-food crops also increased from 53 to 102 in the same period. In Andhra Pradesh area under food crops decreased in 1980-81 to 1990-91 from 9554 hectares to 8851 hectares and again increased to 9295 in 2000-01 and 9733 in 2010-11. Non-food crops, in 1980-81 is 2728 hectares and it continuously increased 2010-11 from 4343 to 4579 hectares. But in both West Godavari and Andhra Pradesh, area under food crops is higher than non-food crops area.

Area, Production and Yield: Comparison among rice, maize, jowar, black gram and groundnut area, production and yield per hectare details of West Godavari district and Andhra Pradesh is shown from 1980-81 to 2010-11.

Rice: In West Godavari district from 1980-81, rice production area is 422 (thousand hectares) to 456 (thousand hectares) in 2010-11 but in Andhra Pradesh, it is 3600 (thousand

hectares) to 4752 (thousand hectares). In West Godavari district from 1980-81, rice production is 1060 (thousand tonnes) to 1491 (thousand tonnes) in 2010-11 but in Andhra Pradesh, it is 2011 (thousand tonnes) to 14420 (thousand tonnes). In West Godavari district from 1980-81, yield per hactare is 2585 (kilograms per hectare) to 3265 (kilograms per hectare) in 2010-11 but in Andhra Pradesh, it is 1991 (kilograms per hectare) to 3055 (kilograms per hectare).

Maize: In West Godavari district 1980-81 maize production area is 2 (thousand hectares) to 45 (thousand hectares) in 2010-11 but in Andhra Pradesh, it was 321 (thousand hectares) to 744 (thousand hectares).In West Godavari district 1980-81 maize production is 6 (thousand tonnes) to 308 (thousand tonnes) in 2010-11 but in Andhra Pradesh, it was 725 (thousand tonnes) to 3953 (thousand tonnes). In West Godavari district 1980-81 maize yield per hactare is 3106 (kilograms per hectare) to 6885 (kilograms per hectare) in 2010-11 but in Andhra Pradesh, it was 222 (kilograms per hectare) to 5317 (kilograms per hectare).

Jowar: In West Godavari district from 1980-81, jowar production area is 7 (thousand hectares) but not available in 2010-11 but in Andhra Pradesh, it is 2054 (thousand hectares) to 254 (thousand hectares). In West Godavari district from 1980-81, jowar production is 3 (thousand tonnes) to 1 (thousand tonnes) in 2010-11 but in Andhra Pradesh, it is 1082 (thousand tonnes) to 308 (thousand tonnes). In West Godavari district from 1980-81, yield per hectare is 45 (kilograms per hectare) to 1447 (kilograms per hectare) in 2010-11 but in Andhra Pradesh, it is 1527 (kilograms per hectare) to 1211 (kilograms per hectare).

Black gram: In West Godavari district from 1980-81, Black gram production area is 2 (thousand hectares) it was 7 (thousand hectare) in 2010-11 but in Andhra Pradesh, it is 232 (thousand hectares) to 464 (thousand hectares). In West Godavari district from 1980-81, Black gram production is 1 (thousand tonnes) to 2 (thousand tonnes) in 2010-11 but in Andhra Pradesh, it is 107 (thousand tonnes) to 253 (thousand tonnes). In West Godavari district from 1980-81, Black gram yield per hectare is 557 (kilograms per hectare) to 285 (kilograms per hectare) in 2010-11 but in Andhra Pradesh, it is 460 (kilograms per hectare) to 547 (kilograms per hectare).

Groundnut: In West Godavari district from 1980-81, Ground nut production area is 6 (thousand hectares) it was (thousand hectare) in 2010-11 not increase but in Andhra Pradesh, it is 1304 (thousand hectares) to 1622 (thousand hectares). In West Godavari district from 1980-81, Groundnut production is 6 (thousand tonnes) to 1 (thousand tonnes) in 2010-11 decreased but in Andhra Pradesh, it is 860 (thousand tonnes) to 1457 (thousand tonnes). In West Godavari district from 1980-81, Groundnut yield per hectare is 994 (kilograms per hectare) to 2032 (kilograms per hectare) in 2010-11 but in Andhra Pradesh, it is 1660 (kilograms per hectare) to 898 (kilograms per hectare) decreased (see table-3.17).

Non-farm Employment is heterogeneity in character, from state to state, region to region, village to village and household to household also. In the state of Andhra Pradesh, the non-farm sector has been supported by the agriculture sector in various forms.Fertilizers shops, pesticides and tractors related shops was also established.The rising agricultural wages in rural areas are leads to increase non-farm activities. The rising agricultural productivity is thus instrumental in inducing a structural transformation of the rural non-farm economy. The direct impact of increase in agriculture production to the growth of non-farm sector can be sustained by way of supplying more raw materials to industries and creating demands for inputs and allied services. The indirect impact can also be visualized in the form of increasing consumption demand and generating surplus for investment.The Non-Farm sector is increasingly playing an important role in the development of rural areas in Andhra Pradesh from decades onwards. Specifically,the Non-Farmsector has provided of employment and income to many rural peoples. However, the efforts are needed to identify appropriate and effective institutional means for development of non-farm sector policy and interventions for creating employment opportunities.

Chapter IV. Factors Determining Non-Farm Employment in Kodurupadu Village

Introduction: In this chapter, Economic and Demographic details is given including workers and non-workers of the selected village Kodurupadu. Those who are working more than 6 months in one financial year is called as main workers, but those who work for less than 6 months is called marginal worker. Total workers (main and marginal workers) are 503 in this village. Here, head of the household, family members and working status details are also given. Workers are divided broadly into agricultural and non-agricultural workers. Agricultural workers are divided into cultivators and casual labour in agriculture. Cultivators are again divided into own cultivators and lease cultivators. Non-agricultural workers are divided into traditional non-farm employees and modern non-farm employees.

Total Households and workforce of the Kodurupadu Village: Out of 298 households, agricultural households are 184 (62); non-farm households are 99 (33) and pension households are 15 (5). Agricultural households 184 (45) again divided in to two types' cultivators 83 and causal labour in agricultural 101 (55) households. Non-farm households are 99, traditional non-farm 58 (59) and modern non-farm 41 (41). Pension holders are 15, 13 (86) are belongs to Scheduled Caste (SCs) remaining two; 1 (7) is other caste (OCs) and another 1 (7) is other backward caste (OBCs).

Total workforce of the village is 503, agricultural workforce is 363 (72) and non-farm employs is 140 (28). Out of 363 agricultural workers, 86 (24) works as cultivators and remaining 277 (76) works as casual labour in agriculture. Total cultivators of 86, 58 (67) are belongs Scheduled Caste (SCs); 9 (10) are Other Backward Caste (OBCs) and 19 (22) are Other Caste (OCs). Total Casual labour in agricultural 277, 221 (80) are belongs Scheduled Caste (SCs); 41 (15) are Other Backward Caste (OBCs) and 15 (5) are Other Caste (OCs).Total non-farm employs 140 are divided into traditional non-farm employs 78 (56) and modern non-farm employs 62 (44). Out of 78 traditional non-farm employs, Scheduled Caste 60 (77), Other Backward Caste 14 (18) and Other Caste 4 (5). In Modern 62 non-farm employs, Scheduled Caste 49 (79), Other Backward Caste 9 (15) and Other Caste 4 (6) are engaged.

In the selected village agricultural workers are 363 and non-farm employees are 140. Total non-farm employees are divided into two 1) traditional non-farm employees and 2) modern non-farm employees. Traditional non-farm employees are again divided as vegetables sellers, shepherding, mason, pastor, washer man, coconut sellers, and maid servants in households. They also do, Laundry, toddy tappers, band music, tailoring, anganwadi workers, kirana shop runners, rickshaw pullers, tree cutting, drama actors, public distribution system workers, wood sellers, dairy farm runners and snail sellers.

Modern non-farm employees are tractor driver. Village Revenue Officer (VRO), Catering, Private Jobs (sales men in cloth shops etc.,). Painting, Centering, Photo Studio Worker, Constable, Ties Factory Worker, Lighting, Electric shop, Tractor own, Auto Own, Military, Car Driver, Field Worker, Dwakra Worker, Auto Driver, Gang Work. Shop Worker, Mill Worker, Cycle Vendor, Bricks Worker, Hotel Worker, Bricks Owners, Electric Workers, Central Reserved Police Force (CRPF).

Socio-economic characteristics: Number of households are 298 and total population of the village is 1025. Out of 298 households, 75 percent households are scheduled caste (SCs), 15 percent of households are other backward caste (OBCs) and remaining 10 percent of households belong to other caste (OCs). In the same way, total population of the village is 1025, in this scheduled caste (SCs) population is 75 percent; other backward caste (OBCs) population is 15 percent and other caste (OCs) population is 10 percent in the village including child population. Scheduled caste (SCs) total population is 765, above 7 years of age population is 674 and child population is 90. In 674 above 7 years population, males are 51 percent and female are 49, 90 percent are child population. Other backward caste (OBCs) caste total population is 158, above 7 years of age population is 133 and child population is 25. In 133 above 7 years population, males are 50 percent and female are 50 percent 25 percent child population. Others caste (OCs) total population is 102, above 7 years of age population is 95 and child population is 8. In 95 above 7 years population, males are 53 percent and female are 47 percent and 8 percent child population. Total population irrespective of caste is 1025, above 7 years of age population is 902 and child population is 123. 902 are above 7 years population, males are 51 percent and female are 43 percent 123 percent child population.

Education status of the head of the family caste wise: Out of family total 298 heads, scheduled caste are 222; other backward caste are 45 and others are 31. Scheduled caste has 222 households, 37 percent of heads are illiterates. In literates, the highest 36 percent only completed primary education and next is the secondary level education with 19 heads. Only 1 percent of head completed higher secondary level of education and technical education. OBC caste 45 households, 29 percent of heads are illiterates. In literates the highest 42 percent of heads only completed primary education and next is the secondary level education with 25 percent. There is no higher secondary level of education and technical education head in OBC caste. In others caste 31 households, 26 percent of heads are illiterates. In literates the highest 35 percent of heads only completed primary education and next is the secondary level education with 26 percent. Only 1 percent of heads completed higher secondary level of education and no technical education is completed in others. In total households, irrespective of caste out of 298 households, 35 percent of heads are illiterates. In literates, the highest 37 percent of heads only completed primary education and next is the secondary level education with 21 percent. Only one percent of heads completed higher secondary level of education and technical education in total households.

Size of land holding at household level: Aggregate 120 households are participating in cultivating continuing 178 households are working as labour in agriculture, non-agriculture and non-farm sector irrespective of caste. In caste wise details, scheduled caste are 222, OBC are 45 and others are 31. In 222 scheduled caste households, only 37 percent are partaking in cultivation outstanding 63 households are not take part. In OBC 45 households, 36 percent of households are involvement in cultivation and left behind are not. In others 31 households, 71 percent are engage in cultivation and 29 percent are not. In aggregate 41 percent are sharing and left over 59 percent are not.

Main Occupation of the Head of Household: Main employment of the head and their caste details. Out of 283 household heads, main occupation is divided into agricultural and non-agricultural. Out of the total agricultural and non-agricultural heads of households, Scheduled caste (SCs) are 209; other backward caste (OBCs) are 44 and other caste (OCs) are 31. Out of 283 main employment heads, SC employees are 209; where agricultural

employees are 134 (64) percent and non-agricultural employees are 75 (36) percent. Out of 44 OBC employees, agricultural employees are 24 (55) percent and non-agricultural employees are 20 (45) percent. In OCs, out of 31 employees; agricultural employees are 26 (84) percent and remaining 4 (16) percent are non-agricultural employees. In total employees, out of 283; agricultural employees are 184 (65) percent and remaining 99 (35) percent are non-agricultural employees.

Marginal Work of Head of Household: Marginal work of heads is shown in table 4.8. Marginal work of head is divided into agricultural and non-agricultural work. Head marginal employees are 113, irrespective of caste and work division. Irrespective of caste, total agricultural employees are 111 and non-agricultural employees are 2 out of 113 marginal employees. In caste point of view, out of 93 marginal employees, agricultural employees are 99 percent and only one percent are non-agricultural employees. In OBCs, out of 15 marginal employees, the highest 93 percent are agricultural employees and remaining 7 percent are non-agricultural employees. In others, out of 5 marginal employees, all are agricultural employees and there is no non-agricultural workers. In total 113 marginal workers irrespective of caste, 98 percent are agricultural employees and only two percent are non-agricultural employees. Agricultural employees are the highest in SCs, 99 percent than OBC and others. In same way, non-agricultural employees are the highest in OBCs than SCs. But there is no marginal non-agricultural employees in others. In details of head marginal work, out of 113 marginal employees; 98 percent are agricultural employees and remaining 2 percent are non-agricultural employees irrespective of caste.

Main work of Family Members: Main work of family members is shown in this table 4.10. Main work of family members is divided into agricultural and non-agricultural employees. Main workers of family members are 220 irrespective of caste in agricultural division. Agricultural employees are 179 and non-agricultural employees are 41 irrespective of caste. In 179 agricultural employees irrespective of caste, the highest are SCs with 145 (81) percent and next place occupied by agricultural employees are OBCs with 26 (90) percent. Non-agricultural employees are 41, in this the highest are others with 4 (33) percent and next place occupied by SCs 19 percent. In total agricultural and non-

agricultural employees, the highest are agricultural employees and next place occupied by non-agricultural employees.

Marginal work of Family Members: Family members' marginal work agricultural and non-agricultural details is shown in table 4.12. In this out of 9 agricultural employees, the highest 7 are SCs and remaining 2, 1 is from OBC and one from other caste. Employees are divided into agricultural employees and non-agricultural employees. Agricultural employees are 7 and non-agricultural employees are only two, out of 9 irrespective of caste. In 7 agricultural employees the highest are OBCs and other caste. In non-agricultural employees out of 2 all are non-agricultural SC employees.

Working Days: Working days of head of the family caste-wise on average. In total year, Scheduled Caste works for 285 days; OBC works for 250 days and others works for 280 days. In scheduled caste from 285 working days of head of family, 95 days are spent working in agricultural sector and 190 are working days in non-farm sector. In OBC, out of 250 working days of head, 75 days are spent working in agricultural sector and 175 days are working in non-farm sector. In the same way, 280 days of other working days of the year, 100 days are work for agriculture and 180 days are working days in non-farm sector. Irrespective of caste, working days in non-farm than agriculture are high. In agricultural sector, working days are very less where they participates only at the time of harvesting. Now mechanization in agriculture is also one of the factor to decrease working days in the non-farm sector because it is used for sowing and reaping. So cultivators are giving priority to mechanization instead of human labour. Non-farm sector is a very low quality production and a lot of heterogeneity character. Working days are high when compared with agriculture but earnings are little high but actually low.

Occupation: Non-farm employees are separated as self-employed, casual labour and wage/salaried employees. Certain head of the families was hinge on only pension, which is provide by government of Andhra Pradesh. Agricultural workers are 184, in this causal labour are 101 and cultivators are 83. In 101 casual labour in agriculture, 77 percent are SCs; 16 percent are OBCs and 7 percent are others. Cultivators or tenants are 83, in this 67 percent are SCs; 10 percent are OBCs and 23 percent are others. In non-farm employees 99, self-employees are 39; casual labour are 40 and wage or salaried are 20. In 39 self-

employees, 51 percent are SCs; 41 percent are OBCs and remaining 8 percent are others. In casual labour 40, 88 percent are SCs; 10 percent are OBCs and remaining 2 percent are other caste. Pension dependent heads are 15, in this 87 percent are SCs; 6. 6 percent are OBCs and 6.6 percent are others. In total households of 298, 75 percent are SCs, 15 percent are OBCs and remaining 10 percent are forward caste households irrespective of occupation.

Wage Difference: Wage differentiation was explained between male and female and in agriculture sector and non-agriculture sector (see table-4.16). In agriculture male and female are receiving different wages in different works for example sowing, reaping, harvesting etc., As per table male persons are receiving 400 rupees but female persons are receiving 350 rupees only 50 rupees wage difference is there. In non-agriculture sector also male persons are acceptance more wages than female workers. As per table male persons are receiving 300 rupees but female persons are receiving 240 rupees only 60 rupees wage difference is there. Generally males are being paid high than female workers it may be agriculture and non-agriculture. But at the MNREGA programme male and female are receiving same amount of wage there is no difference and that wage also not certainty wage flucvations occurred.

Share of income: Among the scheduled caste, the highest income share is coming from rural non-farm, casual labour is almost 32 percent after cultivators that are getting the highest income that is 29 percent. But the lowest income in scheduled caste is from pension dependents of only 3 percent. In other backward caste also, the highest income is from casual labour of non-agriculture and the next place occupied by cultivators as well as self-employees in non-farm, both are getting equal income that is 28 percent. But in other backward caste also the pension holders lowest gets the income only 3 percent. In forward caste, the highest income is from casual labour of non-farm of 40 percent, next place occupied by self-employees of non-farm but cultivators are getting only 20 percent in total income. Pension holders of forward caste gets very small percent of only 1 percent.

Poverty: In total agricultural, non-agricultural and pension households of 298, above poverty are 247 and below poverty are 51 irrespective of caste (see table-4.20). Out of 247 of above poverty households, 183 are scheduled caste; 38 are other backward caste and 26

are forward caste households. Below poverty households are 51, in this 39 are scheduled caste; other backward caste are 7 and forward caste are 5 households. Agricultural households are 184, the details is given in this table. Out of 184 total agricultural households 149 are above poverty and 35 are below poverty irrespective of caste. Now in 149 of above poverty households, scheduled caste households are 110; other backward caste households are 18 and remaining 21 belongs to forward caste. But in below poverty line households of 35, 24 are scheduled caste; other backward caste are 6 and remaining 5 are forward caste.

Modern Non-farm Employment opportunities are

Tractors/car/lorry/auto drivers, VRO, catering, private job, painter, centering, photo studio, constables, tiles factory workers, lighting, electric shop, tractor/auto/car own, filed officers, dwakra worker, gang man, shop workers (sales promoters), mill workers, flower sellers, RMP, bricks own, electric workers, CRPF, Public Distribution system (PDS), anganwadi workers and dairy farm.

Modern nonfarm employees of Scheduled Caste (SC)are, Tractors/car/lorry/auto drivers,tiles factory workers,shop workers (sales promoters), mill workers,flower sellers,catering, painter,dwakra worker andelectric workers. These modern non-farm employees are only dependent on non-farm they have no cultivated land and also not educated.

Modern nonfarm employees of Scheduled Caste (SC)who are educated are working as government employees like VRO,constables,gang man,CRPF, and also working in private sector like private bank job,Registered Medical Practioner (RMP).

Modern nonfarm employees of Other Backward Caste (OBC)are working as photo studio, lighting and filed officers.

Modern nonfarm employees of Other Caste (OC)areelectric shop, tractor/auto/car own,centering,and bricks own making factory

Determining Factors of Non-farm Employment

In the selected village Kodurupadu, main determining factors of non-farm employment are caste, education, land, age, gender, family size, Income (poor/non-poor).

Caste occupations like washing of cloths, laundry are run by washer man/women, kirana shops running by Vysya, drama actors are BCs, priest hood of temples are done by Brahmins, toddy tapping are run by Gavalla. These non-farm occupations are decided by caste only.

Education play main role in determining of traditional or modern non-farm employment. Highly educated people are engage in modern non-farm employment and less educated people are in traditional non-farm employment. For example, degree and above educated people are engaged in government jobs like Village Revenue Officer (VRO),Police constables,gang man jobs in Railway,Central Reserve Police Force (CRPF) and private jobs like some private Bank Jobs,Registered Medical Practioner (RMP), Filed officer in anganwadi.

Ownership of land is also one of the important determining factor of non-farm employment. Land owners have own tractors to cultivate their own land and transport paddy bags to city. If the head of the family are engaged in agriculture remaining male members in their family are running some agricultural related fertilizers shops, pesticide shops, tractor repair related shops in the village. These tractors are useful not only to own village people but to nearer village people also who are engaged in agriculture. Some are engaged in bricks making business clay or cement bricks in their land.

Age is also one determining factor of non-farm employment, young and educate people are interest to do modern non-farm employment than traditional non-farm because they can move from one place to another place for example, catering, band mela music, lighting, all type of drivers (tractor/car/auto), painter and flower sellers, vegetable sellers, coconut sellers these are moving come back by evening to their village. These people go to surrounding villages in the morning and come back in the evening after completing their work.

Gender is one of the important determining factor of non-farm employment, especially tailoring, anganwadi workers, maid servants, are only women are working than man. Photo

studio and dairy farm are only run by men. Especially, Muslim women are not interest to participate in the non-farm employment.

Family size is the determining factor of non-farm employment. Large size families have more working members and participate in rural non-farm employment than small size of the families from each large family at least two members participate in non-farm employment,

Income (Poor/non-poor) is major important determining factor of non-farm employment, low income people are engaged in traditional shepherding, rickshaw puller, snail sellers and tree cutting.

Chapter-V Few Findings

Caste based diversification:

Traditional caste occupations and Heads of the family: According to the caste occupation of history scheduled caste (SCs) occupation is agricultural labourers. In our study village Kodurupadu three caste are existing, scheduled caste (SCs), other backward caste (OBCs) and other caste (OCs) no Scheduled Tribe (STs). The highest (71%) diversified caste is scheduled caste (SCs). Next place are occupied by other backward caste (22%) and (7%) are other caste (OCs) respectively in traditional non-farm employment. But in modern non-farm employment, the highest (83%) diversified caste is scheduled caste (SCs). Next place is occupied by other backward caste (17%) and (10%) are other caste (OCs) respectively. Both in traditional and modern non-farm employment, Scheduled Caste (SCs) are highly diversified than the two other castes like other backward caste (OBCs) and other caste (OCs). Within the Scheduled Caste (SCs), most of the heads are diversified into modern, but in Other Backward Caste (OBCs) are highly diversified from their caste occupation. In other caste (OCs), most a diversified into traditional non-farm.

Sub-caste

OBC: The occupation of Rajaka caste is washing clothes. In this village out of 5 heads traditional non-farm employees, 4 are engaged in washing clothes and 1 head runs laundry and they are not diversified from their caste occupation. Gavalla caste occupation is toddy tapping, in this out of 3 heads traditional non-farm employees, 2 are engaged in toddy tapping and 1 does toddy tree cutting and they are not diversified. Kummari caste occupation is making clay utensils, like pots, cooking utensils but in this village out of the 2 heads, 1 is works as mason and another 1 is works as drama actor. They are diversified from caste occupation. Santani caste occupation is providing flowers to temple are flower sellers. Out of 3 Santani heads in this village, one is from each occupation of kirana, PDS and wood seller.

OCs: Kapu traditional occupation is cultivating of land. Out of the 3 heads, they are diversified into one from each occupation as vegetable seller, mason and pastor.

Vysya or Komati caste occupation is Kirana shop maintenance. In this village, one head is there he runs Kirana shop and no diversification. He is engaged in his own caste occupation.

Modern non-farm occupations heads of the family:

OBCs: Rajaka caste occupation is washing clothes out of which 6 heads, 1 is diversified in to modern non-farm that is centering. Gavalla caste occupation is toddy tapping, out of which 5 heads 2 is diversified; 1 from each occupation of military and bricks owner. Kummari caste occupation is making clay utensils, like pots, plates, cooking utensils where out of 6, 4 are diversified, 3 are works in hotel and 1 head is works as electric repair.

Family member's details:

Traditional: Out of 78 traditional non-farm employees, 58 are head of the family, remaining 20 are family members. Of the 20 family members, 19 is belongs to Scheduled Caste (SCs) and 1 is belongs Other Backward Caste (OBCs). In 19 family members of SCs, 8 works as maid servants, 5 works as mason, 2 from each occupation as shepherded and Kirana maintained, 1 from each occupation as pastor and Kirana maintained. One member belongs OBCs, he works as washer man.

Modern: Out of 62 modern non-farm employees, 41 are heads and remaining 21 are family members. From 21 family members, 15 are SCs, 2 are OBCs and 4 are OCs.From the 15 family members of SCs, 5 are working in private jobs, 4 are tractor drivers, two from each occupation of lighting and car driver and one is works in the rice mill. In 2 OBCs family members, one from each occupation does catering and centering. In 4 OCs family members, three does private jobs and one person runs has own tractor.

Class based diversification:

Agricultural workers are divided in to two categories, agricultural casual labour and agricultural cultivators. Non-agricultural employees are divided into two categories, non-agricultural casual labour and self-labour. In scheduled caste (SCs) income shares are, agricultural casual labour income is 15, cultivators income share is 29. But non-farm casual labour share is 32, non-farm self-labour share is 21 and pension income share is 3. In other

backward caste (OBCs) income shares are, agricultural casual labour income is 10, cultivators income share is 28. But non-farm casual labour share is 31, non-farm self-labour share is 28 and pension income share is 3. In other caste (OCs) income shares agricultural casual labour is 8, cultivators income share is 20.

But non-farm casual labour share is 40, non-farm self-labour share is 31 and pension income share is 1. Agricultural income shares, casual labour highly share was earned by scheduled caste (15%) than other two other backward caste (OBCs) (10%) and other caste (OCs) (8%). According to the income shares, in cultivators high share was earned by scheduled caste (29%) than the other two; other backward caste (OBCs) (28%) and other caste (OCs) (20%). Non-farm income shares, casual labour high share was earned by other caste (OCs) (40%) than other two other scheduled caste (SCs) (32%) backward caste (OBCs) (31%).

According to the income shares, in self-labour high share was earned by other caste (OCs) (31%) than the other two backward caste (OBCs) (28%) and scheduled caste (SCs) (21%). From pension, 3 percent scheduled caste (SCs), 3 percent other backward caste (OBCs) and 1 percent are earning by other caste (OCs). Pure agricultural households are 82, the highest 35 percent are earned by other caste (OCs), 33 percent are earned by scheduled caste and 32 percent are earned by other backward caste (OBCs). Pure non-farm households are 36, 34 percent earned by scheduled caste (SCs) and other backward caste (OBCs) and 32 percent are earned by other caste (OCs).

Own land cultivation and lease-in land cultivation income shares, scheduled caste highly (50.4) earned from lease-in land cultivation. Other backward caste (OBCs) also earned 53.4 high income from lease-in land cultivation but other caste (OCs) are different as they earned high 54 percent from cultivation. Out of 298, above poverty households are 247 and below poverty are 51. In 184 agricultural households, 149 are in above poverty and remaining 35 are in below poverty. In 99 non-farm households, above poverty are 97 and only 2 are below poverty. In 15 pension depending households, only one household is above poverty and remaining 13 are below poverty. Casual labour in agricultural households are 101, in this 76 are above and remaining 25 are below poverty. Casual labour in non-agricultural households are 40, where all are above poverty. But in

cultivators of 83 households, 73 are above and 10 are below poverty. Pure agricultural labour households are 82, in this 58 are above and 24 are below poverty. Pure non-farm households is 36 and all are above poverty. Traditional non-farm households are 58, one is below poverty and remaining 57 are above poverty. In modern 41 households, 40 are above poverty and one is below poverty.

The relationship between caste and non-farm is negative because, structure of the society is totally different. Among Scheduled Caste (SCs), Other Backward Caste (OBCs) and Other Caste (OCs) lot of social and economic differences can see. Some of the caste occupation forward one generation to another generation their occupation for example, chapels making belongs to SC Madiga caste, washing clothes is by chakali (OBCs).

The relationship between education and non-farm showing always positive on non-farm who are completed secondary level of education they can enter into modern non-farm but who completed primary level of education are engage in only in traditional non-farm.

The relationship between land and non-farm is negative. Small and marginal farmers are only engage in non-farm but semi-medium, medium and large farmers are not showing any interest to enter into non-farm. But land less and agricultural labour only enter into non-farm. In this study no high cultivated land owners.

The relationship between age and non-farm is negative, young and educated people are engage in modern non-farm low educated people are engage in traditional non-farm only. But above 60 and 60 age employs are very less. The people who can move or migrate one place to another place are young people only.

The relationship between gender and non-farm is positive or negative. Positive relation in the case of male and negative relation in the case of female. So many obligations to female persons to enter into non-farm, like social and economic problems.

The relationship between family size and non-farm is positive, if family members are high automatically their participation in non-farm also high. In the caste single members families this shows negative relation.

Poor or non-poor division makes by their income levels according to the per capita income of the members can’t compete with minimum needs we treat as poor above all are non-poor. Poor or poverty relation with modern non-farm is negative but positive relation with traditional non-farm.

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