NEW TECHNOLOGY AND CHANGING AGRARIAN STRUCTURE: CASE STUDY OF A TELANGANA VILLAGE

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DECLARATION

I hereby declare that the work embodied in this thesis entitled ***"New Technology and Changing Agrarian Structure: Case Study of a Telangana Village"*** is carried out by me under the supervision of Prof. P. Venkata Rao, Department of Anthropology, University of Hyderabad, Hyderabad. This work has not been submitted for any degree of any other University or Institution.

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CERTIFICATE

This is to certify that **Mr. Yamsani Srikanth (Reg. No. 02SAPH01)** has carried out the work embodied in the present thesis entitled ***"New Technology and Changing Agrarian Structure: Case Study of a Telangana Village"*** under the supervision of Prof. P. Venkata Rao, Department of Anthropology, University of Hyderabad. The thesis represents his independent work and has not been submitted to any other University or Institution for award of any other research degree.

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ACRONYMS/ABBREVATIONS

AMS	Andhra Maha Sabha
FCI	Food Corporation of India
HH	Household
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MSP	Minimum Support Price
OBC	Other Backward Communities
OC	Other Castes
RMP	Rural Medical Practitioner
SC	Scheduled Castes
SHG	Self Help Group
SRSP	Sri Ram Sagar Project
ST	Scheduled Tribe
TDP	Telugu Desham Party

Chapter 1
INTRODUCTION

India is an agrarian based society with majority of its population depending on land and residing in rural areas. As per the census of 2001 it is observed that 72 per cent of Indian population still lives in rural areas with most of them depending on agriculture. The saying that, India lives in its villages, is as close to reality now as it was in the pre-independence period. This is true because even after five decades of economic planning, after independence, the bulk of the country's population continues to live in rural areas (Rao and Nair, 2003: 3349). Notwithstanding this village is a significant component of Indian society and the importance of village should not be merely understood in its demographic sense but it had a design in which the basic values of Indian civilization were reflected (Beteille: 1980: 107-108).

Agriculture and its allied activities have been the major sources of occupation for the majority of the population in rural India. This is valid even for the contemporary period as India has retained its character of peasant society despite of the accelerated process of urbanization and industrialization, which it has undergone in the last few decades (Breman, 1993: xxi). While emphasizing the importance of agriculture in rural India, Jodhka (2012) says that “Rural economic life is always seen as being organized around agriculture. Apart from being a source of livelihood, cultural life of the cultivating peasant is almost completely woven around the land. In other words, for a typical peasant, agriculture is a way life” (p. 1). Indeed any attempt to understand the ground realities of rural India have to be primarily focused on the interactions that are taking place in different agricultural activities.

The village is the unit of rural society in India where we find the dynamics in the socio-economic lives of the rural people. As Jodhka (2002) rightly points out “For the professional sociologists and social anthropologists, village represented India in microcosm, ‘an invaluable observation centre’ where one could see and study the ‘real’ India, its social organization and cultural life” (p. 3343). Its relevance in understanding social reality in rural India is further explained by Desai as he says that “Like every social phenomenon the village is a historical category. The emergence of

the village at a certain stage in the evolution of the life of man, its further growth and development in subsequent periods of human history, the varied structural changes it experienced during thousands of years of its existence, the rapid and basic transformation is thus undergone during the last hundred and fifty years since the industrial revolution – all these constitute a very fascinating and challenging study" (Desai, 1978:13). This is the reason understanding the rural society has been one of the important and happening thrust in the social science research in India.

Emergence of Village Studies in India:

The emergence of village studies in India can be dated back to the British colonial rule. The context in which the colonial rulers started showing interest in understanding the rural life is well explained by R.K. Mukherjee in the following words. "The end of the First World War unveiled the abject poverty, squalor, and disorganization of village societies; the rumblings of rural discontent began to reach the ears of the government and the educated public in towns and cities. The Government had to take a serious note of the imminent agrarian crisis; leading to the appointment of the first Royal Commission on Agriculture in 1926" (Mukherjee: 1971-ix). "……It was in this critical phase of India's history that "village studies", in the sense the label is employed today, took its birth in order that facts and figures could be gathered for an objective understanding of how the rural folks live, what are their wants, and why are they obliged to lead a sub-human existence" (Ibid).

In a similar kind of opinion P.K. Bose (1984) says that, "In India village studies have their roots in the colonial rule. The gradual deterioration of Indian rural economy under colonial rule culminating in the agrarian crisis at the beginning of the present century and especially after the first world war, made the government concerned about the spreading peasant unrest and it began to seek more detailed information on rural society in particular" (p. 6). The reason is very simple to understand as the British rulers were interested in controlling and ruling India then that time. While pointing out the intention of the colonial rulers, Mukherjee says that "because for good or bad, for the welfare of the people or for the exploitation of the masses, it is necessary to know at the outset how the society is organized and how the people live" (Mukherjee, 1971: xiii).

However these studies, which were done under the control and supervision of colonial rulers, hardly have come out with the realities of the rural life in India. Social life in the Indian village and its agrarian structures were extensively documented by the colonial ethnographers along with many other practices of colonial historiography. However, these accounts were written in a manner that justified colonial subjugation of India (Cohn, 1987: 212). These studies by the colonial ethnographers depicted the village communities in India as harmonious, relatively isolated and above all, unchanging thus blocking from the view the impoverishment caused by colonial policies and there was no mention of private poverty, which was actually a crucial aspect of Indian village setting. (Jodhka, 2003: 1217)

In the words of Bhattacharya "the colonial ethnography also popularized the concept of 'jajmani system' by constructing such exchanges of 'reciprocity' by assuming that it was not an exploitative system where mutual ratification was supposed to be the outcome of the reciprocal exchange" (cited in Jodhka 2003: 1218). On the same issue Bose explains that, the studies of Maine and other British administrator – scholars like Munro, Met café and Elphinstone to Moreland were based on the image of the Indian village as self-sufficient unit and on the 'changelessness" of the village community, which was more an idea than a fact. So, the early studies of village community were more speculative in nature and were pursued in the proper Victorian tradition without bothering about the evidence in support of them (Bose, 1984: 7).

Later in 1930's many more scientists, administrators, and politically imbued social workers joined forces. "Village Studies" began to be carried out extensively all over India by organizations and individuals (Mukherjee, 1978: 805-06). These researches that were conducted in various parts of India proved the claims like, the Indian village was internally in differentiated, and self sufficient and stable were in correct. These studies revealed the existing differentiation among peasantry in India.

However, these studies also ignored certain aspects of rural societies in India. In a critique of such studies, Mukherjee (1978) remarks that "But in the course of development of 'village studies' during 1920-50, the emphasis was laid increasingly on purely economic categorization of rural society; and even the *social relations*

which the villagers had evolved with reference of their economic organization were not attended to properly or at all….the income distribution, landholding, the expenditure pattern, and other economic attributes of the villagers were often treated in meticulous detail; but the social relations the rural folks had developed with respect to these economic attributes were, almost invariably, lost sight of" (p. 809). P.K. Bose (1984) rightly points out this by saying that "The economic aspects of the peasants were investigated in isolation from the analysis of the village power structure, kinship organization, family structure and villagers' social and cultural life. One could find the villagers described in terms of increasingly precise and abstract economic-statistical categories only, and taken as an object of governmental policies" (p. 11).

Village studies have got tremendous boost in the discipline of anthropology sine 1950s in India. However, the orientation of these village studies have taken a clear shift as they primarily focused on castes in local communities in contradiction to earlier economic studies by economists in the villages. These village studies by anthropologists shifted the focus from tribe to caste and tried to explain almost everything in terms of caste. While summarizing the list of these works Jodhka (2005) says like this:

> Having found a relevant subject in the village, the social anthropologists (many of whom were either from the west or were Indian scholars trained in western universities) initiated field studies in the early 1950s. A number of short essays providing brief accounts of individual villages were published by them in the newly launched Indian journal called *The Economic Weekly* (which later came to be known as the *Economic and Political Weekly*) during October 1951 and May 1954. These essays were put together by M.N. Srinivas in the form of a book with the title, India's Villages, in 1955. In the same year, M. Marriot published another collection by the name of Village India. Interestingly, the first volume of *Rural Profiles* by D.N. Majumdar also appeared in 1955…….The first full-length study of a village near Hyderabad in the Telangana region, *Indian Village*, by S.C. Dube also appeared in the same year (p. 55-56).

Commenting on these first generation village studies by anthropologists Beteille says that "Whatever else one may or may not get in the anthropological monograph on Indian village, one is bound to get in it a fairly detailed account of different castes in the village their functional interdependence and their hierarchical arrangement. Social anthropologists seem to have developed a kind of common strategy for describing the villages they study. After a few preliminary observations on regional background, ecology, etc., a detailed account is given of the 'caste structure' of the village, this then becomes the context within which subsequent

observations on economics, politics and ritual acquire their meaning" (Beteille, 1974: 41).

In the same context, in his preface to Mayer's book Raymond Firth (1974) says,

> Most of the books and articles about the agrarian problems of India that reach the western reader analyses of a general kind. They tell us of India – and leave us with a feeling of ignorance as to just how these problems affect different groups and classes of the people in different places. They tell of economics and leave untouched those social alignments and social values, which give the economic system its meaning. Or they tell about the social background as something which simply inhibits the development of these economic enterprise and efficiency – in terms of caste, taboos and sacred cows and sacred monkeys and leave untouched the social satisfactions to be found in the family and kinship system, in the caste associations and reliance's, and even in the complex, ritual evaluations of animals which share with man something of what he believes to be the divine spirit (p. V).

In this way, most of these village studies that were produced by the Indian anthropologists, looked into the differentiation of peasantry in terms of 'caste' only and ignored the elements of 'class' in understanding the agrarian hierarchy in rural India. Where as economists have done a good contribution to the class analysis of agrarian relations but these studies limited the 'class' to variables like land size, output etc. These studies also ignored the aspects of 'social organization of production, i.e. crop pattern, share cropping, division of labour etc. Regarding the late 1950s studies, P.K. Bose (1984) says that, all these studies in a way closed the gap between sociology and social anthropology on the one hand and widened the gap between the study and analysis of economic and social factors affecting the village organization (p. 14).

In a similar argument while stressing the composite understanding of both socio-economic aspects of rural society in India R.K.Mukherjee (1978) says,

> With reference to the same subject as 'Village Study', an economist may be found to dwell on themes of 'proletarianization' of the mass villagers as indicate of the dominant phenomenon in rural society whereas a social anthropologist and sociologist would be complementary concentrating his attention on the role of dominant caste in a village, on customization or sanskritization of the rural folks, etc. …Is there a link between the two processes or are they independent of each other? And if a link is there what does it stand for vis-à-vis the dynamics of rural society? Would it not be useful to explore that links for a harmonious picture of the life pulsating in a village? ….Until and unless the 'economic' and 'social' perspective towards 'village studies' meet at critical points, it is not possible to obtain a composite understanding of village life and a balanced view of the dynamics of village society. (p. 811-812)

However, these studies revealed the social reality of Indian villages on caste lines. They produced in concepts like Sanskritization, Westernization, and dominant caste by M.N. Srinivas and Universalisation and Parochialisation by Mckim Marriot which tried to bring clarity in understanding social relations at village level. Few sociologists and social anthropologists like Scarlett Epstein, F.G. Bailey, Mayer A.C., Mukherjee and Andre Beteille etc, filled the above-mentioned gaps in the later period in their studies.

Emergence of Agrarian Studies in India:

The interest of sociologists and social anthropologists in the study of agrarian social structure and change is a very recent phenomenon. Until sixties, these disciplines have ignored the vast population living in misery, poverty, institutionalized inequality and exploitation that were characteristics of the agrarian systems of developing societies. Unlike studies on caste, kinship, village community, or more recently, gender; study of agrarian relations did not occupy a central position among these studies. A major preoccupation has been to study the caste society as a clear cut system of social organization, while the network of social relationships involved in the organization of agrarian production has long remained of secondary interest. Economists and historians have been studying it for quite some time in the past but with perspectives specific to their own disciplines. It was only from 1960s that the relationship between landownership, control and use of land and social structure has been increasingly brought into focus by some sociologists and social anthropologists. (Beteille: 1974; Breman: 1993; Jodhka: 2003).

The study of agrarian systems is so far been little explored by the anthropologists in India. Broadly this research area looks into the issues like land and its utilization for productive purposes. There is no need to emphasize further on the requirement of such studies in a land based social economic system like India. The categories like landlord, owner cultivator, tenant and agriculture labour and their mutual relations constitute the heart of agrarian hierarchy. However, because of the preoccupation of anthropologists towards caste this aspect of hierarchy received very little attention from the anthropologists. But the agrarian hierarchy is the crucial feature of rural social system in India and unless we understand its nature and forms, the understanding of caste itself will remain incomplete (Beteille, 1974: 32).

Andre Beteille considers the following as the major topics of anthropological investigation in the study of agrarian systems. They are (a) technology (b) work cycle (c) organization of production; and (d) agrarian hierarchy. He adds to this saying that "these major topics are mutually related and each one of them is related to others not listed here, e.g. technology to ecology and productive organization to systems of land tenure" (Beteille, 1974: 34). He further says that in any agrarian society land is the most important focus of interest. For these kinds of studies, the understanding of existing relations centering around the ownership, control and use of land provides the most useful point of departure.

Mukherjee (1981) in his study criticizes the theoretical approach of 'deductive positivistic' in understanding the agrarian relations in the case of Indian society. After critically evaluating the theoretical orientations of the Marxist and the Weberian understanding of social reality, he concludes that Marxist approach, which adapts 'inductive inferential orientation', is best suitable in unfolding the realities of agrarian relations in India. P.K. Bose identifies three dominant sociological approaches in analyzing agrarian social structure in India. They are firstly, the approach which regards 'tradition' as an intrinsic element of and conceptual referent in the study of structure, secondly, the approach using 'natural', 'native', or 'indigenous' categories of providing basic analytical tools in the study of social structure and third the approach adopting concepts drawn from established Marxian, Weberian or even Durkheimian sociological traditions (P.K. Bose, 1989: 183).

In this background it becomes important to understand the agrarian social structure and change in India during different historical periods.

Evolution of Agrarian Structure before Independence:

Describing on the nature of agrarian system during the Mughal period Dharmalingam says that "Villages in Mughal India can be divided into two categories according to the nature of their land institutions: 'raiyati' or peasant- held and zamindari. A zamindari area comprised a village or a part of a village in contrast to the smaller holdings of 'raiyatí' peasant cultivators. The two systems were mutually exclusive: where one existed, the other did not. The zamindar collected his revenue share either by imposing a separate tax on the peasants or taking part of what was

collected for the nobles. In 'raiyati' areas the land revenue was collected by the village headman who was paid a certain percentage of the revenue as commission or given revenue-free land for cultivation" (Dharmalingam, 1991: A-47).

Further commenting on the emergence of differentiation among the peasantry in India till the 19th century, he says that "The interaction of different social, economic and political forces resulted in differentiated population. The direct producers, labourers had not only to maintain themselves but to support the ruling nobles and intermediaries who collaborated in exploiting the peasants. Concessions made to certain peasant elements in collecting tax revenue stratified the peasantry itself; thus the exploitative productive relations between the direct producers and the dominant class progressively widened the gap between the exploiters and the exploited" (ibid: A-48).

With the beginning of colonial regime further, changes took place in the agrarian social structure in India. In order to increase their revenues from agriculture they introduced new systems of revenue taxation in the countryside. By introducing historical and controversial permanent settlement act in the year 1793 they started the vesting of land rights to individual, and as a result, the zamindars, the hereditary revenue officers were the 'landlords' of India. Their intention was to increase the tax collection through this alignment however; they could not achieve good results with this new system especially in the parts of south India. Consequently they introduced a new system called 'ryotwari' under which the cultivator is supposed to pay the taxes directly to the state and along as he meets the revenue requirements from the state he can possess the property rights on that land. Another variety of land settlement was introduced during this time in the United Provinces, Punjab and Central Provinces under which the village was identified as the unit of revenue assessment. A villager of good 'social standing' was appointed to collect the taxes from the individual cultivators and paying the tax on behalf of the village (Dharmalingam 1991; Jodhka 2003).

However, despite of all these colonial interventions in Indian countryside, rural indebtedness and land alienation has spread steadily among the cultivators in the country. The moneylenders and landlords started exploiting the poor cultivators who

could not meet the revenue payment irrespective of the system of revenue settlement: zamindari, ryotwari, or mahalwai (Dhanagare, 1983). As remarked by Dharmalingam (1991), at the time of independence the Indian agrarian structure has the following levels: "…at the top of the ladder was the landlord class with absentee and non-cultivating zamindars dominating in the zamindari region, resident proprietors and cultivating landlords dominating in the 'ryotwari' and 'mahalwari' areas; followed by the trading and money lending class, and the peasantry: rich peasants, middle peasants, poor peasants and landless. The rural artisans constituted the last stratum" (p. A-50).

Agrarian Changes after Independence:

After Independence, the main task of the governments, both at central and states level, was to achieve economic development by transforming from a stagnant agrarian economy into an industrially developed one. Land problem was one of the key issues in economic development. Consequently, several committees and commission were formed to look into the land related issues and it was decided to introduce land reforms in the country. Broadly speaking, there were three major proposals that were included in the land reforms program. They are, firstly, Abolition of Intermediaries, second, tenancy reforms and last, ceilings on landholdings (Joshi: 1978). While describing the details of these land reforms Jodhka says that "The government of India directed its states to abolish intermediary tenures, regulate rent and tenancy rights, confer ownership rights on tenants, impose ceilings on land holdings, distribute the surplus land among the rural poor, and facilitate the consolidation of holdings. A large number of legislations were passed by the state governments over a short period of time" (Jodhka 2003: 1227). The land reforms could not achieve their goals as proposed by the Indian government. Jodhka (2003) further commenting on this says like this:

> most of the legislations had intentionally provided loopholes that allowed the dominant landowners to tamper with land records by redistributing land among relatives-at least on paper-evicting their tenants and using other means to escape the legislations…..However, it was only in rare cases that the landless labourers living in the countryside, most of whom belonged to the ex-'untouchable' castes, received land. The beneficiaries, by and large, belonged to middle-level caste groups who traditionally cultivated land as part of the calling of their castes. Otherwise also the holding structure continued to be fairly iniquitous though the proportion of smaller and medium-size landowners has been expanding (p. 1227-1228).

Commenting on the failure of several programs that were initiated during the post independence period Dhanagare says that “The initial measures for rural development in the form of community. development program, land reforms and co-operative institutions, introduced in the first two decades (1947-67) of the independence, had not been particularly effective either in increasing farm productivity substantially or in removing the spectre of rural poverty, unemployment and also of the ever-growing socio-economic inequalities” (cited in Dhanagare, 1987: AN137).

Describing the condition of India during this period Gough says that “In the mid-1960s, India experienced a food crisis resulting partly from drought and partly from maldistribution and politically motivated withdrawal of US aid. In 1965, chiefly under the influence of the US government and the Ford Foundation, particular areas or "package districts" were chosen for intensive agricultural development with modern inputs and machinery. Most of these were bought from US corporations, or manufactured and processed by them in India in collaboration with Indian firms. The accent was now on technological progress, regardless of social structure, and land reforms tended to be either pushed less vigorously or forgotten” (Gough, 1977:51). In this background the Indian government initiated ‘green revolution’ program in the country.

The ‘Green Revolution’ Program:

For the first time, the word ‘green revolution’ was coined by William Gaud at a meeting of the Society for International Development in DC in 1968. In this meeting while describing the result of US and philanthropic funding for fertilizer, irrigation, improved hybrid seeds, state support and credit Gaud says that “These and other developments in the field of agriculture contain the makings of a new revolution. It is not a violet Red Revolution like that of the Soviets, nor is it a White Revolution like that of the Shah of Iran. I call it the Green Revolution” (cited in Raj Patel, 2012: 5). While defining this term Farmer says “The term 'Green Revolution' came into use in the late 1960s to cover 'the new technology' and its then-predicted consequences. This technology comprised new, high-yielding varieties (HYVs) of cereals, especially dwarf wheat and rice, in association with chemical fertilizers and agro-chemicals, and with controlled water-supply (usually involving irrigation) and new methods of

cultivation, including mechanization. All of these together were seen as a 'package of practices' to supersede 'traditional' technology and to be adopted as a whole" (Farmer, 1986: 175-176).

Parthasarathy opines that "The green revolution has to be understood more as a broader ideology of rural transformation whereas programs such as HYVP, Integrated Rural Development Program (IRDP) and the like are specific institutionalized measures for translating the green revolution ideology into practice" (cited in Dhanagare, 1987: AN 137). In the words of Frankel, green revolution carried the conviction that "agriculture is being peacefully transformed through the quiet workings of science and technology, reaping the economic gains of modernization while avoiding the social costs of mass upheaval and disorder usually associated with rapid change" (Frankel, 1971: V).

Nevertheless the green revolution program was launched in some parts of India initially, and later was spread to other parts of the country. The impact of the program varied from one region to another one, and also across different socio-economic categories of the rural India. The implementation period of this program was also long and was carried out at different time period across various regions in the country. A momentum has begun among the social science academia in analyzing India's agrarian social structure and its change in the due course. In this background several studies were initiated by several scholars and institutions to understand the impact of this program in these areas. The impact of green revolution on rural India has attracted several economists to undertake studies in different parts of India. This in turn resulted in a debate on mode of production in agriculture in the country. "The Indian debate on the mode of production revolves around the question whether, in the last 15 or 20 years, there has been a decisive movement in Indian agriculture from a feudal mode of production to a capitalist mode of production" (Alavi, 1975:1235).

While summarizing this debate among the Indian academia Sahay (2001) in his book says that the debate has begun with the work of Rudra (1970) who concluded from his study that Indian agrarian system is pre-capitalist or feudal. Arguing against this position scholars like Chattopadhyay (1972), Gough (1980), Banaji (1972, 1973, and 1977), Omvedt (1981), Harriss (1982) and Breman (1985) argued that Indian

agrarian system is capitalist. These scholars cited reasons like the presence of self-cultivation, mechanization, profit orientation, free wage labour and existence of free market in support of their argument. Utsa Patnaik (1971, 1972) argues that even though capitalism has established its roots still non-capitalist mode of production dominate the Indian agriculture. In support of her argument she cited reasons like no use of surplus value for investment and reinvestment, presence of personalized dependency relations between landless wage labourers and their employers and improper development of capital in the spheres of money lending and trade. On the other hand there were scholars like Bhaduri (1973), Prasad (1973, 1974), and Sau (1973, 1975 and 1976) who argued that the mode of production in Indian agriculture is 'semi-feudal'. They cited reasons like presence of sharecropping, indebtedness of rural tenants, the exploitation in terms of usury and landownership by the same class, massive unemployment, non-monetized wage and market relations, non-profit oriented attitude of landowners by not utilizing the resources with poor investment attitudes in support of their argument (p. 12-13).

While drawing a 'balance-sheet' of this debate on the mode of production in Indian agriculture Alice Thorner observes that "….The school of thought which tried to take account of these aspects by labeling Indian agriculture semi-feudal has withdrawn from the debate after about the middle of the 1970s, but there is still talk of the persistence of feudal and semi-feudal relations of production. Similarly, the original proponents of a colonial monde have themselves dropped the term, while the term 'dual mode' has, to my knowledge, attracted no followers. But the concepts of the preservation/destruction of earlier modes of production by capitalism, and of the articulation of different modes within a single social formation continue to figure in the discussion" (Thorner, 1982: 2063). He further concludes that "… towards the end of the debate there seems to have emerged a consensus that though it may have its local specificities and considerable regional variations, the capitalist mode of production indeed was on its way to dominating the agrarian economy of India and most certainly that of the regions which had experienced the green revolution" (cited in Jodhka 2003: 1232).

In the due course several studies were conducted on agrarian structure and change in India across different disciplines of social sciences in the country. The details of such studies are mentioned in below.

Review of Literature

For a better understanding, the available studies are classified into the following sub themes highlighting their findings.

Studies on Agrarian Social Structure and Change:

Frankel (1971) in his study concludes that the introduction of new technology with 'green revolution' program has quickened the process of economic polarization in the rural areas in India but also it has resulted in the increasing social antagonism between landlords, and tenants, and landowners and labourers. In a similar argument, Mencher (1978) in her study argues in Tamil Nadu, with the new technology even though production of paddy is maximized it has resulted in conflicts between tenants and labour groups due to lack of co-operative approach in implementing the program. Parthasarathy and Pothana (1983) in their study form a canal irrigated paddy cultivating delta district from Andhra Pradesh concludes that there is trend of capitalist agricultural growth however with a slow growth of disintegration of small peasants that is taking place in the study area.

Dhanagare (1987) in his article argues that the 'green revolution' program has an inherent pro rich peasant bias and that is the reason it has failed in reducing the socio-economic inequalities in rural India. Gorter (1989) from his village study of South Gujarat region observes that with the agrarian change that took place with the introduction of canal irrigation shows a trend of capitalist agriculture however mostly limited to the large landowners. Interestingly, in contradiction to such development there is reappearance of tenancy relations, with large farmers cultivating the lands by taking them on rent.

G. Satyanarayana (1992) in his comparative study of both irrigated and non-irrigated villages concludes that with the introduction of irrigation there is a reduction of female participation in agriculture activities among the farmers, with an increased

demand for agriculture labour which can be attributed to the improved economic position of the farmers. Higher utilizationn of machinery and disappearance of tied labour is found more in the irrigated village when compared with the non-irrigated village. G.K. Karanth (1995) in his study of Karnataka village finds that the introduction of new technology (in the form of 'sericulture' i.e., cultivating mulberry plants) and monetization of agriculture has not eroded the tradition of 'jajmani relations' and on the contrary it has adapted itself to the changing needs and requirements of the emerging situation.

In their study from Tamil Nadu Athreya, Djurfeldt and Lindberg (1990) argues that the 'green revolution' has resulted in the de-concentration of land among the traditional landlord families with new social groups emerging as the landowners, disappearance of family labour with emergence of permanent farm labour and also the emergence of a system of gang labour who are paid collective wages on piece-rate basis in the wet areas. Similarly Harriss (1992) argues that the introduction of 'green revolution' has resulted in the increasing numbers of and area under marginal and small holdings, increasing importance of casual wage labour and a relative decline in significance of self-employment' in India. He describes this process of agrarian change as, proleterianization without depeasantization, in the sense that the extent of dependence on wage work has increased while there is no evidence of depeasantization among the small land holders.

Vasavi (1994) in an anthropological study of dry region of Karnataka state analyses, the ecological, social and cultural shifts that are taking place in the local agricultural practices due to the advent of inputs of modern agriculture. In this process, it is found that both the modern agriculture is reconstituting the culture of the region and also there is a continuity of ethos that connects humans, land and seeds as part of traditional agricultural practices. In a longitudinal ethnographic village study, Epstein (1998) observes that irrigation has brought several changes in terms of agricultural practices with a shift from subsistence oriented agriculture to market oriented one, replacement of agriculture labour with mechanization, emergence of non-agricultural activities within the village, increased credit facilities for the farmers and also increased economic disparities in the village. Mohanty (1999) while analyzing the impact of modernization of agriculture in Maharashtra argues that even

though the new measures have brought prosperity among all categories of peasantry, the large farmers have emerged as rich class dominating the economic and socio-political spheres of rural life on the other hand small and marginal farmers and the landless agricultural labourers remain disadvantaged.

Narasimha Reddy (2001) in his article argues that with the introduction of new technology, the agrarian change in India is showing the trend of growing landlessness and a high degree of concentration of land among peasants. He also observes that there is an emerging trend of non-farm economic activity among village population. Anil Kumar (2006) in his study of villages from South Telangana argues that the process of agrarian change that is followed with the introduction of canal irrigation has resulted in the strengthening of the dominant landlords however, it has not led to the clear cut polarization of different agrarian classes in the due course.

Studies from Class Perspective:

In the beginning the studies on agrarian social structure and change were dominated by the class perspective by the economists.

Utsa Patnaik (1976) argues that the Marxist theory of class differentiation within the peasantry is a powerful alternative theory to closely relate other two theoretical positions called "neoclassical" and "neo-Populism" in India. According to her this theory provides the necessary analytical tools for looking at the agrarian structure both at points of time and its evolution over time and she suggests the 'labour- exploitation criterion[1]' for identifying classes at the empirical level. Further on the basis of this criterion she categorizes the agrarian classes into landlords, rich peasants, middle peasants which includes the sub categories of upper middle and lower middle peasant, poor peasant and full time labourer. However, Rudra (1978) proposes a different categorization of Indian agriculture population. For him, there exist only two agrarian classes namely, 'the class of big landowners' and the other 'the class of agricultural labourers'. According to him these two classes in antagonistic contradiction with each other, and this contradiction constitutes, the principal contradiction in rural society in India. Bardhan (1979) while accepting

[1] For more details see the article

Rudra's broader categorization of agrarian classes disagrees with him for neglecting the significance of middle peasants as a separate class.

K L Sharma (1983) in his article criticizes Utsa Patnaik's analysis of the differentiation of peasantry saying that the classification is derived from Mao's classification instead of taking it from the structure of Indian society. He argues that she ignored the specificity and historicity of Indian society in her framework and measures exploitation ratio purely in a mechanical way and further tried to globalize the capitalist mode of production in Indian agriculture ignoring of complex character of land relations in India. P K Bose (1984) in his book proposes a new scheme of class analysis in which he categorizes peasants into five broad categories namely landlords, rich peasants, middle peasants, poor peasants and peasant proletariat. Even though landownership is one of the criteria he does not consider it as the principal criterion for demarcating classes. The type of labour performed, and other modes of exploitation also play a significant part in this scheme. He concludes that each class is a composite category based on different forms of economic, social and cultural relations in case of India.

Studies from Caste Perspective:

Hindu society is consisted of different caste groups that are endogamous in nature and hierarchically arranged in terms of social status when compared with each other. Since ages the rural society in India has been composed of such caste groups and they were also assigned different occupational works which again have unequal socio-economic values in the society. Commenting on this typical nature of Indian society Berreman (1983) in his article says "India is unique among the world's peasant societies in the degree and consistency with which even the humblest of its peasants with slightest control over land have at their command an underclass of lower castes who perform agriculture labour and service occupations in support of them. To a very major extent, owner and worker, exploiter and exploited, identify their economic interests with their caste interests, and their castes interests with family interests. …I would suggest that caste was the form that consciousness was moulded into early in the history and development of peasant India" (p. 247).

Rajatsubhra Mukhopadhyay (1980) in his study of agrarian structure of a village in West Bengal observes that the agrarian categories correspond to the caste categories. He found that while the dominant landowners hail from upper caste the landless are from the scheduled castes. He finds the caste bias in the case of tenancy as well as the land owners prefer to lease out their agriculture land for share cropping only within their own caste members. He concludes that because of their economic dependency with landowning classes controlled by the customary obligations, tenants and labourers are rarely united in hostile rivalry against the landed castes. Taking this as an opportunity, the landowning castes, as a class, reorganize their activities and strengthen the caste ideologies, thus shaping agrarian relations.

In a similar kind of argument Gail Omvedt (1980) argues that it is not because of 'economic' distinction that some peasants have become impoverished but because of their 'ascriptive' position that is a result of caste system generated a permanent class of agriculture labourers. She concludes that a striking result of this distinction is that in the campaign of 'land to the tiller' resulted in favour of landholding peasant/ tenant ignoring the untouchable field servant who worked regularly on the land by performing heavy labour. This is because by the simple fact that claim to land was made on the basis of historically social organized right which he had been excluded from by his very caste status. Tanka Bahadur Subba (1984) in his article puts up a hypothesis that 'the caste and agrarian relationship is expected to differ from one place to another, from one social / cultural condition to another'. From his study, he found that in general, the caste-class relationship is less corresponding in the higher altitude villages than in the lower altitude villages. Due to its agrarian history those who came earlier got the lands irrespective of their caste background. Indu Mathur (1987) in her study argued that with the introduction of new technology in agriculture the rich, high and middle caste farmers got hugely benefitted because of their pre-existing higher socio-economic position in the society. Further they continue to hold their traditional dominance and control over the agricultural labour with most of them hailing from the lower castes.

Gopal Guru (1997) in his paper explains about the Dalit land question and emerging agrarian contradictions as part of it. By critically evaluating Bolsil's article on 'privatisation of commons for the poor', Gopal Guru argues that the 'gairan land'

that is distributed to Dalits 'on papers' infact did not occur in reality. Moreover there was an alienation of these lands for Dalits where government departments, local power structure, conflict with non-dalits resulted in much misery for Dalits in the region and further instead of reducing dependency, has reinforced the dalit vulnerability to peripheral agrarian capitalism. Anand Chakravarti (2001) in his study argues that agrarian class relations in Bihar are embedded in caste, because whether a person controls land or not is conditioned by that person's caste status. For him, both the traditional and new dominant castes have privileged access to material and political resources, and constitute the dominant class. While a person who is born in a low-ranking caste becomes part of vast rural underclass, subject to caste and class exploitation, as well as state repression.

Hira Singh (2002) in his study in Rajasthan finds similar kind of correlation between the caste and its position in agrarian hierarchy. From his empirical evidence he found that caste is an important factor in the agrarian structure of Rajasthan. He says that while the landlords are comprised of Rajput caste members the peasants were composed of castes like Jat, Bishnoi and others. Alakh Sharma (2005) while discussing the trends in agrarian relations in Bihar finds that that the forward castes still continue to be big peasants and landlords while scheduled castes are mainly agricultural labourers. However, he finds there is an upward mobility among the middle castes mostly from the dominant ones towards the higher class in the hierarchy. The lower middle castes have consolidated their position and good number of them raised to the rank of middle peasants.

Village studies conducted in Telangana by Anil Kumar (1999), Sudharshan Reddy and Venkateswara Rao (2008), Ramulu (2008) and Sivaramakrishna Rao (2008) have observed a trend of disintegration of large landholdings belonging to the dominant landlord castes and emergence of small and medium landholding cultivators among the backward castes in the villages. In a similar kind of study from a south coastal delta village by Atchi Reddy (2008) it is found that along with backward castes even good number of scheduled caste households emerged as the small and medium cultivators in the due course.

Studies from Gender Perspective:

The status of women in Indian agrarian social structure and the impact of agrarian change upon women have not got much focus in the academia. There are few studies that looked upon these issues and the details are mentioned below.

Bina Agarwal (1998) in her article analyses that, ‘gender perspective’ poses the following challenges to the conventional economists in understanding the agrarian change. Firstly, it challenges the assumptions that the household is an undifferentiated unit in which members share common preferences and interests. The second challenge is posed by the observation of gender differences in preferences, as revealed in income-spending patterns as well as in the use of productive resources in a household. Third, a gender perspective challenges the assumption that women's class can be derived simply from their family's property status and class position. The fourth challenge is posed by the need to understand the process of intra-household dynamics and allocations in a household.

Manabendu (1982) through her study finds that that for certain types of agricultural operations like interculture, transplanting and harvesting female labour is preferred by the employers by the very nature of the work. Apart from this female labour is preferred to male labour for certain operations where cultivation is non-mechanized. Based on the statistical data she observes differential declining rate of female agriculture labour in different states in India and she does not attribute technology as the single reason for such trend. In her study Ursula Sharma (1982) remarks that, it is not the actual amount of work and nature of work carried out by women, but the pattern of farm management and land ownership that matters in understanding the levels of female participation in agriculture.

Deipica Bagchi (1981) in her study analyses that modernization of agriculture resulted in displacement in the division of labour among women. However, the degree of this alienation depends on the socio-economic and cultural factors of the region. Further it is found that the impact of such development alienation has greater significance in less developed regions and lower caste and economic class groups. In a similar kind of study K.Saradamoni (1982) while describing the impact of land reforms on the status of Kerala women says that there is a clear differentiation in the

daily routine activities, aspirations, utilization of income among the women that belong to the households of different agrarian classes like landlord, tenant and agriculture labour. It is also found that the participation of manual labour in agriculture fields by these women also differ accordingly with women from tenant and labour households working in the fields and women from the landlord houses were avoiding it.

Sudha Pai (1987) in her study finds that the status of female agricultural labour has declined in the post 'green revolution' period in India. Based on the statistical data analysis she analyses that by pushing out the female agriculture labour even from the lesser important agriculture activities the new technology has resulted in relegating women to a secondary position in the labour market and rural economy. In another study Da Corta and Ventakeshwarlu (1998) while examining the effects of 'green revolution' induced agricultural growth on labour and domestic gender relations in villages in Andhra Pradesh observed that due to the effects of economic growth during this period the male labour started moving to off farm occupation with better opportunities available for them outside agriculture. To tackle this situation the capitalists started hiring the female labour, which are cheaper, more easily disciplined, more economically dependent and finally less free than a male labour.

In a similar kind of observation Revathi (2008) in her village observes that with the result of the 'green revolution' induced agricultural growth the male labour shifted into non-farm activities which resulted in the increased demand for female participation in agricultural activities. She found a new form of female tied labour locally known as 'ratham[2]' that has emerged with an annual mode of wage payment where women from the landowning castes becoming work supervisors over the female agricultural labour with most of them hailing from the scheduled castes and scheduled tribes background.

Garikipati (2009) in her study in two villages of dry region also opines that despite of increased participation of woman in labour market there is a 'gender based resource division' in the household between the male and female members. However,

[2] For detailed information on this see Revathi, 2008, p. 172-173.

in her analysis she found that providing ownership of productive assets to women would result in significant improvement in women's relative domestic power and her ability to bargain for better working conditions in the labour market. Finally through based on her findings she recommends for the entitlements of land rights to women along with any other source of assets that can result in women's direct contribution to the income of the family.

Rural Labour Perspective:

Majority of the agrarian population in India is comprised of agriculture labour with a significant contribution of their services to different activities of agriculture. Most of these labourers are landless and completely depend on their wage earnings derived from agriculture work. Hence, any change that take place in the agrarian social structure and forces of production will certainly have huge impact upon the living conditions of the labour population in the country. Many studies have come up in the post land reforms and post green revolution period to analyze the impact of such measures on these vulnerable group in rural India.

Kathleen Gough (1983) in her study observes that there has been an increase in the number of both male and female agriculture labour during the period 1951-76 in Tamil Nadu. She argues that the reason for this are multiple in nature, firstly, during this period the landlords evicted their tenants from cultivating their lands so that they can avoid the granting of benefits to the tenants as part of new tenancy laws and also to manage their own cultivation and profit from using the newly introduced 'green revolution' technology since 1965. A good number of people from artisan castes also joined the labour group as their traditional work could not make a living for them. Apart from a considerable number of landowners had to sell their lands because of debts, family expenses and the growing cost of agriculture inputs and of labour.

Mencher (1983) while analyzing the changes among agriculture labour in the wet rice region of Kerala also found similar kind of increase in the population of agriculture labour in the region. Further, he observed that these labour could able to achieve fixed working hours for them by organizing themselves in opposition to the landlords. She says that in the contemporary Kerala no reports of atrocities against

untouchables are found as the friction here in is of ‘class’ nature with agriculture labour is comprised of different communities and castes who in turn collectively stand against the landlords for their rights in the work place. In a similar kind of work, Bijay Bihar Som (2005) from his study argues that with the introduction of land reforms and commercialization of agriculture in West Bengal the agricultural labour have emerged as a class and getting unionized and also they could able to secure an opportunity to share in rural power, though marginally. With the new generation of them preferring to work on contract are now in a position to bargain with their employer.

Jence Lerche (1998) in his comparative study of two villages from Uttar Pradesh argues that the dynamic economic development does not necessarily weaken the strong social and economic dominance of the landlords over the labour even though the latter do not need to have a direct dependency for their livelihood. On the other hand it is found that less dynamic economic development can allow for a better position for the agricultural labourers. Ramachandran, Swaminathan & Rawal (2002) in their village study from Tamil Nadu concludes that despite the advanced agriculture growth in the region and positive changes in wage-rates and workers’ earnings during the past two decades, chronic employment insecurity, very high levels of poverty and indebtedness continue to exist among the agriculture labour households.

Sudha Rao (1984) in her village study observes that introduction of canal irrigation increased the demand for labour both within and outside of the village. She explains that firstly, it provided canal construction related works within the village, secondly, it facilitated shift in more intensive crops like sugar cane and paddy, thirdly, irrigation encouraged double cropping with its consequent increase in demand for agriculture labour. Finally, with the establishment of sugar factory with up gradation as district headquarters in nearby town boosted urban wage and salaried employment. Kalpana Bardhan (1989) in her study while commenting on the post ‘green revolution’ period analyses that while growth is taking place in Indian agriculture it is not using as much labour nearly it could and it should. She concludes that the trend of heavy mechanization adopted by the rich farmers is resulting in the displacement of labour from agriculture resulting in the poverty among them.

Freedom Vs Unfreedom of Labour:

The issue of changing freedom levels of the agriculture labour with respect to the position of attached labour in the post green revolution period scenario in India has attracted a serious debate among the researchers. Bhalla (1976) in her study from Haryana observes that, the relations between the landowners and labour are changing as there is a trend of landowners entering into formal contract with the attached labour which for her is a 'modern' phenomenon. In a similar kind of view, Bardhan and Rudra (1978) from their findings from eastern India argue that the institution of attached labour cannot be equated with feudalism and it is the employee's need for job security and the employer's need for a dependable and readily available of source of labour supply but not the feudal subordination provide the major motivation of attached labour contracts.

In contrary to the above, Brass (1990) from his observations of Haryana agriculture analyses that farmers are using the mechanism of debt to control and discipline the agricultural labour through attached labour system. According to him this could be called as a form of bonded labour system and notes that a process of deproletarianisation is taking place in Haryana agriculture. Breman (1993) in his longitudinal study concludes that the situation of bondage that is marked with the attached labour system (locally known as '*hali*') has come to an end. However, he observes that the remnants of the former bondage can be seen in the attitudes of dominant landowners towards their regular workers. Harriss (1993) from his case study of a district from Tamil Nadu observes that there is a pattern of 'proletarianisation without depesantisation' is taking place among the small holding farmers.

Jodhka (1994) in his study of Haryana agriculture argues that the attached labour system functioned more as a labour mortgage system for interest free credit rather than subsistence guarantee agreement. He observes that there is trend of weakening of this ideology of patronage and loyalty with the counter tendencies from the laboueres that have given rise to tensions and conflicts. Further with the availability of employment outside agriculture and availability of alternate sources of credit it is leading to the gradual decline of the system. J. Mohan Rao (1998) after considering the theoretical basis of the categories freedom/ unfreedom employed in

both liberal and Marxian thought he concludes that so long as politico-juridical constraints coercing one of the contracting parties are absent (specifically, this includes the intergenerational transfer of attachment), attached labour is not an unfree relation.

Wages of Agricultural Labour:

The introduction of 'green revolution' technology and its impact on the wages and increased/decreased opportunities of employment for the agricultural labourers has been a major topic of discussion in the Indian academia. The opinions vary from each other as they were conducted in differential time periods and also different regions. Krishnaji (1971) in his article argues that in states like Punjab after the introduction of 'green revolution' program the wages of agricultural labourers were kept low through the import of labour from neighbouring states. In support of this argument, Herdt and Baker (1972) in their study also found that in most parts of India increased demand for labour that is caused by the introduction of high-yielding varieties has not resulted in the increases in agricultural wages. However, Jose (1974) from his latest data found that there is trend of increase in real wages of agricultural labourers in some states in the country.

In contrary to this Bardhan (1984) in his findings, observed that there is a decline in real daily wage earnings of agricultural labourers in all states except Uttar Pradesh. Pathasarathy and Adiseshu (1982) argued that despite considerable rise in money wages, real wages of agriculture labour in Andhra Pradesh are marked by stagnation. Further, they found that there is no association between trends in real wages and per capita agricultural production of rural India. Jose (1988) in his later study, based on statistics from Punjab state (where rapid agricultural growth took place after the introduction of 'green revolution' program) predicts that the trend of increase in agricultural wages that is taking place in some regions ('green revolution' induced regions) of India might come to stand still at some point of time.

Unni (1988) in her study observed an improvement in the standard of living of agricultural labourers, however the year to year fluctuations in real earnings indicate that casual workers in agriculture are a very vulnerable section of the society. Gaiah and Spinedi (1992) from their study conclude that the growth of agricultural

labour force did not necessarily result in declining of the wage rates, the impact of technology on the wages depends on whether it is land-saved or labour-saved input that is used and finally the role of 'oligopsony' (a few large employers) also becomes crucial in determining the wages of agricultural labour in case of India.

Sunanda (1988) finds that that the average daily wage for a full day's work earned by women is lower than that earned by men in every operation including transplanting and weeding which are largely female tasks. Moreover in the case of schedule caste and scheduled tribe women in few agricultural operations the wage differentials are further increasing. In a similar kind of observation, Ram Singh (1996) finds that the benefit of agricultural growth has not been equally or proportionately distributed between male and female agricultural wage workers, or across the states in India as revealed by the continued differences in wage rates and wage gaps in the study.

Prudhvikar Reddy (1998) while analyzing the wages of agricultural labour in Andhra Pradesh, among the HYV technology paddy crop regions reveals that, the real wages of all categories of labour have increased in all regions of the state however, the magnitude of such increase is found to be differing from region to region. In a similar finding, Narayanamoorthy & Deshpande (2003) from their data from different states for different time periods concludes that there is a positive and significant relationship with the availability of irrigation and real wage rate of agricultural labourers. It is also found that the wage gap between the male and female agricultural labourers has been narrowing down in this process.

Sheila Bhalla (1988) in her study observed that with the rapid use of HYV technology and consequent increase of agricultural production results in increase employment opportunities for agriculture labour in those areas. However, it also found that after certain level of agricultural expansion caused by the modern technology it seems there could be a reverse trend in the generation of employment for agriculture labourers. Chandrashekar (1993) in his study concludes that the trend of occupational diversification among the agricultural labourers is reflection of the fact that still many of the rural areas in the country are yet to experience the full impact of the process of 'green revolution' program.

Maria (1997) observes a trend of employment diversification is taking place in rural Tamil Nadu which however she feels that it is not an empowering factor for the agricultural labourers as they are forced depend on petty casual labour works that will not be able to provide them income security. A similar kind of conclusion is drawn by the authors Lanjouw and Shariff (2004) who observed that penetration of non-farm employment varies among different communities and also states in India. Ranjan (2009) from his study concludes that the growth of non-farm sector in Uttar Pradesh is the result of distress induced employment with majority of them hailing from the background of agricultural labourers.

If we observe the above literature review, we could draw some broad trends and findings from these studies. During the pre independence period the village studies were preoccupied with the 'class' approach while understanding the rural realities, with most of them dominated by the Economists. Later during the 1950s several village monographs were published by both Indian and foreign sociologists and anthropologists in which 'caste' was the primary focus to understand the rural dynamics. Later there emerged agrarian studies that took a balanced approach of looking at changes in terms of both 'caste' and 'class' in their studies.

The study of changing agrarian social structure has become a predominant area of study in the post 'green revolution' period in India. We found several scholars from sociology, anthropology and economics contributing to this area of research that has resulted in a much famous 'mode of production debate' in the Indian academics. Initially such studies were comprised of economists studying the phenomenon of agrarian change through the method of analyzing through macro approach; on the other hand sociologists and anthropologist were analyzing through in-depth understanding of micro level village studies. Nevertheless in the later years it is found that even economists started analyzing the broad trends of agrarian change from collecting data through village studies. These studies brought several important issues such as growth of capitalist agriculture (even though restricted to large farmers), increasing socio-economic inequalities among the rural populations, the process of 'de-proletarianisation', the 'freedom' and 'unfreedom' of agricultural labour, 'feminization of agriculture' and further the emergence of non-farm occupations at the village level.

Majority of these studies are conducted by economists that have drawn the conclusions on the basis their macro level data analysis. Nevertheless these observed trends cannot be attributed to all the regions in India and they are not homogenous in nature even if they are observed in multiple regions. This can be attributed to the diversity of the country that has a composition of different set of social structure, culture and political organization. Moreover, from the findings of these studies, it is observed even such observed trends do keep changing.

Given the diversity of natural and social environments in South Asia, Farmer remarks that "It is prima facie not to be expected that 'the new technology' would operate in the same way or have the same social and economic effects all over South Asia, or even all over any one of its countries…. that the 'Green Revolution' is evolving all the time in various ways. Conclusions drawn and generalizations made at one point in time for a given area are not valid a few years later" (Farmer, 1986:190-91). These observations strongly recommend for conducting many more village studies in India as the impact of new technology would certainly have a differential impact due to their historical, political and cultural specificities of each region. Further an anthropological study of impact of new technology provides us deeper and empirical understanding of changes that are taking place among various socio-economic groups in a village.

Statement of the Problem:

Drawing the observations from the above mentioned review of literature on agrarian change in India, the present study tries to look into the following research questions through this study.

- Can we generalize the findings of these studies as an all India phenomena?
- Does the introduction of modern technologies such as 'green revolution' in Indian agriculture result a similar kind of impact or does it show variation for different regions?
- Can we ignore the historical understanding of such agrarian change which is evolving into different shapes at different periods of time?

- What is the impact this new technology in organizing different agricultural activities and the labour arrangements?
- What is the nature and level of impact of such technology among different socio-economic categories of agrarian population?
- What are 'old' practices of agrarian population that disappeared and what are the new practices that are emerging in the contemporary time?

With the above mentioned research questions in mind, the present study proposed the following objectives.

Objectives of the Study:

1. To understand the agrarian history of the study region/village before the introduction of new technology.
2. To examine the agrarian class structure in the village.
3. To describe the organization of agriculture production among different socio-economic categories of farmers.
4. To analyze the emerging trends of agrarian change in the village.
5. To delineate the rise of various non-farm occupations among the agriculture labour and farmer households.

Methodology:

The present study adapts case study method in trying to understand the changing agrarian structure. For this purpose, an intensive ethnographic village study was conducted. The selection of this village for the purpose of the study has gone through different stages of selection process before zeroing on the study village. Several parameters were considered in this process. In selecting the study village, initially census data was referred to collect the list of all the villages in the district. Among these, villages that fall in the command area (that come under canal irrigated cultivating area) are only shortlisted. Lists of villages that consist of 200-400 households were shortlisted from each mandal that falls in the command area. From this, a preliminary pilot study was conducted among two to three randomly selected villages from each mandal of the command area. During the personal visits of such

villages details on cropping pattern, occupational structure, predominance of agriculture, caste composition are collected. The present study village was selected on the basis of availability of canal irrigation, predominance of agriculture; its allied occupations and multi-caste composition; and finally the medium size of the households in the village.

Study Area:

The study is conducted in Telangana region of Andhra Pradesh, which is one of the most underdeveloped regions in India. Telangana region has witnessed the strong oppressive rule of feudal landlords, which in turn resulted in a massive peasant armed struggle against this exploitation in the pre-independence period. The region was being neglected constantly in the post-independence period also by the rulers. Geographically the region belongs to a semi-arid and dry type where, agriculture is still dependent on traditional sources of irrigation like rain and private well irrigation with some exceptions where canal irrigation was introduced in few pockets. In the recent time, the dry parts of the region have witnessed the suicides of farmers, because of the crop failure, indebtedness and lack of irrigation facilities. On the other side of the coin, we have also witnessed huge growth in agriculture production among the canal irrigated areas in the same Telangana region. During 1985-2001 periods, growth rates in Telangana agriculture have been higher when compared with other non-Telangana districts, as well as entire Andhra Pradesh state. In particular, some of the northern Telangana districts (it covers Karimnagar District) were ahead in agriculture growth when compared with southern districts for this period. There has been a high growth in the use of HYV seeds, fertilizers and pesticides by the farmers during this period (Vakulabharanam, 2004: 1422-1423). It is very well recognized that Telangana has its own social, cultural, economic and political history and the study of changing agrarian structure in the wake of recent agriculture growth in the region appeals more for a social scientist.

One village has been selected from Karimnagar District of the Telangana region to conduct intensive fieldwork as part of the present study. Karimnagar is one of the ten districts of Telangana region located in the northern part of it. The district has witnessed an oppressive exploitation of feudal landlords in the history where acute disparities of income levels were present among the rural population along with the

stagnant agriculture economy during the pre-independence period. This situation has not improved further even during the post independence period, which lead to the much noted radical peasant movements of Sircilla and Jagityal against the exploitation of feudal landlords in the district.

Nevertheless, from the last couple of decades few areas of this district have been witnessing an enormous growth in terms of agriculture with the introduction of canal irrigation through Sri Ram Sagar Project popularly known as SRSP. In fact, in the recent statistics released by the government, the district has stood first in the production of paddy grain in the state of Andhra Pradesh. The agrarian social structure in the district has been undergoing several changes from the feudal set up to the recent capitalist oriented cultivation with the introduction of 'new technology' in agriculture in terms of providing canal irrigation along with the modern inputs of agriculture like HYV seeds, fertilizers and pesticides. The study village falls in the command area of the district which has received the above mentioned technology inputs as part of the 'green revolution' program in India.

TOOLS AND METHODS OF DATA COLLECTION:

Fieldwork:

Intensive fieldwork has been considered for several decades to be the major if not the distinctive method of social and cultural anthropology, and until recently the discipline has been concerned primarily with the study of small-scale societies, primitive and peasant. The present study also involved an intensive field study in the selected village for the duration of eight months during the period 2006-07 covering the entire agricultural cycle in the village. Initially the researcher engaged in informal talks, attended public gatherings and meetings in the village on different occasions in order to build up rapport with the village inmates. This process has helped the researcher in identifying some key informants in the village. Later household survey was conducted to collect data on various social variables like demographic particulars, gender, marital status, literacy levels etc. Apart from this important information on economic variables like occupation details, size of land holdings, quality of soil, ownership of means of production, livestock and credit details were also collected

from each household in the village. All these details were collected through administering a structured household schedule during the fieldwork.

Observation:

Observation is an inherent quality of human being. However, the scientific observation involves certain method of observation in given social context and also given theoretical frameworks. The present study takes participant observation as one of the major tools of data collection in the village. As observation reveals the interconnected threads of relations between different communities it becomes crucial for the present study in order to understand the existing agrarian relations in the study village. Data were collected on different agricultural activities, crop patterns, division of labour, technology used, social gatherings, and labour relations through this method during the fieldwork period in the village.

Interviews:

Interview is one another method of getting in depth information on any phenomena from the people. Different kinds of interviews were conducted with different set of people in the village. The respondents vary from old people to children, landlords to agricultural labour, men and women, upper caste to lower caste etc. covering differential backgrounds in the agricultural population. Personal in-depth interviews were also conducted in order to get data on agrarian history of village, life experience in terms of relations with others, ambitions, achievements, failures, setbacks, happy and sad movements, etc. in terms of their relation to agricultural activities.

Case studies:

Selective interviews are turned into case studies, which include all social and economic categories of people in the village.

The data that were collected through the fieldwork consist of both quantitative and qualitative aspects. With regard to the quantitative data, statistical analysis techniques like SPSS were used by proper identification of the variables to analyze the data that is collected. In the case of qualitative data, interpretation is made with the appropriate theoretical framework and also in the light of conclusions drawn from

the earlier studies. Necessary maps and tables, references are also given to substantiate the argument in the thesis.

Chapterization:

The first chapter ‘Introduction’ deals with the study and its introduction to the reader. It brings up the historical understanding of the emergence of village studies and later on agrarian studies in the Indian academia and its relevance in the contemporary times. The literature review in this chapter broadly explains the different perspectives of agrarian change that were analyzed by different set of scholars in the social science literature. The objectives of the study, methodology, study area and tools and methods of data collections are explained. A brief note on the organization of the thesis into various chapters is presented.

The second chapter ‘agrarian history’ brings up the history of agrarian social structure of Telangana region in general, and the study village in particular. The agrarian history of the study village is further divided into two periods of time namely pre-canal and post-canal period. It contains the details on the condition of people, cropping pattern, division of labour in agriculture, feudal structure, emergence of political factions, counter activities against the landlords and democratization of local electoral bodies during both the periods.

The third chapter ‘ethnographic profile of the village’, describes the socio-economic, cultural and political aspects of the village population. It begins with the introduction of the geographical location along with physical aspects of the region along with the village. It contains the description of the village population in terms of the size of households, caste, gender and age wise composition, occupational structure, literacy levels, religious aspects, economic organization, political organization and communication facilities within the village.

The fourth chapter ‘agrarian class structure’ explains the position of all households in the village in terms of local agrarian hierarchy. It explains the distribution of households in the village in terms of caste and size of ownership of land. Further it presents the details on type of land, sources of irrigation, ownership of agricultural instruments like tractor, harvester, pump sets and sprayers along with the

ownership of livestock etc. across the households in the village. Data on credit details incurred by these households for different purposes are also included in this chapter.

The fifth chapter ‘organization of agriculture production’ in detail, gives an ethnographic account of the various activities that are involved in the process of cultivation by the farmers in the village. This chapter describes the performance of agricultural works like procurement of seeds, fertilizers and pesticides, preparation of soil, ploughing, transplantation, harvesting, transporting and finally marketing of the crop managed by the farmers in the village. The details on this are collected from various farmers belonging to different socio-economic categories in the village.

The sixth chapter ‘trends of agrarian change’ analyzes the changing agrarian scenario in the village in terms of cropping pattern, mechanization of agriculture, changes in the ‘attached labour’ system, labour relations and women.

The seventh chapter deals with the process of ‘emergence of various non-farm occupations’ for both farmers and agricultural labourers in the village. The agriculture growth in the village has started providing different venues of opportunities for both agriculture labour and enterprising farmers both inside and outside the village, details of which are explained in this chapter.

The eight chapter which is the final one, brings up the brief ‘summary and conclusion’ that are derived from the findings of the study. This chapter sums up the process of changing agrarian structure in the study village due to the impact of ‘new’ technology over a period of time through a historical understanding.

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Chapter 2
AGRARIAN HISTORY

Telangana: A Brief Agrarian History:

The region of Telangana was part of the *Nizam*'s ruled Hyderabad State, which comprised of eight Telugu-speaking Telangana[1] districts, three Kannada- and five Marathi-speaking districts. In Telangana, given the historical specificity of the *Nizam*'s dominion, the nature of socio-economic change and political trajectory took a distinct turn. A class of landed gentry, consisting of Muslim *Jagirdars* and Hindu *Deshmukhs* belonging to the Reddy, Velama and Brahmin castes, constituted the support base of the *Nizam*'s rule. Unlike the Presidency areas, the State provided citizens with hardly any civil or political rights, while the landed gentry exploited the rural population through the illegal eviction of farmers, the extraction of free goods and services from the toiling sections of the village and most importantly the denial of people's dignity and self-respect (Srinivasulu, 2002: 6).

In 1948 the union government integrated the Hyderabad State into the Indian union after an armed action popularly known as the "Police Action". Later it was further integrated with the Telugu speaking region of the Andhra region, which was a part of the Madras Presidency until 1953. At present the Telangana region is comprised of ten districts in the state of Andhra Pradesh.

The Feudal Setup:

The basic feature that dominated the socio economic life of the people of Telangana was the unquestioned feudal exploitation that persisted till the *Nizam* was over thrown from his position as the ruler of the Hyderabad State. The villages in Telangana were predominantly under the control of the *Jagirdars* and *Deshmukhs* who are responsible for the revenue collection and maintenance of law and order in their respective areas. All the farmers in the village are forced to pay fixed amount for every crop in the form of tax to the *Nizam* state irrespective of their crop output. Bad weather conditions, lack of irrigation facilities, and regular famines forced many of the farmers to fail in paying these taxes. The *Deshmukhs* took advantage of this

[1] The number of districts in the region at present has reached to ten.

situation and indiscriminately took away of the lands of such farmers that has resulted in land grabbing by the *Deshmukhs* in a great size in almost all the villages in Telangana. The most important mechanism of land-grab by these landlords was the periodic survey settlements during which land freshly brought under cultivation by the peasantry as well as un-cultivated land was grabbed using their influence of officialdom (Sundarayya, 1973: 9; Balagopal, 1983: 710; Thirumali, 1992: 477-478).

The *Jagirdars* and *Deshmukhs* who were the loyal servants of the *Nizam* used to exploit this situation and were actively involved in harassing the farmers in all terms. They took control over these grabbed lands of the farmers and over a period of time, emerged as landlords in these villages. The goons of these feudal lords used to loot and seize the properties of these evicted farmers. There were many incidents where the female members of these families were sexually harassed by these gangs. During this period, a servile-labour based social formation emerged where the landlords forcibly transformed the large mass of the rural population into 'servile' labour. The landlords ensured regular and constant supply of labour by bringing untouchables and 'sudra' low castes under extensive debt bondage, and landlords, by attaching labour to their domestic and agricultural work converted it to forced *vetti* labour (Thirumali, 1992: 478).

However, *vetti* is not bonded labour and its sanctions lies in custom and brutal force, unlike the bonded labour that is the outcome of debt-bondage. It does include the forcible free services of peasants in the agricultural fields of landlords however it goes beyond that in this case. All the toiling castes of the village, free of charge, had to supply the landlords whatever goods or services that were produced by them. He would demand gifts from the villagers on special occasions and contributions to the costs of ceremonial functions in his family (Balagopal, 1983: 711-712).

The 'untouchable' caste members of the village were forced to provide their free services along with the free supply of leather material to the landlords as part of the practice of *vetti*. The *chakali*, *besta* and *boya* caste members had to carry the family members of these landlords on their shoulders for long distance journey from one village to another. Toddy-tappers were supposed to supply free toddy regularly and the shepherd caste households had to supply sheep for any occasion that happens

in the landlords' houses. The carpenters and blacksmiths had to provide agriculture instruments with free of cost to these landlords. The potters are supposed to supply pottery at free of cost. The barbers had to provide their services like massaging the body of landlords on a regular basis. The merchants in the village had to supply the necessary goods on free of cost to meet the landlords' household requirements. The worst among this is keeping the girls as slaves in the houses of landlords. Thus *vetti* system has resulted in the utter loss of self respect among the masses in the Telangana region (Sundarayya, 1973a: 10-11).

The landlords used to take lead role in the settlement of disputes in the villages. In the absence of collective dispensation of justice, the judgments made by the landlords in the village have become unchallenged, unilateral and authoritarian with their tone, language and behavior being infused with abuse, arrogance and authority. The *Dora* used to settle the all kinds of disputes like that are related to land right disputes, caste group disputes or even domestic disputes between wife and husband, parents and major offspring or disputes over property distribution. Moreover the institution of *Dora* was further maintained and justified by referring to the contradictions/antagonism between the peasant castes and labourers (most of them belonging to untouchable and other lower castes). The customary practices that favoured the upper castes have never allowed the 'untouchable' lower castes for free mobility and intermingling. The members of 'untouchable' castes were forced to be very submissive in their body language, their dressing pattern was restricted to certain types of wearing, they were not allowed to wear footwear and they always spoke to the landlords with the words staring with '*Dora* I am your slave, I touch your feet' (*Dora nee banchanu,nee kalmokta*) that have become part of their cultural practices. In this way the landlords were able to establish their superior position, reconstituting the new power base, while subordinating the other communities on the basis of caste in social hierarchy. In this process they controlled the economy, society and life of the people and established a new culture of domination in the region (Thirumali, 1992: 479-480).

During the *Nizam*'s autocratic rule, there were no electoral bodies at any level from village to the state and there was no question of presence of civil liberties. Under these conditions, emerged Andhra Maha Sabha (AMS) organization with the initiation

of intellectuals and liberals from the Telangana region. During the years 1928-32 AMS was lead by eminent personalities like Madapati Hanumantha Rao and Suravaram Pratapa Reddy and they were fighting for the democratic rights of the people while demanding the reforms in administrative structure and opening up of more schools during this time. However, with the entering of young and dynamic personalities like Ravi Narayana Reddy and Baddam Yella Reddy, the activities of AMS took to more violent methods. These leaders who got inspired by the ongoing freedom movement under the leadership of Indian National Congress during the 1940-42, joined the communist movement and in turn transformed the AMS a broader organization fighting against the *Nizam* rule while forming a united front of youth, peasants, traders and other middle class. From the year 1944, AMS under the leadership of communist party started engaging in militant activities from the village level against the atrocities of landlords, and *Razakars*,the private army of *Nizam*, aligned with the landlords. In this process, they were able to redistribute thousands of acres of surplus lands of landlords to the peasants, *vetti* was abolished and people started retaliating against the atrocities of landlords by forming military camps across the villages and even declared self rule in several villages in the region (Sundarayya, 1973b: 18-42).

After India got its independence from the British colonial regime, the Union Government of India started 'Police action' on Hyderabad state as *Nizam* was not ready to merge his state in the Indian Union. Within few days of the attack, *Nizam* surrendered to the Indian army and surrendered the Hyderabad state to the Indian Union. However, the Indian army forces kept on attacking the armed peasants with brutality. Consequently, unable to sustain the onslaught of the armed forces of Indian union, the Communist party called of their armed struggle in the year 1951 (Sundarayya, 1973c: 42-43). Even though this movement has resulted in some positive changes like political and economic development of peasants in the region, it failed in empowering the labour communities/castes. The party worked under the pressures that have put by the rich peasant castes during their actions (Thirumali, 1996: 179-180).

During the post-independence period, land reforms were introduced in the region as part of the measures taken by the union government. However, they could

not result in the complete abolition of intermediaries, the tenants continue to be insecure over their cultivating rights, rate of rents continued to be still high for tenants, ownership rights were not conferred to the tenants, high levels of land ceilings continued to exist in the state of Andhra Pradesh (Koshy, 1974: 52-57). Thus the basic agrarian structure that is dominated by few rich landlords could not change even after the post independence period.

Agrarian History of Thogata[2]:

Since the beginning the village Thogata has been primarily dependent on agriculture as the main source of livelihood. The village agrarian history can be broadly divided into two phases namely 1) Pre canal period and 2) Post canal period.

To begin with the pre canal period, the village has witnessed a severe crisis in agriculture in terms of lack of production with no irrigation facilities available for cultivation. The situation was far worse during the famine period. The entire region was under the clutches of strong feudal landlords in most of the villages, thus resulting in the backwardness in agriculture in terms of adoption to new technology to increase the agricultural productivity. This period has witnessed the typical feudal type cultivation with absentee landlordism, predominance of '*vetti*' practice and exploitation of labour and atrocities on the working caste/ class people in the villages. The agriculture labourers have to depend on the landlords for their survival with no other alternative options being available for their livelihood.

Conditions of People:

In older days, sufficient food was hardy available for the poor people. They used to survive on '*makka gatka*' which contains the juice of corn grains boiled in water which used to be the regular diet of the people in the village. It used to be very difficult for them to get even single meal in a day. The condition of Dalits is much worse as sometimes they were forced survive by eating the roasted fruits of toddy tree due to lack of availability of food in the village and also they had to go to bed with empty stomach. The landless labour in the village used to work in the agriculture fields of few *Velama* landlords and after the work is over, they would go and beg

[2] Pseudo name of the study village.

desperately for some food. After hours of waiting and crying in front of landlords' houses, they are provided with small amount of food to eat. This shows the vulnerable conditions that existed in the pre canal irrigation period in the village where starvation was a common phenomenon among the majority of the village population.

There is no exception even in the case of *Velama* farmers who also used to consume *gatka* as part of their diet. Only four to five big *Velama* landlords in the village used to have rice as their diet three times in a day. Around 15-20 households; most of them comprised of Velamas; used to eat rice 1-2 times in a day in the village. On the other hand most of the other households in the village used to survive on consuming *gatka*. During the '*shravana masam*' i.e., during the beginning of the monsoon period, the intake of *gatka* used to result in dehydration among the people in the village, and eating rice was must during this period. At that time, the labours from the village used to simply beg in front of the landlord families to get some amount of rice to eat. As Thogata village lands are at higher altitude when compared with the lands in the neighboring villages, the productivity of crop used to be less. More than anything else, with the practice of '*vetti*', many of these labour families used to suffer with hunger and poverty as they have to work for the landlords for free of cost. The labourers had to be satisfied with whatever was given to them by the landlords.

In the words of an old Velama large farmer from the village, the condition of the people during this time, "Four acres is the biggest land that would be cultivated by a single farmer in the village. Marginal farmers used to go to large farmers to ask grain from them. For seven *kunches*[3] of grain taken on credit, one has to pay an additional three and half *kunches* of grain as the interest in a year". Agriculture in the village used to be of subsistence oriented with farmers cultivating crops for their consumption purpose only. The wages for the labour were used to be paid in kind in the form of grain during this period in the village.

The Feudal Setup and Atrocities:

One single Velama landlord ruled the village for forty years unchallenged as the head of village without any resistance from others in the village.

[3] Local term used for weight with one kunche being equivalent to seven kilograms of weight.

He maintained the ultimate political authority in the village till 1983 when electoral reforms were introduced by the state government in Gram Panchayat elections. During his tenure as the head of the village, he earned few hundreds of acres of land in and around the surroundings of the village. The village has never seen a police personnel entering into the village as all the disputes used to be settled by him and no one ever dared to approach the police station. He was very popular in the surrounding villages and also used to settle disputes in all those villages. The practice of "*vetti*" was present in the study village and as part of this feudal practice every caste in the village had to offer its products and services to the landlords' families in the village free of cost. The *Golla* caste members were obliged to present sheep during festivals, the *Gouda* caste members were forced to provide *toddy*, the carpenters had to make new wooden plough and the potters were supposed to offer pots during festivals in the village and accordingly by all other service castes.

People in the village used to show their submission and respect in the form of walking without footwear in front of the landlords, getting down from the cycle in case of facing a landlord on the way and standing up immediately on the arrival of the landlord on any occasion. They never dared to show any resistance and were always obedient while speaking with these landlords. They always pronounce the prefix of '*Dora*' while referring the names of the Velama landlords in the village. This practice is still followed by the majority of the people in the village mostly belonging to older generation.

Apart from this, the landlords in the village used to beat their labour and never used to pay proper wages for their attached labour. Even a short delay in the work was not tolerated by them. Few incidents were reported in the village where the landlords had beaten their labour to death without any mercy. Many atrocities have occurred upon the womenfolk in the village including the most heinous act of rapes. Scared of such incidents, over a period of time, all the families belonging to weaving caste have left the village. The only *Komati* (merchant) caste family was forced to leave the village as their house was burnt by the landlords for not providing goods for free of cost. At present not a single family from these two castes lives in the village. Unable to tolerate similar treatment mooted to them by the landlords of the village many Muslim families have also left the village in the due course of time.

Pattern of Landholdings:

The pattern of landholding varies among different castes in the village. Velamas are the dominant landholding caste, coming next are the Golla caste. Dalit caste households are comprised of most of the landless families in the village. The biggest landlord in the village used to have more than one hundred acres of land in his control. He used to have 10 pairs of bullocks with 10 attached labour working for him. Next to him, the present patwari family had six pairs of bullocks and six attached labours and the ex police patel family had five bullock pairs with equal number of attached labour working on his farm. The social status of these landlords was always associated with the size of his land and the number of attached labour employed in the farm land. These landlord families used to have huge land in and around the Thogata village.

Cropping Pattern:

Major crops that are cultivated in the village used to be Maize, Ground Nut, Green Gram and other cereals that require less water for irrigation. Mostly these crops used to be cultivated only during the *Kharif* season because it falls in the monsoon period. Only few Velama farmers who owned wells, cultivated paddy, that too in a limited area of the agriculture land. In most of the cases this used to be done only during the kharif season as the monsoon brings rain during this time. Maize used to be the major crop that was cultivated by the farmers during the pre canal period. Maize used to be the major source of food among the villagers during the time. During the *Rabi* season they used to go for cereals and other crops like chilly etc. The middle and Dalit caste people were dependent on the mercy of these land lords for food by working as farm servants in their households.

The agriculture was of more of manual work without the involvement of any modern equipment. The big landlords used to cultivate their lands with bullock carts with the help of their farm servants while majority of the small farmers used tp depend on their family labour for various works in agriculture. The manual labour was very intensive while the productivity earned in return was very less. The major source of irrigation for agriculture was rain water that they get during the monsoon period. Very few farmers used to have wells in their farm lands and they were run by diesel engines for some time.

The village has got power supply in the year 1964 with one transformer being established in the village. With this, around ten wells were electrified in the village by fixing motor pumps. Among these, nine belong to Velama households and one belonging to a Golla farmer. Over a period of ten years, during 1965-1974, three transformers were installed in the village and the number of wells with motor pump has increased to 25. During this period, some of the farmers who had little bit of water resources in their farm lands slowly started cultivating the crops like Maize, Groundnut and Paddy. During this period (1973-74), the hybrid varieties of seeds were also introduced for the first time in the village agriculture. Government also started conducting several activities of trainings and awareness campaigns for the farmers encouraging them to use the newly introduced hybrid variety of seeds in cultivation.

Division of Labour:

Both male and female members of the families from all the castes used to work in the farms during the cultivation except for the women who hail from the dominant landlord households. Otherwise womenfolk from the Velama caste, who belong to the large land holdings, were also used to work in the agriculture fields along with other male members of their families. All the family members used to work very hard with the help of their bullocks in the absence of any modern machinery. Exchange of labour was very prominent during these days. Farmers used to exchange the labour for ploughing and also during the harvesting work. Farmers in the village used to wake up daily early around 3 am in the morning and used to take their cattle for grazing. After that they used to take them for ploughing the field. The middle and small farmers, most of them belonging to other backward classes (OBC) and Dalit castes who were completely dependent on the rainfall in the absence of any other alternate sources of water. Those few farmers who owned wells, used to pump the water manually and make water channels to their field with lots of hardship.

Marketing:

When the farmer gets his crop after all the struggle and pain, the '*dalari'*[4] (broker) used to cheat the farmers in the village while weighing the grain. Only few big farmers were able to go up to Karimanagr, the district head quarters to sell their grain in the government market yard with the help of their bullock carts. The small and medium farmers used to sell their grain in every harvest season to the local *dalari*, generally belonging to the *Komati* caste from the neighboring area.

In the beginning grains were weighed in 'bindelu' (a metal pot or vessel) that always never match the standard measurements of weighing. These traders and *dalari* used to cheat the farmers even in the case of weighing stones by using improper weighing stones. They even used to cut down the actual market price of the grain by citing the reason of inferior quality of grain during such transactions. Thus farmers in the village were not able to sell their crop at market price as they were completely under the control of these middlemen. This was the case mostly with the marginal and middle farmers and even in the case of some of the large farmers. Some large farmers who own bullocks used to carry their grain to the government market located in the District headquarters Karimnagar. The villagers say that that was the most hectic process that time as they have to load the grain into the carts and have to stay overnight in the town in order to sell their crop. In between, any natural calamity resulted in damage to their harvests there were no proper storage facilities at that time. The threat of dacoits was also prevalent in those days in the area.

AGRARIAN SCENARIO IN THE POST CANAL PERIOD

As part of the larger development politics, India has started implementing its agenda in the field of agriculture after it has got political independence from the colonial British rulers. The much demanded social cause of land reforms was kept aside after a decade of its implementation in many of the states in the country. Indian government started implementing the agenda of 'Intensification of Agriculture' by introducing 'new' technology in agriculture with a program called Green Revolution

[4] Dalari means the middle man who buys the grain from the farmers directly at their home. These are basically from the nearby towns and they make rounds in the village offering the farmers for buying the crop, and later sells this grain in the open market with profit margin for himself.

in the 1960s on a large scale. As part of this program, several canal irrigation projects were taken up across the country in order to provide good infrastructure facilities for agriculture in the country. Adding to these, new varieties of seeds called HYV seeds were introduced along with chemical fertilizers and pesticides across the rural heartland in the country for the use of farmers. It was said that this is to increase the yield of the crop by saying and it is to fulfill the consumption needs of the growing population of the country.

As part of this agenda several irrigation projects were taken up across the country in the 1960s onwards. In the process, one major irrigation project called Sri Ram Sagar Project (SRSP) was launched in the northern Telangana on the river Godavari. The project was meant to provide sustainable supply of water to fulfill the irrigation requirements of the farmers in the region, to fulfill the drinking water requirements and also to fulfill the water requirement for the thermal power project located in Ramagundam in Karimnagar Disstrict. The major beneficiaries of these projects include the districts namely Nizamabad, Karimnagar, and Warangal.

The inauguration and the construction of this project began simultaneously with another major irrigation project called Nagarjuna Sagar project where the major beneficiaries are the districts from Coastal Andhra region. However, because of the apathy and discrimination showed by the successive rulers of the state and domination of powerful capitalists lobby of Andhra upper caste politicians the SRSP project took many years to complete just its first phase of project. Even after five decades, the second phase of the project is yet to be completed.

The study village has started receiving the canal water with the construction of SRSP project from the year 1980 onwards. In the beginning, water was released only for the Rabi season agriculture in the village. During this time, farmers in the village used to cultivate Maize, Paddy and Groundnut for Rabi season. During the Kharif they were cultivating Green Gram and other cereals. However, from the year 1995 onwards, the officials stared releasing the canal water for the Kharif season also. At the same time, the government has been encouraging the farmers to go for hybrid varieties for cultivation to increase the crop yield. Several training programs were conducted to motivate the farmers in the village to go for hybrid varieties. Many

private seed companies also started advertising/campaigning about their products by distributing the sample seeds in these canal irrigated villages. During those days, these companies even used provide many offers like one seed bag free on the purchase of three bags of seed. Initially, farmers were reluctant to use these hybrid varieties of seed in their farm lands. However, some farmers in the village tested these hybrid varieties of seeds for both Maize and Paddy in their farm lands. After seeing the achievement of these farmers in terms of better yield in crops, slowly all other farmers in the village started using these new seed varieties in their farm lands in the due course of time.

With the introduction of this 'new technology' the total size of the cultivating area in the village has started increasing every year. With the intensive cultivation of paddy crop the production levels also started touching new heights in the consequent years. This situation has started resulting in higher levels of labour requirement for various activities of agriculture, especially, among the large landholding farmers mostly consisting of Velama caste. With the surplus production levels achieved in their agriculture, gradually, the womenfolk of these Velama families started staying away from the activities in their agriculture field. There has been a change in the value system among the rich Velamas where sending women of the family to work in their agriculture fields is considered as an act of low status in the society. This situation resulted in higher requirement of labour for such families and they were not ready bear the labour charges of labour population from within the village. With the availability of free water resource through canal irrigation, even small and marginal farmers started cultivating crops in their agriculture lands, who, otherwise were used to be the major source of agriculture labour in the village. Achieving this self sufficiency has increased their bargaining capacity of as an agriculture labour in the village. The Velama landlords felt the labour charges were high and started searching for cheap labour from outside the village, so that they can minimize the expenditure on the labour charges and maximize their profits in the agriculture.

These rich Velama farmers were able to explore their social contacts from the dry regions of the neighboring Adilabad district to avail the cheap labour in the form

of illiterate tribal people[5]. Due to lack of livelihood options and employment opportunities in their native places, these tribal people readily accepted to work with Velama landlords. During this process, some of the Velama farmers also started offering advance wage payment, initially in the form of kind and later in the form cash payment to attract the labour to work with them. A flood of migrant people, along with their families, were seen in several temporary shelters near the farm lands of the Velama rich farmers during this period[6]. Most of these tribal migrant labours were hired from the places like Sirpur, Kagajnagar and Chennur of Adilabad district. This practice of migrant labour working in the village for paddy harvesting has flourished between 1998 -2004.

Apart from the cheap labour, lack of proper knowledge on local farms in the village and their size was another major advantage of recruiting these migrant labours by the Velama landlords. They used to cheat the illiterate tribal by miscalculating the size of the farm lands while making the wage payment. The farmers used to pay around 20 *kunches* of grain per one acre of harvesting work done. They also found these tribal people more obedient as they are also tied up with the debt bondage. In fact, the rich Velama farmers were very successful in cutting down their labour charges with the better utilization of such cheap immigrant tribal labour during harvesting of paddy crop for few years. However, they could not hold them for long time for reasons explained below.

During this period the rich Velama farmers absorbed good number of individuals among this tribal population to work as attached labour in their farm land. The intensification of paddy cultivation has resulted in the increased number of labour hours that are required by these farmers although the year. They thought it is better to have these migrant labourers as attached labour, who, they consider are more obedient and hard working in nature. In the process, a good number of these tribal migrants

[5] Several studies have showed similar kind of trend in some others parts of India like incase of farmers from north-west India used to attract huge junk labour from the poor and dry regions of center-east India and in case of cultivation in Western Maharashtra they used to bring labour from dry regions like Sholapur and North Karnataka.

[6] Anil Kumar (2006: 11-12, 16) in his village studies from South Telangana explained that in the post canal irrigation period, the local landlords started hiring cheap illiterate labour in huge number from the neighboring dry regions, to work for transplanting and harvesting in the paddy fields.

stayed back in the village along with their families to work as attached labour for the rich Velama farmers.

From the year 2004 onwards the number of these immigrant tribal labour who work for harvesting the paddy crop in Thogata village has started declining. The introduction of new policy by the central government has changed the situation drastically. With the introduction of NREGS[7] scheme by the central government, these labour started staying back in their native place with work being made available for them in their own villages. Under this scheme, the union government started providing wage earning opportunities for the landless labour especially in the dry regions to begin with. Due to this, Thogata village started witnessing a steady decline in the number of immigrant tribal labour force in the village. Apart from this, several welfare schemes were introduced on part of state government, like provision of rice grain to the poor households for just Rs 2 per kilo and provision of loans for the members of women self help groups (SHG) for a nominal interest rate of 0.25% etc. By the year 2007 the number of these migrant labours coming to the village has reached to nil. However, the big Velama landlords in the village were able to hold back some of these tribal men to continue working with them in their households as attached labour with the ties of debt bondage and also by increasing their annual wage payment as and when the situation demanded.

Increase in the Yield of the Crop:

Before the introduction of canal irrigation, the farmers in the village were able to get a yield of two *puttas*[8] of grain that is equivalent of 22.4 quintals of contemporary measurements. Farmers in the village opine that with the introduction of canal irrigation, they are able to produce a yield of 3- 3.5 *puttas* of grain that comes to a figure of around 35-40 quintals of grain per acre. This has produced many surplus producing farmers' households in the village further resulting in emergence of wealth in village economy.

[7] This is now being renamed as Mahatma Gandhi National Rural Employment Guarantee Act and further amendments were being made on time to time basis such as recently the assurance of providing minimum working days has been increased from 100 days 150 days for the unemployed rural people under this scheme.

[8] This a local term used for measuring the quantity of the paddy grain and 1 putta of grain is equivalent to around 11.2 quintals. 1 putta =20 giddelu; 1 gidde = 8 kunchelu; 1 kunche = 7 kilos of paddy grain.

Emergence of Cock Fights:

The increased production level in the village agriculture has resulted in self sufficiency among the farmers. With the regular supply of canal water for both the crop seasons every year, many of the large farmers have started bringing more land for cultivation. Thus, the marketing of the surplus production in agriculture started making the landlords to become rich over a period of time. The feudal landlords, for the first time, started experiencing the taste of cash in a market oriented agriculture production in the village. With this money, they searched for new avenues of entertainment for themselves.

This is how the culture of cock fights has emerged in the village during this time. Every year, after the harvesting season is over, the rich landlords in the village used to gather together in an open place in the village. They would bring their cocks to fight with other cocks in the field. Huge amounts of cash used to keep as bet on these cock fights. Within a few years the village had become very popular for its craziness on this game where owners of the cock actually try to show off their power by making the opponent's cock getting defeated. In the due course, the village has become very popular as the venue for cock fights with the patronage of the feudal landlords in the village. It is said, that many rich farmers/ businessmen from across the districts and also from the neighboring states used to visit the village during these cock fights for playing the game. In the due course of time some farmers from medium landholding category belonging to various castes also took this as passion and some of them have really got addicted to this game.

The cock owners in the village take special care while feeding to their cocks. They prepare their cocks by providing meat as food and always try to increase the number of cocks in their house so that they can have a standby in case any of their cocks gets killed during such cock fights. These cock fights reached their peak in few years and it started resulting in fights and clashes among the owners who may belong to different political factions from the village. The situation has worsened further where some times; the police had to enter in the village to control the law and order situation during these cock fights. Finally, these cock fights were controlled by the strict actions taken by the police authorities in the recent years.

Since then the cock fight lovers started playing the game in some other places that are located far from the village. The time and venue of the cock fights are always kept secret and the information on this gets circulated to only among them. One of such attempt was spoiled by the police when they were caught while returning from a cock fight in the neighboring district. The police even seized huge amount of money from them during the raid. Interestingly it is found that these days, the rich Velamas are betting on cricket matches. This trend is also found among Dalits where the young boys are betting their money on international cricket matches. The amount of bets said to vary from few hundreds to thousands of rupees.

Democratization of Electoral Bodies:

A huge shift occurred in the year 1983 in the politics of state of Andhra Pradesh. Telugu Desham Party (TDP), a newly formed political party by the famous Telugu Film Actor N. T. Rama Rao (popularly known as NTR) came into power for the first time in the state. This is the first instance where a non-congress government came into the power in the state of Andhra Pradesh. NTR had become the Chief Minister of Andhra Pradesh with his party winning majority of the seats in the legislative assembly. As part of his party's manifesto he brought reforms in the local body's administration. As part of this program, for the first time reservations were introduced for marginalized sections like Scheduled Castes, Scheduled Tribes, Backward Communities and Women in the local body elections at village level.

The village had its first Gram Panchayat elections in the year 1984 in the post-reforms period. By that time there was a lot of discontent that spread among different sections of the village population on the atrocities of the feudal landlord's family. For the first time in the village history, one person stood in the contest against the feudal landlord for the post of *Sarpanch*. This person is also from Velama caste, hailing from an ex-*vatandari* (Position of local chief during the *Nizam* period, usually controlling few villages of area) family in the village. He won the elections as the *Sarpanch* very easily with the huge support that is given by the most of the oppressed sections of the village. This election brought in a new era raising the voices of resistance against the feudal landlord's atrocities and domination for the first time in the history of the village.

Emergence of Political Factions and Resistance to Feudal Forces:

The newly elected *Sarpanch* had good support from his own fellow caste members who were fed up with the domination of the feudal landlord's family. At every level of the village affairs, they started giving stiff opposition to the activities of the feudal landlord. This has started irritating the feudal landlord's faction and several incidents of clashes started occurring between these two groups in the village in the later period. The antagonism between these two political factions in the village reached at peak with one incident that took place in the village during this period.

In the village, there was a tradition of screening movies for public on behalf of the Gram Panchayat. On one day, a Telugu movie was planned to be screened for the people in the village. During the screening of the movie, a dispute occurred regarding the permission for the entry to a Gram Panchayat ward member from *Tenugu* caste to watch the movie that actually belongs to the feudal landlord's faction. With lots of confusion the organizers could not screen the movie on that day. They planned to screen the movie on another day but the feudal landlord's faction opposed this and in a bid to stop the movie screening they cut the power supply from the transformer in the village. This resulted in gathering of people belonging to both the factions of the village at the transformer. Heated arguments were exchanged which resulted in a scuffle among the people belonging to both the factions in the village. During the scuffle, one person belonging to the *Sarpanch*'s faction fell on the members of the opposite faction, whom, the opposite faction started to beat severely. His head was broken in this attack and a huge uproar and bitter havoc was created by the members of feudal landlord's faction. In continuation of this incident, many of the supporters of the liberal faction were beat by the feudal faction members on several occasions in the consequent days.

Fed up of the feudal landlord's domination, some of the members belonging to the liberal faction approached the revolutionary left political group (locally known as Naxalites[9]) that was actively working in that region during that time. In response to

[9] This is the popular term that is used while referring to the members belonging to the revolutionary left political parties in the region. There is also another local term used for them called 'annalu' which is widely used among the oppressed sections of the villages with a meaning of 'elder brother'.

their plea the Naxalites have initially issued oral warnings to the members of the landlords' families in the village. However, the landlords did not take it seriously and continued their atrocities upon the people in the village. One day, members from feudal landlords' faction indulged in gang rape of a woman belonging to the backward communities. This incident has evoked huge anger among majority of the sections in the village. Consequently some of the male members from the backward communities have joined with the Naxalites seeking their help against the landlords in the village.

The Bloodshed:

One day, some of the members of Naxalite group have entered in the village in search of feudal landlord to kill him. They caught one member from feudal landlords' family who was notorious for his misbehavior with other caste women indulging in adultery, extra marital affairs and also sexual exploitation of women in the village. Naxalites. In this incident the Naxalites killed some members of the feudal landlords' in the village. However, the feudal faction also retaliated by killing some of the members from the liberal faction in the village.

The presence of Naxalites and their actions in the village through in this particular incident has created fear among the members of feudal landlord faction. On the other hand it boosted the moral courage among the oppressed sections of the village. From then strong resistance was offered against the feudal landlord's atrocities in the village. In fact, many such villages from the entire Telangana region have started witnessing such activities against the atrocities of feudal landlords from the 1970s onwards that continued for few decades. Karimnagar district became a prominent place for such activities of peasant struggles that were carried out in the name of naxalbari movement lead by the left wing political groups (Balagopal, 1988). This can be considered as the benchmark for the beginning of new era of agrarian relations in the village with liberal faction of Velama farmers emerging as leaders in the village politics.

After this incident of Naxalites in the village, there has been a gradual decline in the atrocities and exploitative activities of the feudal landlords in Thogata village after this incident in the village. The spread of Naxalite movement in the North

Telangana region had great influence in the change in the politico-economic environment in favour of the oppressed castes and classes in the villages. It succeeded in putting fear among the exploiting feudal landlords in the region that resulted in a more dignified and livable life for the poor peasants and landless labourers in the course of time (Rao & Reddy, 2008: 50). Still some of the people from the older generation have got fear in their minds about the feudal landlord's family, but, none of the younger generation in the village is scared about the landlords in the village.

Attempt of Self Assertion by Dalits:

Over a period of time the oppressed sections of the village started gaining their courage and strength as discussed in previous sections of this chapter. The story of establishing the new settlement by the Dalits in the year 1990 with great fight and courage against the feudal landlord of the village is a worth mentioning. This particular land is located on the both sides of the road that connects to the mandal head quarters. This land actually belongs to the government under the '*poramboku land*' category. The official transfer of *pattas* to the Dalits took place during the tenure of a Mandal Revenue Officer (M.R.O.) who also incidentally belongs to Dalit caste.

In the words of one of the leading personalities from Dalit caste in this struggle *"without his support this colony would have never come into reality. He is also a Dalit however; he was closely associated with the Velama personalities in the village during his tenure"*. It is also reported that there were many attempts made by the feudal landlords to prevent them occupying these lands. He even planned to plant a mango grove in this area to obstruct them. However, on a single night, Dalits in the village raised huts in the entire land by equally distributing among all the households within themselves. It is told that they also have got the support from some of the members of liberal faction Velama leaders in the village.

As discussed in the above sections due to the introduction of reforms in the local political bodies, the emergence of new rich class among the Velama caste along with the activities of Naxalites considerable decline is observed in terms of atrocities of landlords in the village in the consequent period.

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Chapter 3

ETHNOGRAPHIC PROFILE OF THE VILLAGE

THE DISTRICT:

Physical Aspects:

Karimnagar District lies in the northern part of Andhra Pradesh approximately between the latitudes of 18 0' and 19 0' and longitudes of 78 30' and 80 31'. The district is bounded on the north by Adilabad district, on the north – west by Nizamabad district, on the west by Medak district on the south by Warangal district and on the east by the river Godavari. The district occupies an area of 11823 Sq kms with density of population of 295 per Sq km.

Karimnagar District forms the part of the Telangana (Northern) a region which finds mention in Hewitt's references in his "Ruling Races of Pre-historic Times", giving an indication that this part of South India was by no means unimportant in the ancient world. The District derived its name 'Karimnagar' by Qiladar of late Nizam, Syed Karimuddin. The District was originally known as "sarkar elgandal" in A.D. 1897, as the result of reorganization of districts in the erstwhile Hyderabad State in 1905, the district was named as Karimnagar, which is its headquarters town.

Climate and Rainfall:

The climate of the district is generally dry except during south west monsoon period which starts in June and ends in September. The post monsoon season is from October-November which is followed by the summer season from March-May. The average rainfall in the district is 966.2 cms.

Soils:

Three types of soil viz. black clay loamy, red sandy loamy soil and alluvial are found in the district. Of these, red sandy loamy soil which is commonly known as "*chalka*" forms the main type in the district. Alluvial type is found in the river valley.

THE VILLAGE:

Thogata village is located 22 kilometers away from the district head quarters on the state high way road that begins from the state capital Hyderabad connecting the industrial hub town of the district namely Ramagundam. The journey from Karimnagar takes around half an hour on the main road and by the time we reach at the boarders of the village on the main road, we get the fresh smell of processing of paddy grain on both sides of the highway road. The main village settlement of the village is located within a distance of one and half kilometer from this main road that is covered by several rice mills in the vicinity. There is a kacha road built in between the agricultural lands of the village from this point on highway road which connects to the main village. There is another road connected to the village, if we go another one kilometer further along with main highway road. This road actually leads to the mandal headquarters cutting through the village. The village is bounded by agricultural fields from all three directions and one side highway road as its border. During the cultivation season the entire surroundings of the village are covered with full lush of green colour of paddy crop being cultivated among the lands in the entire area.

Starting from the boundary of the village the entire stretch of highway road is covered by rice mills that are under construction and many others that are already under operation. Small tea shops which are located in these clusters of rice mills are always busy with customers. The rice mills begin from the village Thogata on the main road towards the nearby town Sultanabad which is four kilometers away from the village towards Ramagundam. The road is always busy with the Lorries that carry sand from the river Godavari to cities like Hyderabad. Many transport Lorries that carry wood and other industrial equipment ply regularly between the industrial hubs located in Adilabad district, Ramagunadam town and other parts of the state through Karimnagar.

Household and Settlement Pattern:

The entire village settlement can be broadly divided into two parts, namely, old settlement and new settlement. The interior part of the village which consists of old settlement is comprised of many caste groups including the Muslim households with an exception of Dalit households. The new settlement consists of households

belonging to Yerukula, Golla and Dalit caste. These households have come up along with the road that connects the mandal head quarters from the highway road. Initially some of the Dalit families left their old settlements in the village in the year 1990 and were the first occupants of this new settlement. This land actually belongs to the government (Poramboku land) and with lot of struggle and facing opposition from the feudal forces in the village they were able to acquire these lands. Later families belonging Golla caste also started living in this area making their residences. However, the small culvert built on the canal stream separates the Dalit houses with the Golla caste houses in this new settlement.

The old settlement is comprised of households belonging to the castes like Velama, Golla, Gouda, Chakali, Tenugu, Ausula, Vadla, Tenugu, Mera, Kummari, Mangali, along with Koya communities. In the old settlement of the village different streets are known by the caste names and also surnames of some castes like *Turka wada* (inhabited by Muslims), *Bangla wada* (the first concrete building in the village belonging to a Velama landlord), *Golla wada* (shepherds' street), *Goundla wada* (Toddy Tappers' street), *Velpuri wada* (all Velama households with the common surname called '*velpuri*'), *Kotla wada* (also called as with the new name called '*Laxmi Palle*') consisting of only Velama households who have moved to the northern part of the village some years back from the main village in search of good drinking water source). The new settlement of Gollas on the eastern side of the village is called as '*dubba wada*' where as the Madiga settlement in the adjacent locality is called as 'SC colony' by the villagers.

Velpuri wada and *Kotla wada* are the two streets in the village that are exclusively inhabited by Velama caste households where as, SC colony is exclusively inhabited by Madiga caste households with a clear demarcation from houses of other castes. Otherwise, all other localities in the village are inhabited by mixed group of people. Interestingly, the houses of the two prominent Velama landlords', who play a vital role in the village politics, are located in different places isolated from other houses in the village. In the old settlement of the village, most of the streets are disorganized with more curves and bends. In the village, both Kotla wada and Velpuri wada are well laid with cement roads. The only other cement road within the village is located in SC colony. Otherwise, all the streets in the village have kucha roads.

Only main streets in the village are provided with drainage facility along with couple of other streets that are exclusively inhabited by Velamas. In the new settlement, few Golla households are provided with drainage facility. None of the streets in the SC colony have the drainage facility in the village. Only main streets in the village are provided with the facility of street lights, again, clear priority being given to the localities that are resided by the dominant caste groups of the village.

The housing pattern of different caste groups in the village can be classified in to the following broad categories

Table 3.1: Types of Houses:

Community	Types of Houses						Total
	R.E.C.	Tiles/ Bangalore	Tiles/ Penku	Hut/ Cement Sheet	Hut/Iron Sheet	Hut/ Thatched	
Ausula	0	4	2	0	3	0	9
Chakali	3	5	1	8	3	0	20
Golla	22	25	5	6	0	4	62
Gouda	6	10	1	5	12	0	34
Koya	0	0	3	0	0	1	4
Kummari	1	0	1	1	0	0	3
Madiga	27	22	0	14	5	14	82
Mangali	0	2	0	0	1	0	3
Mera	0	0	1	0	0	0	1
Muslim	0	1	7	0	0	0	8
Tenugu	2	4	0	0	2	1	9
Vadla	0	1	1	0	1	0	3
Velama	34	44	4	9	9	2	102
Yerukula	0	0	0	3	0	0	3
Total	95	118	26	46	36	22	343

Source: Field Survey, 2006-07.

Among Velamas, which is the dominant landholding caste in the village, ¾ of their families live in either R.E.C or nicely built Bangalore tiled houses. Their houses are very spacious with good space for the open yard which is generally used for storing grass, parking vehicles like tractor, harvester, and part of space is used for cattle shed. Among these, some houses have proper compound walls with gate. Among the middle castes like Gollas, they also have the houses in the same ratio like Velamas when it comes to type of houses where more than half of the families live in either R.E.C. or Bangalore tiled houses.

Among Madigas also we find the same situation with high incidence of residences in R.E.C. houses. However, this should not lead to a conclusion that they are also having good quality of dwelling places. Even though a good number of their families live in these types of houses they lack basic features like the houses are not well finished, without any plastering, and any windows and doors. Most of these houses are constructed as part of various government schemes with some monetary support from the government side. Even now, there are an increasing number of R.E.C. houses among the Madiga families with the ongoing program of "*Indiramma Illu*" where partial amount of money and building material will be supplied by the state government to build houses for the weaker sections in the villages.

Few middle caste families belonging to Gouda, Tenugu, Kummari also possess the first two types of houses. When it comes to the category of the lowest quality of houses that is hut/thatched, the number of Madiga households are high, when compared to their total number of houses. All most all the Muslim families dwell in the houses made of tiles which are very old and built by their fore fathers. Few of them have made alterations to their houses otherwise no one has built new houses. In the study village, all most all of the families have own their houses with few exceptions like Koyas who came for livelihood to this village who live in rented houses. Few families from the middle castes and Dalits also stay in rented houses in the village. Very few cases of sharing are found in the village where the house is shared among the close relatives.

Population Composition:

The village population is composed of 10 caste groups among Hindus, one scheduled caste group, two scheduled tribe group along with few households from Muslim community and couple of converted Christian (all form Madiga caste) households. The names of different communities along with their size and details of traditional occupation are mentioned below.

Table 3.2: List of Communities with their Traditional Occupations:

S.No.	Community	Traditional Occupation	No. of Households	No. of Persons
1	Ausula	Gold smith work	9	37
2	Chakali	Washing clothes	20	64
3	Golla	Shepherd	62	268
4	Gouda	Toddy tapper	34	132
5	Koya	Agriculture labour	4	14
6	Kummari	Potter	3	12
7	Madiga	Agriculture labour	82	309
8	Mangali	Barber	3	13
9	Mera	Tailor	1	1
10	Muslim	RMP	8	30
11	Tenugu	Fishing	9	33
12	Vadla	Carpenter	3	12
13	Velama	Agriculture	102	386
14	Yerukula	Basket making	3	11
Total			343	1322

Source: Field Survey, 2006-07.

1. Ausula: This is the traditional artisan caste of gold work with all most all the households from this caste are engaged in their traditional occupation preparing gold ornaments. Only two households from this caste, who are brothers, own land in the village. However, only the elder brother is a full time cultivator who also cultivates his younger brother's land on share cropping basis. Some of the younger generation members of the Ausula households migrated to the nearby towns in search of employment in Gold workshops and also to improve their skills further in the latest techniques in their field of work. Some of the women from this community make beedis to support their households' income.

2. Chakali: This is the traditional cloth washing caste in the village and there are twenty households belonging to this caste group. The composition is mixed with different occupations among these households. Fifty percent of the Chakali households in the village are engaged in agriculture as their primary occupation. Out of total ten cultivators from this caste, eight of them cultivate their own agriculture lands where as the rest two are cultivating others' lands as tenants. There are six men from this caste who are working as attached labour in the village. The most common feature among the Chakali households is that while women are engaged in washing clothes, men do the pressing of the cloths in the village. Apart from their traditional

occupation, the women from this caste group actively engage in agriculture labour activities. One woman from this caste group was elected as the Sarpanch of the village in the year 1983 when reservations were introduced for the first time in the local body elections in the state. At present one person from this caste group is representing as the ward member of the village panchayat.

3. Golla: This is the third largest community in terms of their size of households in the village. Sheep herding is the traditional occupation of this caste group. However, in the study village, majority of the Gollas' primary occupation is agriculture and most of them are also engaged in shepherd activity. A typical Golla household carries out both the economic activities in their family. This trend is more visible in the middle and small farmers' category of Gollas and they are big landholding cultivators in the village. Some of the younger generation Golla men take up the work of *hamali* labour also during the every harvest season in the village. The Golla women are also very hard working in nature and they handsomely contribute to their family income with their wages earned by regular labour activities. Most of the Golla women in the village engage in agriculture labour work, especially during the planting and weeding season. They also actively participate in wage earning works that are allotted under various government sponsored works especially during the off season of agriculture.

These multiple income sources of Gollas that are generated by engaging in different economic activities have strengthened their economic position in the village. This eventually resulted in their increased bargaining power in village politics and they became the most influential among all the backward communities in the village standing next only to Velamas. This is reflected in putting up Golla caste persons as candidates for Sarpanch position during the recent years. Their political influence has reached beyond the village level politics with one woman candidate from this caste was elected as the member of Mandal Praja Parishad (M.P.P.) during the local body elections that were conducted in the year 2006.

4. Gouda: This is the traditional toddy tapping caste in the village. Majority of the households from this caste depend on toddy tapping as their livelihood. Few of them own land and do cultivation. Some of the younger persons from this community are learning driving of heavy vehicles and later getting in to the work as Harvester

/Tractor driver jobs. The poorest Gouda households are involved in some petty agriculture labour works. The wine shop in the village (which is officially run and is given to an individual on the basis of auction that is conducted at Panchayat office every year) is run by a Gouda household only. The Gouda women also actively engage in agriculture labour work and contribute to their family income.

5. Koya: This is a scheduled tribe community from Adilabad district of Andhra Pradesh and they have come to the village as migrants a decade ago. Due to lack of opportunities in their native place and because of poverty, they used to come to the village to work as agricultural labour during the harvesting seasons. Over a period of time some of the Koya members have stayed back in the village along with their families and they started working as attached labour for the landlords in the village. Most of the womenfolk from this community work as agricultural labour in the village. However, couple of them from the younger generation are working in the rice mills located in the nearby of the village. Even after all these years, they have neither purchased a land nor even built a house for themselves in the village. They either stay in a rented house or in the temporary hut that is built in the premises of the landlord's house.

6. Kummari: This is the traditional pottery making caste in the village. In the village there are three Kummari households that belong to the siblings of a single family. Among these, two households are engaged in agriculture as their primary occupation. They also cultivate land belonging to others on tenancy. Both these households also make pottery during various festival seasons and also depending on the requirement of the customers in the village. Another brother works as attached labour in the village. Women from these households actively engage in various wages earning labour works in the village.

7. Madiga: This is the second largest caste in the village in terms of their number of households next only to Velamas. Like all the 'untouchable caste' in Indian villages, the Madigas from this village are also forced to live in a secluded area from other castes' houses. This caste group consists of highest number of landless agricultural labour population in the village. Around twenty five percent of the households from this caste group are engaged in agriculture as their main source of livelihood. However, except for few households, most of them do cultivation on a very meager

land that too belonging to the '*poramboku*' (government land). Because of their small landholdings and lack of irrigation facilities, most of these households are forced to engage in various wage earning labour activities both inside and outside of agriculture.

There are ten persons from this caste who are working as attached labour who belong to the poorest households. Some of the Madigas also take up the *hamali* work in the village during the harvesting season every year. The other major occupations of Madigas include construction labour, rice Mill labour, *sutari* work, electrician etc. Womenfolk from this caste engage in the activities of agriculture labour, rice mill labour and construction labour. There has been a regular increase in the number of Madiga caste people working as construction labour and other unskilled labour works in rice mills that located in the nearby small town. They can easily reach these work sites of rice mills by walking through the agriculture fields from their residences. Some of the elderly Madiga men have got many years of experience in the field of construction and they have become as *Sutari* and *Mastri* position in this field. In this process they formed their own group of construction labour with their kith and kin. Some of the young Madiga men are working as electricians, clerks and other technical related jobs outside the village.

8. Mangali: This is the traditional barber caste in the village. There are total three Mangali households in the village belonging to a single family. Two households belong to the siblings and the third household is headed by their mother. Both the brothers are engaged in their traditional occupation of barber work in the village. All the households in the village are divided into two equal parts across the caste lines (excluding Madiga households) and allotted to these two brothers as their fixed customers. The payment for their services is normally done in terms of paddy grain twice in a year. These men are also supposed to provide their services to all their client households during the festive occasions/ceremonies in their families and they are duly paid for that occasion accordingly.

9. Mera: The traditional occupation of this caste is tailoring work. There is one old widow who lives in the village from this community.

10. Muslim: There are eight households of Muslim community residing in the study village. The traditional occupation of these Muslim households used to be medical practice in the field of *Unani* medicine. They are known for their expertise in cataract operations in the earlier period. However; with the emergence of modern surgical practices they have lost their importance in the due course. This resulted in the erosion of their traditional occupation further weakening their economic condition. Slowly they started selling off their lands to others in the village and started living a life with no proper occupation for themselves. Only one Muslim household in the village has agriculture land which they lease out to others for cultivation. Many of the Muslim households in the village are living in dire economic conditions now. Some of the elderly Muslim men are leading their life by selling spectacles in and around the village. There are two young men from this community who are working as Rural Medical Practitioner (RMP) in the village with one of them dealing with the veterinary cases.

11. Tenugu: This is the traditional fishing caste in the village. However, agriculture is the major occupation for them in the study village. Out of total nine households, all most all of them are engaged in agriculture as their main source of livelihood. One young farmer from this caste is also selected as '*Adarsha Rythu*' (Model Farmer) in recognition to his skills and modern practices in cultivation by the state government. Two members of the community entered into motor repairing field along with agriculture. The village Sarpanch belongs to this caste and he is a skilled motor mechanic known for his expertise in fixing and repairing the huge motors that operated in the rice mill industry. He is also a successful entrepreneur running an agriculture pipe manufacturing unit. Some of the womenfolk of the Tenugu caste go for agriculture labour work during the season. The '*Sunkari*' (village messenger) of the village also belongs to this caste.

12. Vadla: This is the traditional carpenter caste in the village. All the three Households from this caste are engaged in carpentry work. Two of them work in a saw mill located in Karimnagar town and they daily go to the work place in the morning and come back to the home by evening. The other person does small wood work in the village itself. The women from these households are engaged in

agriculture labour work. None of the three Vadla households in the village own agriculture land.

13. Velama: This is the dominant and traditional landholding caste in the Telangana region whose primary occupation is agriculture. Velamas are very powerful social group in terms of both economic and political and the caste is known for its feudal and exploitative nature in the entire region. The term '*Dora*' which means 'lord' is almost a synonym for the names of the persons from this caste group which is still prevalent in many of the Telangana villages. Whereas the female members of this caste are referred as '*Dorasani*' means the same as of 'lord' with gender connotation. Velamas are numerically, as well as politically, strong in the study village with an unchallenged status in both social and political power. This caste group has substantially started increasing their economic condition by indulging in intensive cultivation after the introduction of canal irrigation in the village in the year 1980. With the sustained growth in the output of the crops all these years, many of the enterprising Velamas have started purchasing various agriculture machinery like tractors, harvesters etc. In the process, the elite section of the landlords from this caste have also entered into the multiple business ventures like rice mill, seed company and Harvester business etc. which are showing phenomenal growth in the area in the recent times. Some others have invested their surplus money in real estate purchases in both residential and commercial ventures located in cities like Karimnagar and Hyderabad.

The younger generation from this caste group is also into agriculture and they are aware of the new developments in the technology, and also various government welfare schemes for the farmers. Apart from this group, a good number of young people are into higher education and settled in white collar jobs in various cities in India. The village revenue officer (V.R.O.) belongs to the Velama community. From the beginning, Velamas have been the most powerful community in the village politics that is continued even today.

14. Yerukula: This is the traditional basket making community from the category of Scheduled Tribe. There are three households of Yerukula who are staying in the village among them one is *hamali* labour, one is attached labour and the other is a basket maker. The women in the caste group work as agriculture labour in the village.

All of them stay in a secluded area in the locality of '*dubba wada*' which is located in the new settlement of the village that is inhabited by the Gollas.

Demographic Profile:

The total population of the village is 1322. Among this male population constitutes of 684 (51.7%) and female population constitutes of 638 (48.3%) persons out of the total population of the village.

Table 3.3: Age Wise Distribution of Population:

Age Groups (years)	Male	%	Female	%	Total	%
0 – 4	46	6.7%	29	4.5%	75	5.7%
5 – 14	123	18.0%	125	19.6%	248	18.8%
15 – 24	147	21.5%	132	20.7%	279	21.1%
25 – 34	96	14.0%	109	17.1%	205	15.5%
35 – 44	101	14.8%	91	14.3%	192	14.5%
45 – 54	59	8.6%	63	9.9%	122	9.2%
55 – 64	54	7.9%	46	7.2%	100	7.6%
65 – 74	39	5.7%	36	5.6%	75	5.7%
75 and above	19	2.8%	7	1.1%	26	2.0%
Total	684	100.0%	638	100.0%	1322	100.0%

Source: Field Survey, 2006-07.

The distribution of population in the village shows that 75 percent of the population falls in the range of 0–44 age group. There is a trend of growth in the population in between the age group of 0-24. Again, there is a declining rate of population from the age group 45 and above categories. The one fourth of the total population falls in to this age group in the village.

Table 3.4: Community wise Distribution of Population:

Caste	Male	%	Female	%	Total	%
Ausula	15	2.2%	22	3.4%	37	2.8%
Chakali	30	4.4%	34	5.3%	64	4.8%
Golla	127	18.6%	141	22.1%	268	20.3%
Gouda	67	9.8%	65	10.2%	132	10.0%
Koya	8	1.2%	6	0.9%	14	1.1%
Kummari	5	0.7%	7	1.1%	12	0.9%
Madiga	180	26.3%	129	20.2%	309	23.4%
Mangali	7	1.0%	6	0.9%	13	1.0%
Mera	0	0.0%	1	0.2%	1	0.1%
Muslim	15	2.2%	15	2.4%	30	2.3%
Tenugu	16	2.3%	17	2.7%	33	2.5%
Vadla	4	0.6%	8	1.3%	12	0.9%
Velama	203	29.7%	183	28.7%	386	29.2%
Yerukula	7	1.0%	4	0.6%	11	0.8%
Total	684	100.0%	638	100.0%	1322	100.0%

Source: Field Survey, 2006-07.

The above table shows that Velama caste population is the largest one which consists of almost 30 percent of total village population. Madiga caste people are comprised of second largest group with 23 percent of total population in the village. Next to them is Golla caste members who consist of 20 percent of the total village population. The rest of the population is comprised of other backward communities, few scheduled tribes and Muslims.

Marital Status:

Table 3.5: Marital Status:

Marital Status	Male	%	Female	%	Total	%
Married	348	50.9%	351	55.0%	699	52.9%
Unmarried	320	46.8%	228	35.7%	548	41.5%
Widow	0	0.0%	52	8.2%	52	3.9%
Widower	14	2.0%	0	0.0%	14	1.1%
Divorcee	1	0.1%	3	0.5%	4	0.3%
Separated	1	0.1%	4	0.6%	5	0.4%
Total	684	100.0%	638	100.0%	1322	100.0%

Source: Field Survey, 2006-07.

The above table describes the distribution of total village population in terms of their marital status. The data explains that female married population is higher than the male married population. Late marriages among the men in the village could be attributed as the reason for this. It is observed there is a high presence of unmarried Velama men in the village who were not able to get prospective women to get married. It seems that the majority of the girls from this caste group are preferring boys from an urban based occupation rather than those residing in villages with agriculture as occupation. Even good financial background of such boys from the village is not helping them to be preferred by the girls among their caste group. Very few cases of divorce and separated cases are found among the village population.

Family:

In the study village, out of total 343 households 237 consists of Nuclear Families that means around 70 percent of the households in the village belong to this category. Fifty four households consist of other subsidiary categories of nuclear families. Ten households belong to single person families. There are total 32 households that belong to joint families which come around 10 percent of the total households in the village. Only Velama, Golla, Madiga and Gouda caste groups are

found to be having joint families. No other caste group has joint families in the village.

Table 3.6: Types of Families:

Community	Type of Family									Total
	NF	SP.NF	SB.NF	SPF	SP.SB.NF	LJF	LCJF	CF	other	
Muslim	6	0	1	0	0	0	0	0	1	8
Ausula	5	2	1	0	0	0	0	0	1	9
Kummari	3	0	0	0	0	0	0	0	0	3
Vadla	2	1	0	0	0	0	0	0	0	3
Mera	0	0	0	1	0	0	0	0	0	1
Mangali	2	0	1	0	0	0	0	0	0	3
Yerukula	3	0	0	0	0	0	0	0	0	3
Koya	3	0	0	1	0	0	0	0	0	4
Tenugu	7	0	1	1	0	0	0	0	0	9
Chakali	19	0	0	0	1	0	0	0	0	20
Gouda	26	5	0	0	0	3	0	0	0	34
Golla	38	6	1	3	0	12	1	1	0	62
Madiga	59	5	7	1	0	4	0	2	4	82
Velama	64	15	7	3	0	10	2	1	0	102
Total	237	34	19	10	1	29	3	4	6	343

Source: Field Survey, 2006-07.

Note: N.F. = Nuclear Family, SP.N.F. = Supplemented Nuclear Family, SB.NF =Sub Nuclear Family, SPF = Single Person Family, SP.SB.NF = Supplemented Sub Nuclear Family, LJF = Lineal Joint Family, LCJF = Lineal – Collateral Joint Family, CF = Compound Family.

There are four cases of compound families where a person living with more than one woman in the same household. All the Muslim households belong to the category of Nuclear Families only. The households which cannot be fixed in the above mentioned categories are kept in the others category where six households fit into this.

Education:

The study village has two government schools. Out of them, one is located in the main village which is an Upper Primary School (UPS) and the other one is located in the SC colony which is a Primary School (PS). The UPS school in the main village has facility for imparting education from 1st class to 7th class and the medium of instruction is Telugu. The school has permanent building with properly built class rooms. However, the number of class rooms is less in terms of their requirement. Midday meals scheme is being implemented in this school since beginning where a Gouda woman daily prepares the meal for the students.

The school premise has large open space that can be utilized for playground and other activities of the school. The strength of the teachers is of five permanent teachers along with one teacher who is recruited on contract basis under the scheme of 'Vidya Volunteer'. The composition of the students in the UPS school is consisted of all the caste groups from the village except those of Velama and Madiga. There is no single student who is enrolled in the school from both these two caste groups.

However, it is observed that there is a declining trend in the enrollment of students in the recent years. Lack of facility for higher classes and also the changing attitude of the parents towards the government education can be considered as the main reasons for this trend. Many of the parents want to send their children into expensive English medium schools. Irrespective their economic status, all the parents from Velama caste group in the village send their children to various private schools which are located in the nearby town and some of the rich Velama children are studying in Karimnagar town. Every day, many school vans, buses from their respective schools come to the village to pick up and also to drop the students from the village. Even a couple of private junior college buses also ply through the village to pick up/drop the students daily. It is observed that many of the children from other castes also go to these private and English medium oriented schools in the recent times.

The reasons for the absence of Dalit students in the UPS school are multiple in natures. The main reason for this is the practice of 'Untouchability' which is still practiced in the village, however, in a more softer and invisible manner. Another reason Dalits cite is that the school is located very far from their residences and children have to pass by the canal stream to reach the school. There is another UPS school in the neighboring village which is located on the boundaries of the SC colony. Hence it has become more convenient for the students from Dalit households to pursue their education.

There is no High School located in the area and all these Dalit students have to go to the mandal headquarters that is located in a distance of three kilometers for further studies. There are few students from the Dalit community who are studying at various 'Gurukula' schools (residential school that run by the state government

exclusively for the benefit of marginalized sections) that are located in different parts of the district. The parents of these children are educated and are aware of various education facilities provided by the government. Some of the students from middle castes are also studying in such government residential schools.

The primary school (PS) located in the SC colony is running in a single room building. The school lacks permanent building and other basic facilities to cater the needs of the young kids from the Dalit households. The school has only person as permanent teacher who also serves the head master of the school. There is another teacher who is working in this school on temporary basis as 'Vidya Volunteer'. Two Anganwadi centers are running in the village among them one is located in the main village in a room that was built beside the UPS school. The other one is located in the SC colony which is running in a small hut on temporary basis.

The nearest government junior college is located at a distance of 5 kms in the nearby town. The nearest government degree college is available in a distance of 15 kilometers in Peddapalli town towards the east direction and in a distance of 22 kilometers in the district head quarters Karimnagar town in the west direction of the village. All most all of the graduate students are studying in Karimnagar town by residing there or travelling everyday from the village. Those who are pursuing post graduation from the village have to choose Karimnagar or any other cities. Karimnagar town has become a destination for students from many villages like Thogata as it has huge number of private colleges along with couple of government colleges offering such courses.

The education levels of the inmates of the village is explained in detail in the below table. The population (excluding the category of 0-4 age group) of the study village consists of 1244 members. Among them 541 persons are illiterates which come around 44% to the total population. There is no single graduate from the caste groups of Erukala, Kummari, Mangali, Mera, Tenugu, and Vadla. Only Chakali, Gouda, Madiga, and Velama caste members have Post Graduate level education in the village. Only one Madiga, one Koya and two Velama members of the village are into the professional graduate courses like B.Tech and B.Pharmacy etc

Table 3.7: Education Status:

Community	ILT	PM	UPM	SC	HSC	GR	PG	Prof. GR	Prof. PG	Total
Muslim	6	6	7	2	1	8	0	0	0	30
Ausula	8	5	5	12	4	2	0	0	0	36
Kummari	6	1	4	1	0	0	0	0	0	12
Vadla	5	2	3	2	0	0	0	0	0	12
Mera	1	0	0	0	0	0	0	0	0	1
Mangali	5	4	1	2	0	0	0	0	0	12
Yerukula	6	3	0	0	0	0	0	0	0	9
Koya	7	3	1	0	0	2	0	0	0	13
Tenugu	7	7	6	8	1	0	0	0	0	29
Chakali	39	6	3	6	1	4	0	0	0	59
Gouda	51	25	16	28	4	0	1	0	0	125
Golla	140	44	23	33	4	2	0	0	0	246
Madiga	122	55	27	56	12	12	1	1	0	286
Velama	138	50	38	73	35	28	2	2	8	374
Total	541	211	134	223	62	58	4	3	8	1244

Source: Field Survey, 2006-07.

Note: ILT = Illiterate, PM = Primary, UPM = Upper Primary, SC = Secondary, HSC = Higher Secondary, GR = Graduation, PG = Post Graduation, Prof. GR = Professional Graduation, Prof. PG = Professional Post Graduation and Children in the age category of 0-4 are exempted from the counting.

Except for the Velamas, none of the members of other castes in the village could reach the education levels of Post Graduate professional courses like MCA, MBA and M.Tech. One student from this caste group is presently doing his MS in U.S.A. The drop outs rate after the high school education is found to be very high among all the caste groups except for the Velamas. Due to the result of agricultural growth in the village Velamas' economic position has improved significantly. High levels of mechanization of agriculture in the village also resulted in displacement of family labour for various agricultural activities. This resulted in their encouragement for their children's educational aspirations which has also become an issue of social status in the present times. Some of these parents are even staying in Karimnagar town along with their children by taking houses on rent for this purpose.

Interestingly, Gollas, who are the second largest community in the village in terms of their economic status, are very poor in their education standards. From the entire Golla caste population, we found only four members who have done their Intermediate education and only two persons did their graduation. There is not a single person who has reached to the level of post graduation among them. As discussed earlier, a typical Golla household is engaged in diverse economic activities cutting across the age groups. From the early childhood, their children are encouraged to go for grazing sheep. This has become a basic obstacle for them to pursue

education in their early ages and when they attain the age of youth they are again send to work in the agriculture fields leaving no scope for them to pursue education. Among the Chakali caste group more than the two thirds of the population are consisted of illiterates. Very few among this caste group from the present generation hailing from well to do families were able to reach the level of higher education.

Even among Koya and Madiga communities, there are parents who are aspiring for their children's education. Two girls from these communities got admission into Pharmacy course. Otherwise, majority of the Koya and Madiga children are not into their higher education. There is a good presence of young men in the age category of 16-22 among Madigas, who, however, have discontinued their studies after schooling and most of them shifted to work as petty casual labours or some simply doing nothing. Literacy levels are better among Muslim population when compared to the other caste groups in the village. They constitute the third largest number in terms of graduate holders from the village. However, due to various reasons, none of them were able to pursue post graduate courses.

3.8: Gender wise Education levels:

Education	Male	%	Female	%	Total	%
Illiterate	226	35.5%	315	51.9%	541	43.5%
Primary	112	17.6%	99	16.3%	211	17.0%
Upper Primary	61	9.6%	73	12.0%	134	10.8%
Secondary	140	22.0%	83	13.7%	223	17.9%
Higher Secondary	48	7.5%	14	2.3%	62	5.0%
Graduate	41	6.4%	16	2.6%	57	4.6%
Post Graduate	2	0.3%	3	0.5%	5	0.4%
Professional Graduate	1	0.2%	2	0.3%	3	0.2%
Professional Post Graduate	6	0.9%	2	0.3%	8	0.6%
Total	637	100.0%	607	100.0%	1244	100.0%

Source: Field Survey, 2006-07.
Note: Children in the age category of 0-4 are exempted from counting.

According to the Census 2001, Andhra Pradesh has an overall literacy rate of 60.5%. While the male literacy rate is at 70.3%, the female literacy rate is only at 50.4%. In the study village, total literates constitute of 56.5 % and among male population, 64.5% are literates and among female 48.1% are literates. This clearly

shows the backwardness of the village in terms of literacy levels when compared with the state level. There is less ratio of female population in the higher levels of study when compared with the male counterparts. However, at graduate professional courses and Post Graduate level, the female number is higher than male. In the category of Post Graduate professional courses, again male number is dominant over the female. The numbers truly represent the dominance of male over the female in terms of education.

There are multiple reasons that could be attributed to the low level literacy among female population. The first and basic reason lies in the values of patriarchal society that exists in Indian society which does not encourage girls to pursue education which is also visible in the study village. The obstacles for the girl's education start from the early age itself where she will be asked to take care of her younger siblings back at home while the parents go for work. When the girl attains certain age, the parents start taking her to the work place to work as wage labour. This tendency results in the early drop outs among the school going girls. Marriages at young age also make them to discontinue their studies as they move to their in laws place.

Lack of proper transportation facility to the educational institutions at higher level which are located far from the village also becomes an obstacle for the girl students to go further level in their education. Nevertheless, few exceptions were found even in the cases of some working caste/class families in the village where girls are pursuing their higher education with the support and encouragement given by their parents. This can be considered as the changing attitude of some of the parents in the village towards the girl child's education.

Religion:

The village is inhabited by people belonging to Hindu, Muslim and Christian households. In the study village 97 percent of the population is composed of Hindus religion. 2.5 percent of the population comprised of Muslims who have been residing in the village since generations. The village also has two Madiga caste households who are converted into Christianity a few years back. There is an increase of Christian followers at individual level among the Madiga households in the village.

Three major Hindu temples exist in the village namely *Anjaneya* Temple, *Pochamma* Temple and *Ellamma* Temple. *Anjaneya* temple is located on the side of the road that connects the centre of the village near the Gram Panchayat office. This is a recently built temple in the village. This is the only 'Sanskritic' temple in the village where devotes visit temple and offer prayers daily. During various festival occasions also villagers offer prayers in this temple. An elderly person from the Ausula caste who has knowledge in Hindu scriptures performs the role of priest in this temple. He is also consulted on various matters like astrology and '*muhurtham*' for various ceremonial occasions by the villagers. During *Hanuman Jayanthi* festival the *Anjaneya* temple get its shine with the regular *bhajans*, prayers offered by the hanuman followers. The '*Hanuman Deeksha*[1]' is taken by good number of persons in the village generally who are in the young age group every year on this occasion.

The *Pochamma* temple is located near the Upper Primary School which is generally considered as the deity of the artisan castes in the village. It is a small construction with very little space inside. The villagers offer sacrifices of hen or goat to this deity during festivals, ceremonies and on auspicious occasions at home. Devotees from the Dalit caste also visit this temple and offer sacrifices on special occasions. There is another small temple near the bund of village tank namely *Madaleshwara Swami* known as the caste deity of Chakali community. It has a small idol located in the very small place which does not have any significance for other castes in the village.

There is another temple in the village namely '*Renuka Ellamma*,' which is the caste deity of Gouda community. This temple is located in a secluded place under the shade of bunch of toddy trees in the vicinity of agricultural fields. This temple has a nicely built structure with large space and the walls of the temple are painted with various pictures of the deity. This place is also known for toddy selling and we can see people sitting and drinking toddy from the toddy tappers.

[1] This is cult that is practiced by the men from different communities worshipping the God Hanuman for a period of 45 days during his birth anniversary. As part of this practice devotees wear a uniform saffron and white colour dress while strictly following vegetarian diet, spending their time in worshipping and praying the God Hanuman and also staying away from all kinds of physical pleasures in their daily routine.

For Muslims, there is a small place in the '*turaka wada*' where they keep '*peerlu*' (consist of sacred flags) on the branches of tamarind tree during the Moharram festival. They generally offer '*Namaz*' (prayer) in the Maszids located in the nearby town. This can be considered as worshiping place for them in the village. Christian followers of the village also generally go to the nearby town to offer prayers in the church. Sometimes prayers are arranged on Sundays in any of the house of the followers in the village where the priest popularly called as 'father' from the town church will come and perform prayers.

In the study village there is no single Brahmin (the traditional caste of priests in Hindu religion) family. One person from the Ausula community who is known for his command in Hindu scriptures performs the role of the priest in *Anjaneya* temple. He is also consulted by the villagers for deciding auspicious dates for various rituals conducted at individual homes. The followers of Hindu religion celebrate the festivals like *Dasara, Ugadi, Vinayaka Chavithi and Sankranthi* in a grand manner. During the *Vinayaka Chaturdi* festival Ganesh idol is installed in the centre of the village near *Goundla wada* that has a permanent structure. Ganesh idols are also installed in two streets of SC colony. During *Hanuman Jayanthi* festival, good numbers of men take up the '*Hanuman Deeksha'* and follow the cult during the period which generally ends on 45 days concluding on the day of *Hanuman Jayanthi*.

Jataras[2]: The villagers actively participate in different *Jataras* that are locally organized. The prominent among them is 'Sammkka-Saralamma' *Jatara.* This *Jatara* is conducted once in two years and is prominently known in the entire Telangana region having its history and prime significance in Medaram village of Warangal District. Millions of devotees visit this place during the *jatara.* However apart from Medaram village, the devotees actively participate in this *Jatara* that is organized simultaneously in different locations in the entire Telangana region. In the same way, the villagers of Thogata also go to the village namely Neerukulla which is around 10 kilometers away from the village. The actual location of the *Jatara* is situated on the outskirts of this village in adjacent to hilly and bushy area with a small stream of water passing by. During the *Jatara* this village gets flooded with several hundreds of

[2] Jatara is a local term used for celebrating the festivals of local deities in the form of organizing fairs. This culture is prominent in Telangana where we can find no presence of Brahminic priests and rituals in such Jataras however, attracting huge number of devotees across different Hindu caste groups.

worshippers from the neighboring mandals. The *jatara* goes on for three days and all categories of people participate in this *Jatara*. The devotees, generally, after taking bath in the stream, offer animal sacrifices to the goddesses during this *jatara* and they cook food there, and after having meal they return to their homes. People reach this place by Bullock cart, bikes, autos, cars, jeeps and Tractors depending on the availability.

'*Renuka Ellamma*' *Jatara* is also celebrated in the village in a grand manner which is specifically related to the Goudas, the traditional toddy tapper community. This *jatara* is celebrated once in two years. However, the place of *Jatara* is mostly in the major temples of *Renuka Ellamma* that are located in different villages in the region. The members of Gouda caste join together at the '*Renuka Ellamma*' temple on this occasion. The members of Gouda families offer animal sacrifice during the *jatara* and make feast arrangements with meat and toddy liquor on this occasion.

Economic Organization:

The village economy is primarily based on agriculture and its allied activities. Majority of the population in the village depends on agriculture and its related activities for their livelihood. With the introduction of canal irrigation there is very little amount of land that is left uncultivated in the village. People in the village are seen always busy in various kinds of farm activities all through the year.

Agriculture is the major source of income for majority of the population in the village. The major castes that are engaged in agriculture in the village are Velamas, Gollas, Tenugu and Madigas. Velamas are the dominant landholding caste in the village with all most all the households engaging in agriculture. Majority of the Golla households in the village are also actively engaged in agriculture along with their traditional occupation. We found few cultivators among the Dalits. However, a number of them also depend on agriculture as wage labour during the crop season. Few households from the castes like Chakali, Kummari and Gouda also practice cultivation as their major occupation. Agriculture in the village also produced demand for *hamali* labour during the every crop season that contributes to the incomes of several labour households belonging to Golla and Madiga caste groups. The

population belonging to the middle castes like Ausula, Chakali, Mangali, Vadla, and Gouda are mostly engaged in their traditional caste related occupations.

Heavy mechanization agriculture in the village resulted in other avenues of income for rich farmers in the village. Tractors and harvester machines that are owned by the rich farmers in the village also contribute good amount to village economy. The owners of such machinery earn regular income by providing them to other farmers in and out side village on rent basis. These machines also produced new employment opportunities for the landless labour households who in turn were hired as drivers by the owners of this machinery. Agriculture growth in the village also resulted in other subsidiary activities like motor repairing work for couple of households from the village. There are very few government employees from the village except for the V.R.O. (Village Revenue Officer) and one bus driver working for the state owned public transport organization widely known as APSRTC.

Enterprises and Industries:

Animal Husbandry is another major economic activity that has prominent presence in the study village. There are two major milk collecting points in the village. One among these two points belongs to the biggest landlord from the village popularly known with the term '*pala*' (milk) becoming a prefix to his name. He collects milk from various households in the village and sells the milk to a famous restaurant in Karimnagar town. He owns an Auto Trolley which is run by him and sometimes by his son for this purpose to supply the milk on every day. There is another milk collecting point of a private dairy company which is run by an elderly Velama rich farmer from the village. Many individuals who own cattle deliver milk daily at his house which is the collection point for the company in the village. They are paid money by the same person on behalf of the company on the basis of both quality and quantity of milk which is checked on everyday while collecting the milk and paid on weekly basis. One more person in the village also does the milk business that is from Madiga community. He owns few buffaloes and sells milk personally among the households in Sultanabad on his motorcycle (a small variant called Moped) daily.

Rice mills are the emerging source of investment for the richest section of farmers in the village. There are around 8-10 households that own rice mills with all of them belonging to Velama caste. Rice mills are one of the major industries in the area which are providing regular employment to the landless inmates of Thogata to large extent. Construction of new rice mills and operational maintenance of the rice mills have become major source of income for majority of the Dalit households in the village. Apart from rice mills, some of the young and dynamic persons from the village are running different business ventures in the area. One rich farmer from Tenugu caste owns an agriculture pipe manufacturing factory in the outskirts of the village on the highway road. A young Velama farmer owns a weigh bridge on the highway road. Another rich farmer from the same caste has recently purchased a seed manufacturing factory in the neighbouring village located on the highway road. The rich Velama farmers from the village are also investing good amount of their surplus income that is generated from agriculture into real estate ventures across the state.

Political Organization:

In the study village there are two types of political organizations with one being the informal one that operates at caste (community) level and the other one is the (Grama) Village Panchayat that is comprised of elected representatives of the people in the village.

Caste Associations: In the study village, the prominent caste associations belong to the castes like Golla, Gouda. Among these, the caste association of Gollas is called as '*Yadava Sangham*' in the village. It has own building near the new settlement of Golla households. This association is very strong in the village and members of this association meet regularly at this building to discuss various matters pertaining to them. Any dispute that arises among the members Golla caste is taken up by members of the *Yadava Sangham* for settling it. Another caste association is called as '*Gouda Sangham*' belonging to the toddy tappers' caste. This association primarily looks after the maintenance of toddy trees among its own caste members. In general, the *Sangham* meets twice in a year to allot toddy trees to its caste members through auction and the money raised through this is utilized for community's welfare. However in case of any personal disputes or family related issues the Gouds in the village generally approach Velamas to solve the issue.

Grama (Village) Panchayat: This is the elected body of the village. The elected ward members include one person from castes namely Chakali, Tenugu and two members from Velama, Golla and Madiga castes. Some of these members are women candidates who belong to castes of Velama, Golla and Madiga. Even though women are elected as ward members in the body their role is minimal in the activities of Gram Panchayat (GP) while the husbands of these members generally play active role in the office matters. The women members attend all formal meetings of the Panchayat; however they do not play any important role in the affairs of Gram Panchayat activities. Even though this body is comprised of individuals across the caste groups in the village, it is the Velamas who actually dominate the entire activities of the Gram Panchayat.

Power Relations:

From beginning the village is known for very active politics in the entire surrounding area. It has been primarily dominated by the strong feudal forces belonging to the caste of Velama. Numerically the village is dominated by Velamas who also own large land holdings. One single Velama person has ruled the village as the Sarpanch for nearly 30 years since the Independence. And only when reservations were introduced in electoral bodies at the Gram Panchayat level for the back ward and other marginalized sections of the society started representing in the Gram Panchayat. Due to these electoral reforms, for the first time, one woman from Chakali (backward community) caste was elected as the village Sarpanch in the year 1984. Along with these reforms, the village has also witnessed the activities of left wing revolutionary parties during this period. Some of the young persons from the deprived castes started questioning the authority/ atrocities of the feudal forces in the village with the influence of the left wing revolutionary parties.

This situation has resulted in the emergence of a group opposing the domination of the Velama landlord's activities in the village. Some of the liberal Velama farmers who got fed up with the arrogant attitude of the village landlord have also joined this group. The resistance from this group has resulted in small disputes in the village which eventually led to big clashes in the village. The progressive forces in the village took the help of the revolutionary party that was operating in that area during that time and few of the villagers joined in this group to fight against the

atrocities of feudal landlords in the village. Eventually there was bloodshed that occurred in the village where members from both feudal and oppressed groups got killed.

After this incident there has been an increase in the political awareness and self dignity among the deprived castes/communities of the village and most of them belong to Dalit and other backward communities. However, this awareness has been limited to the community level and still; the Velamas dominate in the affairs of GP. The best example is the domination of the feudal landlord in the affairs of village GP during the term of a Dalit Sarpanch in the recent period. During the GP elections of year 2001 one Dalit person, who is an illiterate from agriculture labour background was elected unanimously as the Sarpanch by the all members of the village. However during his entire tenure, it was in fact the feudal landlord family, which has run the GP. The villagers were forced to approach the house of this landlord every time in case of any work related to GP to get it done. The Sarpanch was made as a puppet in the hands of the landlord who has been a loyal servant of him working at his farm as attached labour since many years.

The domination of the Velamas reflect in many ways in terms of their economic status with the possession of valuable properties like land, agriculture machinery, vehicles, and other accessories etc. Above all these, the strong social network among the members of this caste makes them unquestionable in the affairs of the village politics. In case of any dispute among different caste groups in the village, they generally approach the Velamas in the village. The domination of the Velamas is also visible in terms of their tone while talking with/about persons from other castes in the village in both public and private conversations.

To some extent the Golla community plays decisive role in the politics due to its numerical dominance along with economic power. With the presence of huge voters' base, the Dalit members of the village were appeased by the ruling parties in the village. They are simply seen as major vote banks and were never encouraged to participate in active politics. The previous Sarpanch who is from a Backward Community is elected from the panel of anti-feudal forces of the village. He is a young and dynamic person who acts on his own decision in various welfare and development programs that are being implemented in the village. However, he is not

involved in solving any civil disputes among villagers which is still in the hands of elderly Velamas. Also, he is always guided by the Velama group that supported him in the affairs of GP. However, in the recent elections of Gram Panchayat the panel belonging to the landlord's factions has again won the elections.

Factions:

The village is basically divided into two factions both of them lead by two Velama families. These two factions represent two different political parties namely Congress and Telugu Desham Party (now onwards TDP). The TDP faction is led by the feudal landlord family that has been dominating the village politics since generations. However the roots of these families are not from the village as one middle aged widow came to this village in search of livelihood few generations back. With the help of some relatives she has bought some land in the village and started cultivating the land with the help of her sons. One of her son got married to the local girl from a big landlord family from the village.

Since then the family has settled down in the village permanently and built close relationships with other Velama families through matrimonial alliances. Over a period of time the family has accumulated huge lands and established themselves as one of the prominent landlords in the village. Her elder son has emerged as the most prominent and powerful landlords in the area. During this period they earned hundreds of acres of land in and around the village and started playing unquestionable position in the village politics. The present head of this family who is the eldest son of the landlord is no exception to this, with his adamant and typical feudal attitude who always tries to hold his control on the village affairs.

The other faction is led by another big landlord family from the village belonging to an Ex Patwari family. This family is composed of five brothers who collectively cultivate their individual lands in the village under the supervision of one brother who stays in the village. Some of them also run individual business ventures outside the village. This faction is led by the eldest brother of the family who belongs to Congress party. This person is a business man who stays in Karimnagar but he visits the village on regular basis. This faction has good support base among large number of Velama families from the *Velpui wada*. The present Patwari (V.R.O.) family, which has been fighting against the domination of the feudal landlord's family

in the village, is also a supporter of this faction. The faction is also supported by good number of other service caste families like Madiga, Chakali, Goud and other deprived castes from the village. The educated sections from various caste groups are well behind this group.

Communication and other Facilities:

The study village is located on the state high way of Andhra Pradesh popularly known as '*Rajiv Rahadari*' that connects Karimnagar and Ramagunama with the capital city of Hyderabad, covering a distance of 250 kilometers. This highway is one of the busiest roads in the state as it connects the industrial hub of the district that is Ramagundam to other parts of the state. The village is located in a distance of 22 kms from Karimnagar town on this highway road. At this point there is a small narrow lane of kucha road and the actual village is located in a distance of one kilometer from the highway.

There is no direct bus service to the village Thogata but one daily bus service is available which goes through the new settlements of the village that connects the mandal headquarters. The villagers have to walk for distance of 1 kilometer to reach the main road to catch any bus or auto towards Karimnagar. The nearest market for the village is Sultanabad, a very small town which is located in a distance of four kilometers from the village towards the east direction. A weekly market runs once in a week in the mandal head quarters which is also located in the same distance from the village in the north direction. Villagers regularly travel to Karimnagar, the district headquarters for different works like administrative, purchasing agriculture inputs, education and also for entertainment. 'Shared Autos' are the major source of transportation for the villagers as they run services regularly from the main road to Karimnagar town.

The village has canal stream that goes through the agriculture fields located in the northern side of the village. This canal was built under the Sri Ram Sagar Project (SRSP) and most of the cultivation in the village depends on this canal water. The village has a tank and few acres of land are irrigated at present under this tank. The village also had few other Tanks namely *Regula kunta, Shakinavari kunta, Sareddivari kunta* which were breached. Two other tanks, *Muthaiah kunta* and

Kancharivari kunta do not exist now. Along with this many of the farmers have private bore wells in their own agriculture fields.

The village has a post office which runs in the house of an old Velama couple. There is no primary health centre located in the village. The nearest PHC is located in the mandal headquarters, Eligaid. The medical personnel from this PHC visit the village regularly to provide health services to the inmates of the village. However the villagers mostly depend on two young men from Muslim community who are practicing as R.M.P. in the village. The fathers of both these practitioners were former R.M.P. from whom they have learnt this occupation. One among these is a veterinary practitioner.

The main village has two big *Kirana* (grocery) shops belonging to Gouda and Tenugu along with two small *Kirana* shops both belonging to Gouda families. In the SC colony, there is one *Kirana* shop owned by a retired coal mine worker from the Madiga community, which caters the needs of the colony people. No single tea shop exists in the village. The village has a wine shop which is run by a Gouda man. There are two cycle repair shops located in the village one belong to a Gouda married man and the other one belongs to a college student from Muslim community. Both of these shops located in the main village.

The village has two major drinking water storage plants also called as over head tanks. One is situated in the main village in the vicinity of the school and the other is located in the SC colony. Six hand pumps are located in the village to cater the needs of the people for water. One cell tower is located in the village in the new settlement of Golla wada serving the needs of mobile phone customers in the village.

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Chapter 4
AGRARIAN CLASS STRUCTURE

The rural society in India can be categorized into different classes depending on their ownership of various means of production in agriculture. In a very detailed definition of classes, Lenin says 'Classes are large groups of people differing from each other by the place they occupy in a historically determined system of social production, by their relation to the means of production, by their role in the social organization of labour, and consequently, by the dimensions of the share of social wealth of which they dispose and the mode of acquiring it' (as cited in Athreya et al., 1990: 172). However, in the context of understanding the class structure in rural India, we have to include caste as part of the analysis. This is because Indian feudalism has been structured and shaped through caste and it is still prevalent today even though in another form making it a vital factor in the analysis (Omvedt, 1981: A156). This chapter tries to present the position of various households in the village across the caste and landholding categories by analyzing their ownership of different means of production.

Land is the fundamental means of production in an agrarian society like India without which, no agricultural production can take place. That is why the understanding of the pattern of ownership and operational holdings of land becomes central in understanding the agrarian class structure in rural India (Rawal, 2008: 43). The ownership of land is also linked with issues like social status, self esteem and also as the source of power. With the introduction of canal water and HYV seeds there have been a steady increase in the crop yields which resulted in the surplus production in Thogata village agriculture. Consequently land has become the crucial factor to locate a household's economic position in the village.

The total cultivated area in the village covers an area of 796 acres. Out of this, 75 percent of the cultivating land is owned by Velama households. Another nine percent of the land is owned by *Golla* households. Dalit households own only seven and half percent of the total cultivating land in the village and the rest of the agriculture land belong to other backward communities. The present study village has

huge variations in terms of size of ownership of agriculture land among different caste groups. The average landholding for the Velama caste group is six acres of land per household. In the case of Tenugu caste group, it is 1.7 acres per household for Kummari caste it is 1.5 acre per household, for Gollas it is 1.1 acre per household. Among all other landholding castes, the average ownership of agriculture land further comes down to less than one acre land per household on an average. These statistics clearly show that most of the agriculture land in the village is under the control and ownership of Velamas, the dominant landholding caste in Telangana. The below table describes the ownership of different sizes of landholdings among various communities in the study village.

Table 4.1: Ownership of Agriculture Land:

Social Group	Community	Category of Landholding							Total HH
		A1	A2	A3	A4	A5	A6	A7	
OC	Muslim	7 (88)	0 (0)	1 (12)	0 (0)	0 (0)	0 (0)	0 (0)	8 (100)
	Velama	11 (11)	3 (3)	11 (11)	28 (27)	25 (24)	18 (18)	6 (6)	102 (100)
	Total HH	18 (16)	3 (3)	12 (11)	28 (25)	25 (24)	18 (16)	6 (5)	110 (100)
OBC	Ausula	7 (78)	1 (11)	1 (11)	0 (0)	0 (0)	0 (0)	0 (0)	9 (100)
	Kummari	1 (33)	0 (0)	2 (67)	0 (0)	0 (0)	0 (0)	0 (0)	3 (100)
	Vadla	3 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (100)
	Mera	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (100)
	Mangali	3 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (100)
	Tenugu	2 (22)	0 (0)	4 (45)	3 (33)	0 (0)	0 (0)	0 (0)	9 (100)
	Chakali	12 (60)	2 (10)	5 (25)	0 (0)	1 (5)	0 (0)	0 (0)	20 (100)
	Gouda	24 (70)	7 (21)	1 (3)	1 (3)	1 (3)	0 (0)	0 (0)	34 (100)
	Golla	11 (18)	7 (11)	18 (29)	17 (27)	6 (10)	3 (5)	0 (0)	62 (100)
	Total HH	64 (44)	17 (12)	31 (21)	21 (15)	8 (6)	3 (2)	0 (0)	144 (100)
SC	Madiga	32 (39)	32 (39)	11 (13)	7 (9)	0 (0)	0 (0)	0 (0)	82 (100)
	Total HH	32 (39)	32 (39)	11 (13)	7 (9)	0 (0)	0 (0)	0 (0)	82 (100)
ST	Yerukula	3 (100)	0 (0)	0 (0)	0 (0)	0 (00	0 (0)	0 (0)	3 (100)
	Koya	4 (100)	0 (00	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	4 (100)
	Total HH	7 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	7 (100)
Total HH		121 (35)	52 (15)	54 (16)	56 (16)	33 (10)	21 (6)	6 (2)	343 (100)

Source: Field survey 2006-7, (Figures in brackets are percentages.)
Note: A1 = Landless (0 acres), A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

Landless (0 acres): In the study village, 35 percent of the total households do not own any agriculture land. In the OC category among the Muslims 88 percent of the

households are landless. Among the Velamas, only 11 percent of them belong to the landless households. This is not a significant number because most of these landless households belong to the old couple living separately from their children as their dependants. Even few other landless households from this group do engage in cultivation by leasing in land from others in the village. In the OBC category, 44 percent of the total households are into landless category. Within this, not a single household from the castes of Vadla, Mera and Mangali own agriculture land. More than 2/3rd of the households from the Ausula and Gouda caste are in the landless category. In case of Chakali households, 60 percent of them do not own agriculture land. Among the Kummari households, 1/3rd of them belong to the landless category. In case of Tenugu caste, 22 percent of them are landless, and among Gollas only 18 percent of them do not own agriculture land. In the SC category, 39 percent of their total households belong to the landless category. Whereas from the ST category we have two social groups namely Yerukula and Koya that are living in the village. All the ST households in the village are landless.

Marginal (above 0–1 acre): In the OC category, among the Velamas, only three percent of their total households fall in this landholding category. On an average, 12 percent of the OBC households have marginal landholdings. Within this, among Gouda caste, 21 percent of their total households fall in this category. Among the SCs, 39 percent of their total households have marginal landholdings.

Small (above 1–2.5 acre): In the OC category, 11 percent of the Velama households have small landholdings. The single Muslim household owning an agriculture land falls in this category. This Muslim household does not engage in cultivation by themselves and they always lease out their agriculture land to others in the village for cultivation. In the OBC category, on an average, 21 percent of the total households are with small landholdings. Within this category, among Kummari caste, 2/3rd of the households fall in this category. Forty five percent of the Tenugu caste households belong to this category. Among Gollas, 29 percent of the households have small landholdings. In case of Chakali caste, 1/4th of their total households fall in this category. In the SC category, only 13 percent of their total households belong to this category.

Lower Medium (above 2.5–5 acres): In the OC category, among the Velamas, 27 percent of their total households belong to this category. On an average, 15 percent of the OBC households fall in this category. Within the OBCs, 1/3rd of the Tenugu caste households and 27 percent of Golla households come in this category. Among the SCs only nine percent of their total households belong to this category.

Upper Medium (above 5–8 acres): In the OC category, among the Velamas, 24 percent of their total households in the village belong to this category. In the OBC category, on an average, only six percent of the households fall in this category. Within this category, only one household each from the castes of Chakali and Gouda have upper medium landholdings. The head of the Chakali household is a retired coal mine worker who has settled down in the village after his retirement from his service and engaged in cultivation. Among the Gollas, only 10 percent of their households fall in this category. None of the other caste groups in the village own upper medium landholding in the village.

Big (above 8–12 acres): In the OC category, 18 percent of the total Velama households belong to this category in the village. On an average, only two percent of the OBC households have big land holding. Within this category, among the Gollas five percent of their total households fall in this category. None of the other social groups in the village hold big landholding in the village.

Large (above 12 acres): This is the highest strata of land ownership in the study village. In the OC category, among the Velamas, only six percent of the households have large landholding in the village. This large landholding is exclusively owned by the Velama caste households and none of the other social groups in the village own large landholding in the village.

Table 4.2: Distribution of Type of Soil:

Social Group	Community	Type of soil	Category of Landholding						Total HH
			A2	A3	A4	A5	A6	A7	
OC	Muslim	White	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	1 (100)
	Velama	Red	3 (100)	8 (73)	24 (86)	23 (92)	18 (100)	6 (100)	82 (91)
		Black	0 (0)	0 (0)	4 (14)	1 (4)	0 (0)	0 (0)	5 (5)
		White	0 (0)	3 (27)	0 (0)	1 (4)	0 (0)	0 (0)	4 (4)
	Total HH		3 (3)	12 (13)	28 (30)	25 (27)	18 (20)	6 (7)	92 (100)
OBC	Ausula	Red	1 (100)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Kummari	Red	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Tenugu	Red	0 (0)	4 (100)	3 (100)	0 (0)	0 (0)	0 (0)	7 (100)
	Chakali	Red	1 (50)	2 (40)	0 (0)	1 (100)	0 (0)	0 (0)	4 (50)
		Black	1 (50)	1 (20)	0 (0)	0 (0)	0 (0)	0 (0)	2 (25)
		White	0 (0)	2 (40)	0 (0)	0 (0)	0 (0)	0 (0)	2 (25)
		Total	2 (25)	5 (63)	0 (0)	1 (12)	0 (0)	0 (0)	8 (100)
	Gouda	Red	5 (71)	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	6 (60)
		Black	2 (29)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	3 (30)
		White	0 (0)	0 (0)	0 (0)	1 (100)	0 (0)	0 (0)	1 (10)
		Total	7 (70)	1 (10)	1 (10)	1 (10)	0 (0)	0 (0)	10 (100)
	Golla	Red	5 (72)	16 (88)	17 (100)	6 (100)	3 (100)	0 (0)	47 (92)
		Black	1 (14)	1 (6)	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)
		White	1 (14)	1 (6)	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)
		Total	7 (14)	18 (35)	17 (33)	6 (12)	3 (6)	0 (0)	51 (100)
	Total HH		17 (21)	31 (39)	21 (26)	8 (10)	3 (4)	0 (0)	80 (100)
SC	Madiga	Red	25 (78)	8 (73)	5 (72)	0 (0)	0 (0)	0 (0)	38 (76)
		Black	1 (3)	1 (9)	1 (14)	0 (0)	0 (0)	0 (0)	3 (6)
		White	6 (19)	2 (18)	1 (14)	0 (0)	0 (0)	0 (0)	9 (18)
		Total	32 (64)	11 (22)	7 (14)	0 (0)	0 (0)	0 (0)	50 (100)
Total HH			52 (23)	54 (24)	56 (25)	33 (16)	21 (9)	6 (3)	222 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages).
Note: A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

The soil in the village can be categorized in to three major types of namely red, black and white soil. Among these, red soil is considered to be the most fertile. Next is black soil and finally the white soil which is the lowest quality of land in terms of fertility of land. Thus the quality of the agriculture land that is owned by the households also becomes an important indicator in understanding their position in the local agrarian hierarchy.

In the OC category, among the Muslims, the only household that owns agriculture land belongs to the white soil category. In the case of Velamas, 91 percentage of the landholding households own red soil agriculture land. The rest of the Velama households own either black or white soil agriculture land. All the Velama households from the categories of big and large landholdings own red soil agriculture land in the village. They belong to the highest strata of landholdings in the village and their agriculture land is also comprised of best quality of the soil

In the OBC category, all the landholding households from the castes of Ausula, Kummari and Tenugu are comprised of red soil agriculture land. In the case of Golla caste 92 percent of them own red soil agriculture land. Within the Gollas, all the households from the lower medium and above landholding category own red soil agriculture land. Among the Gouda caste households only 60 percent of them own red soil agriculture land. In the case of Chakali caste only 50 percent of their households own red soil land. All the marginal and small landholdings belonging to the castes of Chakali and Golla are comprised of low quality soils of either black or white in the village. In the case of Gouda caste, the only household from the upper medium category landholding category owns low quality white soil agriculture land in the village. In the SC category, 76 percent of the Madiga households are comprised of red soil agriculture land in the village. Another eighteen percent of the Madiga landholdings are of white soil type land. The slight better percentage of red soil land among the SCs could be attributed to their newly acquired government land which is comprised of red soil type in the village.

The above table clearly depicts that all the Velama and Golla farmers belonging to the higher strata own the most fertile land in the village. This eventually has resulted in the increased yields when compared with other soil landholdings. Consequently their economic position has also improved significantly. Among the Dalits even though good number of households from this caste also own red soil agriculture land most of them fall in the marginal and small landholdings due to which they could not avail this advantage.

Table 4.3: Sources of Irrigation:

Social Group	Caste	Source of irrigation	Category of Landholding						Total HH
			A2	A3	A4	A5	A6	A7	
OC	Muslim	C	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	1 (100)
	Velama	C	0 (0)	3 (27)	2 (7)	1 (4)	1 (6)	0 (0)	7 (8)
		T	0 (0)	0 (0)	0 (0)	2 (8)	0 (0)	0 (0)	2 (2)
		WwE	2 (67)	2 (18)	2 (7)	0 (0)	0 (0)	0 (0)	6 (7)
		C+WwE	1 (33)	6 (55)	24 (86)	22 (88)	17 (94)	6 (100)	76 (83)
		Total	3 (3)	11 (13)	28 (30)	25 (27)	18 (20)	6 (7)	91 (100)
	Total HH		3 (3)	12 (13)	28 (30)	25 (27)	18 (20)	6 (7)	92 (100)
OBC	Ausula	C+WwE	1 (100)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Kummari	C	0 (0)	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)	1 (50)
		C+WwE	0 (0)	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)	1 (50)
		Total	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Tenugu	C+WwE	0 (0)	4 (100)	3 (100)	0 (0)	0 (0)	0 (0)	7 (100)
	Chakali	C	0 (0)	4 (80)	0 (0)	1 (100)	0 (0)	0 (0)	5 (63)
		T	1 (50)	1 (20)	0 (0)	0 (0)	0 (0)	0 (0)	2 (25)
		WwE	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (12)
		Total	2 (25)	5 (63)	0 (0)	1 (12)	0 (0)	0 (0)	8 (100)
	Gouda	C	2 (29)	0 (0)	0 (0)	1 (100)	0 (0)	0 (0)	3 (30)
		T	2 (29)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (20)
		WwE	3 (42)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (30)
		C+WwE	0 (0)	1 (100)	1 (100)	0 (0)	0 (0)	0 (0)	2 (20)
		Total	7 (70)	1 (10)	1 (10)	1 (10)	0 (0)	0 (0)	10 (100)
	Golla	C	5 (71)	12 (67)	5 (29)	1 (17)	0 (0)	0 (0)	23 (45)
		WwE	0 (0)	2 (11)	1 (6)	0 (0)	0 (0)	0 (0)	3 (6)
		C+WwE	2 (29)	4 (22)	11 (65)	5 (83)	3 (100)	0 (0)	25 (49)
		Total	7 (14)	18 (34)	17 (33)	6 (13)	3 (6)	0 (0)	51 (100)
	Total HH		17 (21)	31 (39)	21 (26)	8 (10)	3 (4)	0 (0)	80 (100)
SC	Madiga	C	29 (91)	5 (45)	1 (14)	0 (0)	0 (0)	0 (0)	35 (70)
		C+WwE	3 (9)	6 (55)	6 (86)	0 (0)	0 (0)	0 (0)	15 (30)
		Total	32 (64)	11 (22)	7 (14)	0 (0)	0 (0)	0 (0)	50 (100)
Total HH			52 (23)	54 (24)	56 (25)	33 (15)	21 (9)	6 (3)	222 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages).
C = Canal, T = Tank, WwE = Well with Electricity.
Note: A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

In the OC category, the single Muslim landholding household completely depends on canal water for irrigation. There will be always an uncertainty on the release of canal water as it is completely depended on the level of rainfall that occurs

during the every monsoon season. Thus a bad rainfall for any year will have a direct negative impact on the crop yield of any landholding. In such situation any alternative arrangement of irrigation by the farmers will be an advantageous factor for them. In case of Velama caste, landholdings 83 percent of them have both canal and well with electricity facility in their farm lands. That means most of the Velama landholdings in the village have got sources for sustainable crop production. Another seven percent of the Velama households have only well with electricity facility to irrigate their lands. Only ten percent of the Velama farmers depend solely on public irrigation systems like wither canal or tank water for irrigation.

In the OBCs, all the households from the castes of Ausula and Tenugu have both canal as well as well as electricity facility for their farm lands. Out of two farmers from Kummari caste, one person has only canal water, and the other one has both canal and well with electricity facility to irrigate their farm lands. Sixty three percent of the Chakali landholdings completely depend on canal for irrigation. Another 25 percent of the households from this caste depend on tank water. Only one household (12 percent) from this caste owns private irrigation facility in the form of well with electricity. In the Gouda caste only 20 percent of the landholdings have both canal and well with electricity facility to their farm lands. Another 30 percent of Gouda households own wells with electricity facility. The rest 50 percent of the households depend on public irrigation facilities of either canal or tank to irrigate their lands. Among the Gollas, 49 percent of the landholdings have both canal and well with electricity facility for their farm lands. Another 45 percent of the households completely depend on canal water for irrigation.

In the SC category 70 percent of the landholding households completely depend on canal water for irrigation. Only 30 percent of the landholding households from this caste have facility of both canal and as well as well with electricity in their farm lands. This clearly shows that majority of the Dalit landholdings in the village do not own any alternative private irrigation facility in their farm lands.

Agriculture Instruments:

Apart from the land, ownership of agriculture instruments plays an important role in locating a household in the class structure. Ownership of heavy machinery like

tractors and harvester earn additional income for their owners improving their economic position. The following tables present the details on ownership of different agriculture instruments across various social groups in the study village.

Table 4.4: Ownership of Plough:

Social Group	Caste	Ownership of plough	Category of Landholding						Total HH
			A2	A3	A4	A5	A6	A7	
OC	Velama	Yes	0 (0)	3 (27)	14 (50)	13 (52)	12 (67)	5 (83)	47 (52)
		No	3 (100)	8 (73)	14 (50)	12 (48)	6 (33)	1 (17)	44 (48)
		Total HH	3 (3)	11 (12)	28 (31)	25 (27)	18 (20)	6 (7)	91 (100)
OBC	Ausula	No	1 (50)	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Kummari	Yes	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Tenugu	Yes	0 (0)	0 (0)	3 (100)	0 (0)	0 (0)	0 (0)	3 (43)
		No	0 (0)	4 (100)	0 (0)	0 (0)	0 (0)	0 (0)	4 (57)
		Total HH	0 (0)	4 (57)	3 (43)	0 (0)	0 (0)	0 (0)	7 (100)
	Chakali	No	2 (25)	5 (62)	0 (0)	1 (12)	0 (0)	0 (0)	8 (100)
	Gouda	Yes	0 (0)	0 (0)	0 (0)	1 (100)	0 (0)	0 (0)	1 (10)
		No	7 (100)	1 (100)	1 (100)	0 (0)	0 (0)	0 (0)	9 (90)
		Total HH	7 (70)	1 (10)	1 (10)	1 (10)	0 (0)	0 (0)	10 (100)
	Golla	Yes	1 (14)	8 (44)	11 (65)	3 (50)	3 (100)	0 (0)	26 (51)
		No	6 (86)	10 (56)	6 (35)	3 (50)	0 (0)	0 (0)	25 (49)
		Total HH	7 (14)	18 (35)	17 (33)	6 (12)	3 (6)	0 (0)	51 (100)
	Total	Yes	1 (6)	10 (32)	14 (67)	4 (50)	3 (100)	0 (0)	32 (40)
		No	16 (94)	21 (68)	7 (33)	4 (50)	0 (0)	0 (0)	48 (60)
		Total HH	17 (21)	31 (39)	21 (26)	8 (10)	3 (4)	0 (0)	80 (100)
SC	Madiga	Yes	3 (9)	4 (36)	2 (29)	0 (0)	0 (0)	0 (0)	9 (18)
		No	29 (91)	7 (64)	5 (71)	0 (0)	0 (0)	0 (0)	41 (82)
		Total HH	32 (64)	11 (22)	7 (14)	0 (0)	0 (0)	0 (0)	50 (100)
Total		Yes	4 (8)	17 (32)	30 (54)	17 (52)	15 (71)	5 (83)	88 (40)
		No	48 (92)	36 (68)	26 (46)	16 (48)	6 (29)	1 (17)	133 (60)
		Total HH	52 (23)	53 (24)	56 (25)	33 (15)	21 (10)	6 (3)	221 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages)
Note: A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

The above table shows the owners of plough across the castes among various landholding categories. Overall 40 percent of the landholding households own plough in the village. In the OC category, 52 percent of the Velama landholding households own plough. In the OBC category on an average 40 percent of the total households own ploughs. However, within this category none of the households from the Ausula and Chakali caste own ploughs in the village. All the farmers from Kummari caste

own plough. In case of Tenugu caste, 43 percent of them own plough, and thus, all of them fall in lower medium landholding category. All the Tenugu caste farmers below this landholding category do not have plough in their households. Only ten percent (one household) of the Gouda caste farmers belonging to the upper medium landholding category owns plough. The rest of the Gouda landholdings in the village fall below this category and none of these households own plough. In case of Golla farmers, 51 percent of them own plough with majority of them coming from the upper strata of landholdings within the caste. In the SC category only 18 percent of the landholdings among the Madiga caste households own plough in the village.

In the village good numbers of households from all the caste categories do not have plough. The reasons for this are multiple in natures that differ for different castes as well as different land holding households. Firstly, the use of plough has been coming down across all the categories with the introduction of the metal plough along with the tractor. Secondly, among the middle strata farmers, most of them are hiring these machineries from their owners on rent basis and they have also stopped using the wooden ploughs. In the case of lower strata of landholdings where most of them belong to the Dalit and other backward communities in the village are not able to afford to get a plough. From the beginning, they used to hire these wooden ploughs from the rich farmers in the village in the exchange of either labour work or money. Moreover these households always will be busy in looking out for daily wage earning opportunities and never get focus on buying ploughs and make use of them. That is why good number farmers from such marginal and small landholdings do the plough work in their agriculture fields by hiring a tractor on rent basis. By doing so, they are saving their time and energy in their farm lands.

Table 4.5: Ownership of Bullock Cart:

Social Group	Caste	Ownership of Bullock Cart	Category of Landholding						Total HH
			A2	A3	A4	A5	A6	A7	
OC	Velama	Yes	0 (0)	3 (27)	15 (54)	12 (48)	12 (67)	6 (100)	48 (53)
		No	3 (100)	8 (73)	13 (46)	13 (52)	6 (33)	0 (0)	43 (47)
		Total	3 (3)	11 (12)	28 (31)	25 (27)	18 (20)	6 (7)	91 (100)
OBC	Ausula	No	1 (100)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Kummari	Yes	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Tenugu	Yes	0 (0)	0 (0)	3 (100)	0 (0)	0 (0)	0 (0)	3 (43)
		No	0 (0)	4 (100)	0 (0)	0 (0)	0 (0)	0 (0)	4 (57)
		Total	0 (0)	4 (57)	3 (43)	0 (0)	0 (0)	0 (0)	7 (100)
	Chakali	Yes	0 (0)	1 (20)	0 (0)	0 (0)	0 (0)	0 (0)	1 (12)
		No	2 (100)	4 (80)	0 (0)	1 (100)	0 (0)	0 (0)	7 (88)
		Total	2 (25)	5 (62)	0 (0)	1 (12)	0 (0)	0 (0)	8 (100)
	Gouda	No	7 (70)	1 (10)	1 (10)	1 (10)	0 (0)	0 (0)	10 (100)
	Golla	Yes	1 (14)	8 (44)	11 (65)	3 (50)	3 (100)	0 (0)	26 (51)
		No	6 (86)	10 (56)	6 (35)	3 (50)	0 (0)	0 (0)	25 (49)
		Total	7 (14)	18 (35)	17 (33)	6 (12)	3 (6)	0 (0)	51 (100)
	Total	Yes	1 (6)	11 (35)	14 (67)	3 (38)	3 (100)	0 (0)	32 (40)
		No	16 (94)	20 (65)	7 (33)	5 (62)	0 (0)	0 (0)	48 (60)
		Total	17 (21)	31 (39)	21 (26)	8 (10)	3 (4)	0 (0)	80 (100)
SC	Madiga	Yes	2 (6)	4 (36)	2 (29)	0 (0)	0 (0)	0 (0)	8 (16)
		No	30 (94)	7 (64)	5 (71)	0 (0)	0 (0)	0 (0)	42 (84)
		Total	32 (64)	11 (22)	7 (14)	0 (0)	0 (0)	0 (0)	50 (100)
Total		Yes	3 (6)	18 (34)	31 (55)	15 (45)	15 (71)	6 (100)	88 (40)
		No	49 (94)	35 (66)	25 (45)	18 (55)	6 (29)	0 (0)	133 (60)
		Total HH	52 (23)	53 (24)	56 (25)	33 (15)	21 (10)	6 (3)	221 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages)
Note: A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

The above table describes the number of landholding households that own bullock cart across the various social groups. In the OC category, 53 percent of the Velama caste landholdings own bullock cart. In Velama caste, all the households from the large landholding category own cart. However, none of the households from the same caste with marginal landholding own bullock cart. In the OBC category on an average 40 percent of the households own bullock cart in their household. However, within this none of the households from Ausula and Gouda caste own bullock cart. All the Kummari caste farmers in the village own cart in their house. In Tenugu caste, 43 percent of them have bullock cart and all these households fall in the higher strata of landholdings within the caste. In the case of Chakali caste, only one household that

too from the upper medium landholding category owns bullock cart. Among the Golla farmers, 51 percent of them have carts in their household which is higher than the average ownership among the all caste groups in the OBC category. Within the Gollas all the households from big landholdings own bullock cart. In SC category among the Madiga caste households only 19 percent of them have a cart. This clearly shows that Dalit farmers in the village are far behind in terms of owning bullock carts.

Table 4.6: Ownership of Tractor:

Social Group	Caste	Ownership of Tractor	Category of Landholding						Total HH
			A2	A3	A4	A5	A6	A7	
OC	Velama	Yes	0 (0)	0 (0)	3 (11)	6 (24)	6 (33)	3 (50)	18 (20)
		No	3 (100)	11 (100)	25 (89)	19 (76)	12 (67)	3 (50)	73 (80)
		Total	3 (3)	11 (12)	28 (31)	25 (27)	18 (20)	6 (7)	91 (100)
OBC	Ausula	No	1 (50)	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Kummari	No	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Tenugu	No	0 (0)	4 (57)	3 (43)	0 (0)	0 (0)	0 (0)	7 (100)
	Chakali	No	2 (25)	5 (62)	0 (0)	1 (12)	0 (0)	0 (0)	8 (100)
	Gouda	Yes	0 (0)	0 (0)	0 (0)	1 (100)	0 (0)	0 (0)	1 (10)
		No	7 (100)	1 (100)	1 (100)	0 (0)	0 (0)	0 (0)	9 (90)
		Total	7 (70)	1 (10)	1 (10)	1 (10)	0 (0)	0 (0)	10 (100)
	Golla	Yes	0 (0)	0 (0)	0 (0)	0 (0)	2 (67)	0 (0)	2 (4)
		No	7 (100)	18 (100)	17 (100)	6 (100)	1 (33)	0 (0)	49 (96)
		Total	7 (14)	18 (35)	17 (33)	6 (12)	3 (6)	0 (0)	51 (100)
	Total	Yes	0 (0)	0 (0)	0 (0)	1 (12)	2 (67)	0 (0)	3 (4)
		No	17 (100)	31 (100)	21 (100)	7 (88)	1 (33)	0 (0)	77 (96)
		Total	17 (21)	31 (39)	21 (26)	8 (10)	3 (4)	0 (0)	80 (100)
SC	Total	No	32 (64)	11 (22)	7 (14)	0 (0)	0 (0)	0 (0)	50 (100)
Total		Yes	0 (0)	0 (0)	3 (5)	7 (21)	8 (38)	3 (50)	21 (10)
		No	52 (100)	53 (100)	53 (95)	26 (79)	13 (62)	3 (50)	200 (90)
		Total HH	52 (23)	53 (24)	56 (25)	33 (15)	21 (10)	6 (3)	221 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages)
Note: A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

The above table explains the number of tractor owners in the study village. The usage of tractor has been steadily increasing since from the beginning of canal irrigation in the village. It has become a major agricultural asset because of its multiple usages for different kinds of agricultural activities. Ownership of tractor puts a farmer in a very advantageous position as it simplifies, quickens and saves a lot of time in different agriculture activities. Many farmers who do not own tractor

generally hire from its owners depending on their requirement. Hence, the ownership of tractor is another major indicator to understand the economic position of the farmer in the village along with category of land. The tractor owners earn regular additional income by leasing out this machinery to other farmers on rent basis.

In the study village, only 10 percent of the landholding households own tractor. That means owning a tractor is limited to only few farmers in the village. In the OC category, among the Velamas, 20 percent of their households own tractor. In this caste group, starting from the lower medium landholding to large landholding category there are tractor owners across all these categories. In fact 85 percent of the total tractors in the village are owned only by the Velama households. In the OBC category only four percent of their total households own tractor in the village. There is one Gouda farmer from the upper medium landholding category who owns tractor from this category. Among the Gollas, only two farmers from the big landholding category own tractor in the village. Within the OBCs, no single household from the castes of Ausula, Kummari, Tenugu and Chakali own tractor. In the SC category also, none of the households from Madiga caste, own tractor in the village.

There has been a steady growth in the number of tractor owners in the village. By the year 2012-13 the total number of tractors in the village has reached to 50. That means during a period of last five years it has reached to more than a double number. The number of tractor owners from the Castes of Velama has further increased with few more owners from the Golla caste joining with them. During this period, for the first time, one farmer among the Dalits has also purchased tractor in the village. This clearly shows the continued trend of investing surplus income generated through agriculture into development of forces of production by purchasing heavy machinery by the upward mobile class of farmers.

Table 4.7: Source of Finance (Purchase of Tractor):

Social Group	Caste	Source of Finance	Category of Landholding				Total HH
			A4	A5	A6	A7	
OC	Velama	Own money	1 (33)	2 (33)	3 (50)	2 (67)	8 (44)
		Credit (formal)	2 (67)	4 (67)	2 (33)	1 (33)	9 (50)
		Credit (informal)	0 (0)	0 (0)	1 (17)	0 (0)	1 (6)
		Total	3 (17)	6 (33)	6 (33)	3 (17)	18 (100)
OBC	Gouda	Credit (informal)	0 (0)	1 (100)	0 (0)	0 (0)	1 (100)
	Golla	Own money	0 (0)	0 (0)	2 (100)	0 (0)	2 (100)
	Total	Own money	0 (0)	0 (0)	2 (100)	0 (0)	2 (67)
		Credit (informal)	0 (0)	1 (100)	0 (0)	0 (0)	1 (33)
		Total	0 (0)	1 (33)	2 (67)	0 (0)	3 (100)
Total		Own money	1 (33)	2 (29)	5 (62)	2 (67)	10 (48)
		Credit (formal)	2 (67)	4 (57)	2 (25)	1 (33)	9 (43)
		Credit (informal)	0 (0)	1 (14)	1 (12)	0 (0)	2 (10)
		Total	3 (14)	7 (33)	8 (38)	3 (14)	21 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages)
A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

The above table explains the various sources of money for purchasing the tractors by the owners in the village. Among all the households, 48 percent of them bought tractors with their own money. Another 43 percent of the tractor owners purchased them by availing loans from the government bank. Only 10 percent of the owners took credit from others to buy tractors. In the OC category, among the Velamas, 44 percent of them depended on their own money. Fifty percent of the owners from this caste availed bank loans. Only six percent of them depended on private credit in order to buy tractor. In the case of OBCs, none of the owners from this availed bank loan while buying the tractor. The only Gouda caste owner got credit from the local landlords in order to purchase the tractor. All the tractor owners from the Golla caste have bought it with their own money. The data clearly shows that except for the Velamas, none of the tractor owners from other castes have access to the government sponsored credit resources in the study village. Because of their dominant position in the local power structure and wider social network, Velamas have better access to such resources. The nearest government bank is located in the mandal headquarters of the village, at a distance of 4 kms from the village.

Table 4.8: Ownership of Harvester:

Social Group	Caste	Ownership of Harvester	Category of Landholding						Total HH
			A2	A3	A4	A5	A6	A7	
OC	Velama	Yes	0 (0)	0 (0)	0 (0)	5 (20)	4 (22)	0 (0)	9 (10)
		No	3 (100)	11 (100)	28 (100)	20 (80)	14 (78)	6 (100)	82 (90)
		Total	3 (3)	11 (12)	28 (31)	25 (27)	18 (20)	6 (7)	91 (100)
OBC	Ausula	No	1 (100)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Kummari	No	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Tenugu	No	0 (0)	4 (100)	3 (100)	0 (0)	0 (0)	0 (0)	7 (100)
	Chakali	No	2 (100)	5 (100)	0 (0)	1 (100)	0 (0)	0 (0)	8 (100)
	Gouda	No	7 (100)	1 (100)	1 (100)	1 (100)	0 (0)	0 (0)	10 (100)
	Golla	Yes	0 (0)	0 (0)	0 (0)	0 (0)	2 (67)	0 (0)	2 (4)
		No	7 (100)	18 (100)	17 (100)	6 (100)	1 (33)	0 (0)	49 (96)
		Total	7 (14)	18 (35)	17 (33)	6 (12)	3 (6)	0 (0)	51 (100)
	Total	Yes	0 (0)	0 (0)	0 (0)	0 (0)	2 (67)	0 (0)	2 (2)
		No	17 (100)	31 (100)	21 (100)	8 (100)	1 (33)	0 (0)	78 (98)
		Total	17 (21)	31 (39)	21 (26)	8 (10)	3 (4)	0 (0)	80 (100)
SC	Madiga	No	32 (100)	11 (100)	7 (100)	0 (0)	0 (0)	0 (0)	50 (100)
Total		Yes	0 (0)	0 (0)	0 (0)	5 (15)	6 (29)	0 (0)	11 (5)
		No	52 (100)	53 (100)	56 (100)	28 (85)	15 (71)	6 (100)	210 (95)
		Total HH	52 (23)	53 (24)	56 (25)	33 (15)	21 (10)	6 (3)	221 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages)
A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

The above table explains the details of ownership of harvester machines in the study village. Out of total landholding households, only five percent of them own harvester machines. The ownership these machines is restricted only two caste groups namely Velama from OC category and Golla from OBC category. Among the harvester owners 81 percent of them belong to the Velama caste and the rest 19 percent of the households belong to the Golla caste. None of the households from SC category own harvester. Also in the OBC category, none of the landholding households belonging to the castes of Ausula, Kummari, Chakali, Tenugu and Gouda own a harvester in the village.

In the OC category, among the Velamas the ownership of harvester is restricted to upper medium and big landholding category. All these households are very enterprising in nature and always look for additional sources of income apart

from cultivation. These households earn good income by leasing out these harvester machines to others during every crop season. Some of them personally operate and supervise the work during harvesting and others recruit drivers/operators for their machines. Interestingly, none of the Velama households from the large landholding category which is the highest strata of landholding own harvester in the village. Some of these households belong to the feudal landlord families who do not show any interest in such kind of enterprising activities. They prefer to invest their surplus money into rice mills rather than into this heavy machinery.

In the OBC category, except for the Golla caste, none of the other caste households own a harvester in the village. Two Golla households from the big landholding category own harvester machines. They belong to the top strata of landholding within their caste and are very enterprising in nature. They also earn additional income by lease outing these machines during every crop season. The source of finance for all these harvester owners from both Velama and Golla caste in the village is formal credit and all of them have availed bank loans while purchasing the harvester machines. A harvester machine costs around 30 lakh rupees and these banks provide 20 percent discount on these machinery for the benefit of the buyers. There has been a steady increase even in the case of these harvester machines in the study village. By the year 2012-13 the number of harvester machine has reached to 21 that means within a span of five year the number of harvesters in the village has doubled. The earnings of the owners from this machinery have been attracting many other rich farmers to buy them. These enterprising farmers are exploring new avenues of income due to the variations in the harvesting time for paddy crop across different regions in the state.

In the study village there are total seven households that own both harvester and tractor. There are four Velama and one Golla household from the big landholding category owning both of these machines. Another two Velama households from the upper medium landholding also own both harvester and tractor in the village.

Table 4.9: Ownership of Sprayer:

Social Group	Caste	Ownership of Sprayer	Category of Landholding						Total HH
			A2	A3	A4	A5	A6	A7	
OC	Velama	Yes	0 (0)	1 (9)	12 (43)	19 (76)	14 (78)	6 (100)	52 (57)
		No	3 (100)	10 (91)	16 (57)	6 (24)	4 (22)	0 (0)	39 (43)
		Total HH	3 (3)	11 (12)	28 (31)	25 (27)	18 (20)	6 (7)	91 (100)
OBC	Ausula	No	1 (50)	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Kummari	No	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Tenugu	No	0 (0)	4 (57)	3 (43)	0 (0)	0 (0)	0 (0)	7 (100)
	Chakali	Yes	0 (0)	0 (0)	0 (0)	1 (100)	0 (0)	0 (0)	1 (12)
		No	2 (100)	5 (100)	0 (0)	0 (0)	0 (0)	0 (0)	7 (88)
		Total	2 (25)	5 (62)	0 (0)	1 (12)	0 (0)	0 (0)	8 (100)
	Gouda	Yes	0 (0)	0 (0)	0 (0)	1 (100)	0 (0)	0 (0)	1 (10)
		No	7 (100)	1 (100)	1 (100)	0 (0)	0 (0)	0 (0)	9 (90)
		Total	7 (70)	1 (10)	1 (10)	1 (10)	0 (0)	0 (0)	10 (100)
	Golla	Yes	0 (0)	1 (6)	1 (6)	4 (67)	2 (67)	0 (0)	8 (16)
		No	7 (100)	17 (94)	16 (94)	2 (33)	1 (33)	0 (0)	43 (84)
		Total	7 (14)	18 (35)	17 (33)	6 (12)	3 (6)	0 (0)	51 (100)
	Total	Yes	0 (0)	1 (3)	1 (5)	6 (75)	2 (67)	0 (0)	10 (12)
		No	17 (100)	30 (97)	20 (95)	2 (25)	1 (33)	0 (0)	70 (88)
		Total HH	17 (21)	31 (39)	21 (26)	8 (10)	3 (4)	0 (0)	80 (100)
SC	Madiga	Yes	1 (3)	4 (36)	2 (29)	0 (0)	0 (0)	0 (0)	7 (14)
		No	31 (97)	7 (64)	5 (71)	0 (0)	0 (0)	0 (0)	43 (86)
		Total HH	32 (64)	11 (22)	7 (14)	0 (0)	0 (0)	0 (0)	50 (100)
Total		Yes	1 (2)	6 (11)	15 (27)	25 (76)	16 (76)	6 (100)	69 (31)
		No	51 (98)	47 (89)	41 (73)	8 (24)	5 (24)	0 (0)	152 (69)
		Total HH	52 (23)	53 (24)	56 (25)	33 (15)	21 (10)	6 (3)	221 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages)
Note: A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

The above table depicts the owners of the sprayers in the study village. Sprayers are used for sprinkling pesticides over the plant to fight against various insects that damage the crop. Overall, among all the landholding households, on an average, only 31 percent of them own sprayers in the village. In the OC category, among the Velamas, 57 percent of the landholdings own sprayer in their household. This is much above from the average of all households in the village. In the OBC category, on an average, only 12 percent of the households own sprayer. Within this category, none of the households from the castes of Ausula, Kummari and Tenugu own a sprayer. In the same category, among the Chakali and Gouda castes, only one household from the upper medium landholding own sprayer. In the case of Golla caste

also, only 16 percent of them own sprayer. In the SC category, among the Madiga households, only 14 percent of them own sprayer. The ownership of sprayer among all these caste groups is far below from the total average of village. Again Velamas are in more advantageous position in the village in terms of owning spryer when compared with other caste groups. The sprayer owners in the village also earn little amount of money by giving them on rent basis to other farmers.

There are different types of sprayers namely hand, petrol and battery depending the source of fuel for these instruments. Among these hand sprayer is considered to be of the lowest level of technology which has to be manually operated by hand. The other one runs by petrol reducing the manual effort while operating. Battery sprayers are equipped with latest technology that runs with the help of electric power minimizing the manual effort further. In the village in the OC category, among the Velamas, 63 percent these owners have hand sprayers. Another 23 percent of the owners have battery sprayers and rest of them own petrol sprayers. In the case of OBC category, all the households from the castes of Chakali and Golla own hand sprayers. One Gouda farmer owns petrol sprayer in the same category. In the SC category all the households own only hand sprayer. The only Gouda farmer who has a sprayer owns a petrol sprayer. That means except for the Velamas none of the landholding households in the village own battery sprayers and all these owners belong to the upper medium and above landholdings only.

Livestock:

Animal husbandry is also an important source of income for an agrarian society like India. The households in rural India are usually comprised of different types of pets and animals depending on their socio-economic position. In the study village, selling milk is an additional source of income for many of the households in the study village. In the case of Gollas and couple of households from other castes, goats and sheep are the major sources of income.

Table 4.10: Ownership of Buffaloes:

Social Group	Community	Category of Landholding							Total Buffaloes
		A1	A2	A3	A4	A5	A6	A7	
OC	Muslim	0	0	0	-		-	-	0 (0)
	Velama	3	1	3	47	55	48	58	215 (76)
OBC	Ausula	0	0	1	-	-	-	-	1 (0.35)
	Kummari	0	0	1	-	-	-	-	1 (0.35)
	Vadla	4	-	-	-	-	-	-	4 (1.3)
	Mera	0	-	-	-	-	-	-	0 (0)
	Mangali	2	-	-	-	-	-	-	2 (0.7)
	Tenugu	0	0	1	4	-	-	-	5 (1.7)
	Chakali	0	0	2	-	0	-	-	2 (0.7)
	Gouda	0	0	0	0	3	-	-	3 (1.2)
	Golla	1	3	10	9	7	3	-	33 (11.7)
	Total	7	3	15	13	10	3	-	51 (18)
SC	Madiga	2	3	3	8	-	-	-	16 (6)
ST	Yerukula	0	-	-	-	-	-	-	0 (0)
	Koya	0	-	-	-	-	-	-	0 (0)
Total Buffaloes		12 (4)	7 (2)	21 (7)	68 (24)	65 (23)	51 (19)	58 (21)	282 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages)
Note: A1 = Landless (0 acres), A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres).

The above table explains the ownership of buffalo among various socio-economic categories of the village. In the study village, altogether, there are total 282 buffaloes among all the households. Out of them, 76 percent of the buffaloes are owned by the Velama caste households. This clearly shows that Velamas are in a better position when it comes to the income generation from milk selling. Another 18 percent of the buffaloes are owned by all the castes in the OBC category. Only six percent of the buffaloes in the village are owned by the Madigas from the SC category. In the OC category none of the Muslim households own buffalo. Among the Velamas the ownership of buffalo is spread across all the landholding categories however most of the owners are from the medium and above land holdings. In the OBC category, 65 percent of buffaloes are exclusively owned by the Golla caste households. None of the households from Yerukula and Koya in the ST category own buffalo in the village.

Table 4.11: Ownership of Sheep:

Social Group	Community	Category of Landholding							Total Sheep
		A1	A2	A3	A4	A5	A6	A7	
OC	Muslim	0	0	0	-	-	-	-	0 (0)
	Velama	0	0	0	0	70	0	0	70 (9)
OBC	Ausula	0	0	0	-	-	-	-	0 (0)
	Kummari	0	0	0	-	-	-	-	0 (0)
	Vadla	0	-	-	-	-	-	-	0 (0)
	Mera	0	-	-	-	-	-	-	0 (0)
	Mangali	0	-	-	-	-	-	-	0 (0)
	Tenugu	0	0	0	0	-	-	-	0 (0)
	Chakali	0	0	0	-	0	-	-	0 (0)
	Gouda	0	0	0	0	0	-	-	0 (0)
	Golla	25	50	240	172	200	0	-	687 (90)
SC	Madiga	0	6	2	0	-	-	-	8 (1)
ST	Yerukula	0	-	-	-	-	-	-	0 (0)
	Koya	0	-	-	-	-	-	-	0 (0)
Total Sheep		25 (3)	56 (7)	242 (32)	172 (22)	270 (36)	0	0	765 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages)
Note: A1 = Landless (0 acres), A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres).

The above table explains the ownership of sheep among different households in the village. Gollas are the traditional shepherd caste in the village. There are, a total of 765 sheep in the village. In that, 90 percent of the sheep are owned by the Golla households. Within this caste, except for the big landholding category, households from all other landholding categories own sheep in their house. None of the household from the big landholding have sheep as all of them completely shifted their occupation to agriculture. Nine percent of the total sheep in the village are owned by the Velamas. Only one percent of the sheep in the village belong to the Madiga households.

The above details on ownership of different means of production among different socio-economic categories shows the agrarian class structure in the study village. In the above analysis three major means of productions are analyzed namely land, agriculture instruments and livestock. Velamas, have emerged as the dominant landholding class in the village by owning ¾ of the total agriculture land in the village. With the introduction of canal water, Velamas have started investing their surplus income in buying more agriculture land from other non- cultivators and in the

process have emerged as the rich landholding class in the village. Most of their agriculture lands are comprised of best quality red soil along with best sources of irrigation in terms of both canal water as well as private wells with electricity. This protects their crop during the shortage of supply in canal water. Most of the heavy machinery like tractors and harvesters in the village belong to Velama farmers through which they earn additional income during every crop period. Milk selling is another source of income for them as we see that ¾ of buffaloes in the village is owned by soley by Velama households. Velamas own and control the most of the means of production in agriculture which has resulted in the dominant class position for them in the village.

Gollas, from the OBC category stand second next only to Velamas in the village agrarian class structure. Nine percent of the total agriculture land in the village is owned by households belonging to this particular caste group. Within Gollas 82 percent of them own agriculture land. More than 90 percent of their landholdings are comprised of best quality soil. When it comes to the source of irrigation they fall behind Velamas with only 55 percent of them owing private irrigation facilities. In the case of ownership of agriculture instruments, half of the households own basic instruments like plough and bullock cart. However, when it comes to owning heavy machinery like tractor and harvester only couple of Golla households have them that too from the big landholdings. Even though Gollas lag behind Velamas in owning livestock like buffalo they outnumber all other castes in the ownership of sheep in their household. Being the traditional shepherd caste 90 percent of the sheep in the village belong to only Gollas. In fact, the subsidiary income they earn from these sheep along with their active participation in wage labour activities from both men and women members of the households has put Gollas above all other caste groups from the OBC category.

Apart from Gollas, the only other caste primarily engaged in agriculture is Tenugu. The number of Tenugu households is less than ten in the village however; most of them fall in either small or medium landholding categories. All landholdings from this caste are comprised of best quality land along with private irrigation facility and also canal water. However, none of the Tenugu caste farmer owns either tractor or harvester. In the case of livestock, only half of them own buffalo in their household.

Among the Chakali caste, only 40 percent of them own agriculture land and within this, most of them belong to either marginal or small landholdings that make them insignificant in the local class structure.

Finally in the SC category, seven percent of the total agriculture land in the village is owned by Madiga caste households. However, this becomes very insignificant because of their high number of households thus most of these landholdings belong to the marginal one. Around ¼ of the landholdings from this caste are comprised of inferior quality land. Only 30 percent of the Madiga landholdings in the village own private irrigation facilities making the majority landholdings vulnerable for cultivation during the non availability of canal water. Very few households own minor agriculture instruments and none of them have either tractor or harvester. This makes them to depend on others while carrying out different agricultural activities. Only couple of Madiga landholdings has livestock in their household. Under these material conditions most of the households from this caste survive on daily wage earnings pushing them to the lowest strata of the local agrarian class structure.

The data in this chapter shows there is a high correlation between caste and class status[1] in the study village. That means the introduction of new technology could not break the already existing nexus between the caste-class among Thogata village population. It is still the downtrodden castes that consist of most of the landless households and agriculture labourers. At the same time, most of the means of productions in the village is in the hands and direct control of households from the upper caste background. Whereas as, most of the middle caste (OBC) households in the village are comprised of small landholdings.

[1] Mencher (1978: 126-141) In her study from Tamil Nadu argued that there is a close connection between caste and class with high percentage of landownership is concentrated in the higher castes and vast majority of agricultural labourers belonging to the 'untouchables' and other lower castes.

Chapter 4
AGRARIAN CLASS STRUCTURE

The rural society in India can be categorized into different classes depending on their ownership of various means of production in agriculture. In a very detailed definition of classes, Lenin says 'Classes are large groups of people differing from each other by the place they occupy in a historically determined system of social production, by their relation to the means of production, by their role in the social organization of labour, and consequently, by the dimensions of the share of social wealth of which they dispose and the mode of acquiring it' (as cited in Athreya et al., 1990: 172). However, in the context of understanding the class structure in rural India, we have to include caste as part of the analysis. This is because Indian feudalism has been structured and shaped through caste and it is still prevalent today even though in another form making it a vital factor in the analysis (Omvedt, 1981: A156). This chapter tries to present the position of various households in the village across the caste and landholding categories by analyzing their ownership of different means of production.

Land is the fundamental means of production in an agrarian society like India without which, no agricultural production can take place. That is why the understanding of the pattern of ownership and operational holdings of land becomes central in understanding the agrarian class structure in rural India (Rawal, 2008: 43). The ownership of land is also linked with issues like social status, self esteem and also as the source of power. With the introduction of canal water and HYV seeds there have been a steady increase in the crop yields which resulted in the surplus production in Thogata village agriculture. Consequently land has become the crucial factor to locate a household's economic position in the village.

The total cultivated area in the village covers an area of 796 acres. Out of this, 75 percent of the cultivating land is owned by Velama households. Another nine percent of the land is owned by *Golla* households. Dalit households own only seven and half percent of the total cultivating land in the village and the rest of the agriculture land belong to other backward communities. The present study village has

huge variations in terms of size of ownership of agriculture land among different caste groups. The average landholding for the Velama caste group is six acres of land per household. In the case of Tenugu caste group, it is 1.7 acres per household for Kummari caste it is 1.5 acre per household, for Gollas it is 1.1 acre per household. Among all other landholding castes, the average ownership of agriculture land further comes down to less than one acre land per household on an average. These statistics clearly show that most of the agriculture land in the village is under the control and ownership of Velamas, the dominant landholding caste in Telangana. The below table describes the ownership of different sizes of landholdings among various communities in the study village.

Table 4.1: Ownership of Agriculture Land:

Social Group	Community	Category of Landholding							Total HH
		A1	A2	A3	A4	A5	A6	A7	
OC	Muslim	7 (88)	0 (0)	1 (12)	0 (0)	0 (0)	0 (0)	0 (0)	8 (100)
	Velama	11 (11)	3 (3)	11 (11)	28 (27)	25 (24)	18 (18)	6 (6)	102 (100)
	Total HH	18 (16)	3 (3)	12 (11)	28 (25)	25 (24)	18 (16)	6 (5)	110 (100)
OBC	Ausula	7 (78)	1 (11)	1 (11)	0 (0)	0 (0)	0 (0)	0 (0)	9 (100)
	Kummari	1 (33)	0 (0)	2 (67)	0 (0)	0 (0)	0 (0)	0 (0)	3 (100)
	Vadla	3 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (100)
	Mera	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (100)
	Mangali	3 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (100)
	Tenugu	2 (22)	0 (0)	4 (45)	3 (33)	0 (0)	0 (0)	0 (0)	9 (100)
	Chakali	12 (60)	2 (10)	5 (25)	0 (0)	1 (5)	0 (0)	0 (0)	20 (100)
	Gouda	24 (70)	7 (21)	1 (3)	1 (3)	1 (3)	0 (0)	0 (0)	34 (100)
	Golla	11 (18)	7 (11)	18 (29)	17 (27)	6 (10)	3 (5)	0 (0)	62 (100)
	Total HH	64 (44)	17 (12)	31 (21)	21 (15)	8 (6)	3 (2)	0 (0)	144 (100)
SC	Madiga	32 (39)	32 (39)	11 (13)	7 (9)	0 (0)	0 (0)	0 (0)	82 (100)
	Total HH	32 (39)	32 (39)	11 (13)	7 (9)	0 (0)	0 (0)	0 (0)	82 (100)
ST	Yerukula	3 (100)	0 (0)	0 (0)	0 (0)	0 (00	0 (0)	0 (0)	3 (100)
	Koya	4 (100)	0 (00	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	4 (100)
	Total HH	7 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	7 (100)
Total HH		121 (35)	52 (15)	54 (16)	56 (16)	33 (10)	21 (6)	6 (2)	343 (100)

Source: Field survey 2006-7, (Figures in brackets are percentages.)
Note: A1 = Landless (0 acres), A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

Landless (0 acres): In the study village, 35 percent of the total households do not own any agriculture land. In the OC category among the Muslims 88 percent of the

households are landless. Among the Velamas, only 11 percent of them belong to the landless households. This is not a significant number because most of these landless households belong to the old couple living separately from their children as their dependants. Even few other landless households from this group do engage in cultivation by leasing in land from others in the village. In the OBC category, 44 percent of the total households are into landless category. Within this, not a single household from the castes of Vadla, Mera and Mangali own agriculture land. More than 2/3rd of the households from the Ausula and Gouda caste are in the landless category. In case of Chakali households, 60 percent of them do not own agriculture land. Among the Kummari households, 1/3rd of them belong to the landless category. In case of Tenugu caste, 22 percent of them are landless, and among Gollas only 18 percent of them do not own agriculture land. In the SC category, 39 percent of their total households belong to the landless category. Whereas from the ST category we have two social groups namely Yerukula and Koya that are living in the village. All the ST households in the village are landless.

Marginal (above 0–1 acre): In the OC category, among the Velamas, only three percent of their total households fall in this landholding category. On an average, 12 percent of the OBC households have marginal landholdings. Within this, among Gouda caste, 21 percent of their total households fall in this category. Among the SCs, 39 percent of their total households have marginal landholdings.

Small (above 1–2.5 acre): In the OC category, 11 percent of the Velama households have small landholdings. The single Muslim household owning an agriculture land falls in this category. This Muslim household does not engage in cultivation by themselves and they always lease out their agriculture land to others in the village for cultivation. In the OBC category, on an average, 21 percent of the total households are with small landholdings. Within this category, among Kummari caste, 2/3rd of the households fall in this category. Forty five percent of the Tenugu caste households belong to this category. Among Gollas, 29 percent of the households have small landholdings. In case of Chakali caste, 1/4th of their total households fall in this category. In the SC category, only 13 percent of their total households belong to this category.

Lower Medium (above 2.5–5 acres): In the OC category, among the Velamas, 27 percent of their total households belong to this category. On an average, 15 percent of the OBC households fall in this category. Within the OBCs, 1/3rd of the Tenugu caste households and 27 percent of Golla households come in this category. Among the SCs only nine percent of their total households belong to this category.

Upper Medium (above 5–8 acres): In the OC category, among the Velamas, 24 percent of their total households in the village belong to this category. In the OBC category, on an average, only six percent of the households fall in this category. Within this category, only one household each from the castes of Chakali and Gouda have upper medium landholdings. The head of the Chakali household is a retired coal mine worker who has settled down in the village after his retirement from his service and engaged in cultivation. Among the Gollas, only 10 percent of their households fall in this category. None of the other caste groups in the village own upper medium landholding in the village.

Big (above 8–12 acres): In the OC category, 18 percent of the total Velama households belong to this category in the village. On an average, only two percent of the OBC households have big land holding. Within this category, among the Gollas five percent of their total households fall in this category. None of the other social groups in the village hold big landholding in the village.

Large (above 12 acres): This is the highest strata of land ownership in the study village. In the OC category, among the Velamas, only six percent of the households have large landholding in the village. This large landholding is exclusively owned by the Velama caste households and none of the other social groups in the village own large landholding in the village.

Table 4.2: Distribution of Type of Soil:

Social Group	Community	Type of soil	Category of Landholding						Total HH
			A2	A3	A4	A5	A6	A7	
OC	Muslim	White	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	1 (100)
	Velama	Red	3 (100)	8 (73)	24 (86)	23 (92)	18 (100)	6 (100)	82 (91)
		Black	0 (0)	0 (0)	4 (14)	1 (4)	0 (0)	0 (0)	5 (5)
		White	0 (0)	3 (27)	0 (0)	1 (4)	0 (0)	0 (0)	4 (4)
	Total HH		3 (3)	12 (13)	28 (30)	25 (27)	18 (20)	6 (7)	92 (100)
OBC	Ausula	Red	1 (100)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Kummari	Red	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Tenugu	Red	0 (0)	4 (100)	3 (100)	0 (0)	0 (0)	0 (0)	7 (100)
	Chakali	Red	1 (50)	2 (40)	0 (0)	1 (100)	0 (0)	0 (0)	4 (50)
		Black	1 (50)	1 (20)	0 (0)	0 (0)	0 (0)	0 (0)	2 (25)
		White	0 (0)	2 (40)	0 (0)	0 (0)	0 (0)	0 (0)	2 (25)
		Total	2 (25)	5 (63)	0 (0)	1 (12)	0 (0)	0 (0)	8 (100)
	Gouda	Red	5 (71)	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	6 (60)
		Black	2 (29)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	3 (30)
		White	0 (0)	0 (0)	0 (0)	1 (100)	0 (0)	0 (0)	1 (10)
		Total	7 (70)	1 (10)	1 (10)	1 (10)	0 (0)	0 (0)	10 (100)
	Golla	Red	5 (72)	16 (88)	17 (100)	6 (100)	3 (100)	0 (0)	47 (92)
		Black	1 (14)	1 (6)	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)
		White	1 (14)	1 (6)	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)
		Total	7 (14)	18 (35)	17 (33)	6 (12)	3 (6)	0 (0)	51 (100)
	Total HH		17 (21)	31 (39)	21 (26)	8 (10)	3 (4)	0 (0)	80 (100)
SC	Madiga	Red	25 (78)	8 (73)	5 (72)	0 (0)	0 (0)	0 (0)	38 (76)
		Black	1 (3)	1 (9)	1 (14)	0 (0)	0 (0)	0 (0)	3 (6)
		White	6 (19)	2 (18)	1 (14)	0 (0)	0 (0)	0 (0)	9 (18)
		Total	32 (64)	11 (22)	7 (14)	0 (0)	0 (0)	0 (0)	50 (100)
Total HH			52 (23)	54 (24)	56 (25)	33 (16)	21 (9)	6 (3)	222 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages).
Note: A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

The soil in the village can be categorized in to three major types of namely red, black and white soil. Among these, red soil is considered to be the most fertile. Next is black soil and finally the white soil which is the lowest quality of land in terms of fertility of land. Thus the quality of the agriculture land that is owned by the households also becomes an important indicator in understanding their position in the local agrarian hierarchy.

In the OC category, among the Muslims, the only household that owns agriculture land belongs to the white soil category. In the case of Velamas, 91 percentage of the landholding households own red soil agriculture land. The rest of the Velama households own either black or white soil agriculture land. All the Velama households from the categories of big and large landholdings own red soil agriculture land in the village. They belong to the highest strata of landholdings in the village and their agriculture land is also comprised of best quality of the soil

In the OBC category, all the landholding households from the castes of Ausula, Kummari and Tenugu are comprised of red soil agriculture land. In the case of Golla caste 92 percent of them own red soil agriculture land. Within the Gollas, all the households from the lower medium and above landholding category own red soil agriculture land. Among the Gouda caste households only 60 percent of them own red soil agriculture land. In the case of Chakali caste only 50 percent of their households own red soil land. All the marginal and small landholdings belonging to the castes of Chakali and Golla are comprised of low quality soils of either black or white in the village. In the case of Gouda caste, the only household from the upper medium category landholding category owns low quality white soil agriculture land in the village. In the SC category, 76 percent of the Madiga households are comprised of red soil agriculture land in the village. Another eighteen percent of the Madiga landholdings are of white soil type land. The slight better percentage of red soil land among the SCs could be attributed to their newly acquired government land which is comprised of red soil type in the village.

The above table clearly depicts that all the Velama and Golla farmers belonging to the higher strata own the most fertile land in the village. This eventually has resulted in the increased yields when compared with other soil landholdings. Consequently their economic position has also improved significantly. Among the Dalits even though good number of households from this caste also own red soil agriculture land most of them fall in the marginal and small landholdings due to which they could not avail this advantage.

Table 4.3: Sources of Irrigation:

Social Group	Caste	Source of irrigation	Category of Landholding						Total HH
			A2	A3	A4	A5	A6	A7	
OC	Muslim	C	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	1 (100)
	Velama	C	0 (0)	3 (27)	2 (7)	1 (4)	1 (6)	0 (0)	7 (8)
		T	0 (0)	0 (0)	0 (0)	2 (8)	0 (0)	0 (0)	2 (2)
		WwE	2 (67)	2 (18)	2 (7)	0 (0)	0 (0)	0 (0)	6 (7)
		C+WwE	1 (33)	6 (55)	24 (86)	22 (88)	17 (94)	6 (100)	76 (83)
		Total	3 (3)	11 (13)	28 (30)	25 (27)	18 (20)	6 (7)	91 (100)
	Total HH		3 (3)	12 (13)	28 (30)	25 (27)	18 (20)	6 (7)	92 (100)
OBC	Ausula	C+WwE	1 (100)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Kummari	C	0 (0)	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)	1 (50)
		C+WwE	0 (0)	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)	1 (50)
		Total	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Tenugu	C+WwE	0 (0)	4 (100)	3 (100)	0 (0)	0 (0)	0 (0)	7 (100)
	Chakali	C	0 (0)	4 (80)	0 (0)	1 (100)	0 (0)	0 (0)	5 (63)
		T	1 (50)	1 (20)	0 (0)	0 (0)	0 (0)	0 (0)	2 (25)
		WwE	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (12)
		Total	2 (25)	5 (63)	0 (0)	1 (12)	0 (0)	0 (0)	8 (100)
	Gouda	C	2 (29)	0 (0)	0 (0)	1 (100)	0 (0)	0 (0)	3 (30)
		T	2 (29)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (20)
		WwE	3 (42)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (30)
		C+WwE	0 (0)	1 (100)	1 (100)	0 (0)	0 (0)	0 (0)	2 (20)
		Total	7 (70)	1 (10)	1 (10)	1 (10)	0 (0)	0 (0)	10 (100)
	Golla	C	5 (71)	12 (67)	5 (29)	1 (17)	0 (0)	0 (0)	23 (45)
		WwE	0 (0)	2 (11)	1 (6)	0 (0)	0 (0)	0 (0)	3 (6)
		C+WwE	2 (29)	4 (22)	11 (65)	5 (83)	3 (100)	0 (0)	25 (49)
		Total	7 (14)	18 (34)	17 (33)	6 (13)	3 (6)	0 (0)	51 (100)
	Total HH		17 (21)	31 (39)	21 (26)	8 (10)	3 (4)	0 (0)	80 (100)
SC	Madiga	C	29 (91)	5 (45)	1 (14)	0 (0)	0 (0)	0 (0)	35 (70)
		C+WwE	3 (9)	6 (55)	6 (86)	0 (0)	0 (0)	0 (0)	15 (30)
		Total	32 (64)	11 (22)	7 (14)	0 (0)	0 (0)	0 (0)	50 (100)
Total HH			52 (23)	54 (24)	56 (25)	33 (15)	21 (9)	6 (3)	222 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages).
C = Canal, T = Tank, WwE = Well with Electricity.
Note: A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

In the OC category, the single Muslim landholding household completely depends on canal water for irrigation. There will be always an uncertainty on the release of canal water as it is completely depended on the level of rainfall that occurs

during the every monsoon season. Thus a bad rainfall for any year will have a direct negative impact on the crop yield of any landholding. In such situation any alternative arrangement of irrigation by the farmers will be an advantageous factor for them. In case of Velama caste, landholdings 83 percent of them have both canal and well with electricity facility in their farm lands. That means most of the Velama landholdings in the village have got sources for sustainable crop production. Another seven percent of the Velama households have only well with electricity facility to irrigate their lands. Only ten percent of the Velama farmers depend solely on public irrigation systems like wither canal or tank water for irrigation.

In the OBCs, all the households from the castes of Ausula and Tenugu have both canal as well as well as electricity facility for their farm lands. Out of two farmers from Kummari caste, one person has only canal water, and the other one has both canal and well with electricity facility to irrigate their farm lands. Sixty three percent of the Chakali landholdings completely depend on canal for irrigation. Another 25 percent of the households from this caste depend on tank water. Only one household (12 percent) from this caste owns private irrigation facility in the form of well with electricity. In the Gouda caste only 20 percent of the landholdings have both canal and well with electricity facility to their farm lands. Another 30 percent of Gouda households own wells with electricity facility. The rest 50 percent of the households depend on public irrigation facilities of either canal or tank to irrigate their lands. Among the Gollas, 49 percent of the landholdings have both canal and well with electricity facility for their farm lands. Another 45 percent of the households completely depend on canal water for irrigation.

In the SC category 70 percent of the landholding households completely depend on canal water for irrigation. Only 30 percent of the landholding households from this caste have facility of both canal and as well as well with electricity in their farm lands. This clearly shows that majority of the Dalit landholdings in the village do not own any alternative private irrigation facility in their farm lands.

Agriculture Instruments:

Apart from the land, ownership of agriculture instruments plays an important role in locating a household in the class structure. Ownership of heavy machinery like

tractors and harvester earn additional income for their owners improving their economic position. The following tables present the details on ownership of different agriculture instruments across various social groups in the study village.

Table 4.4: Ownership of Plough:

Social Group	Caste	Ownership of plough	Category of Landholding						Total HH
			A2	A3	A4	A5	A6	A7	
OC	Velama	Yes	0 (0)	3 (27)	14 (50)	13 (52)	12 (67)	5 (83)	47 (52)
		No	3 (100)	8 (73)	14 (50)	12 (48)	6 (33)	1 (17)	44 (48)
		Total HH	3 (3)	11 (12)	28 (31)	25 (27)	18 (20)	6 (7)	91 (100)
OBC	Ausula	No	1 (50)	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Kummari	Yes	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Tenugu	Yes	0 (0)	0 (0)	3 (100)	0 (0)	0 (0)	0 (0)	3 (43)
		No	0 (0)	4 (100)	0 (0)	0 (0)	0 (0)	0 (0)	4 (57)
		Total HH	0 (0)	4 (57)	3 (43)	0 (0)	0 (0)	0 (0)	7 (100)
	Chakali	No	2 (25)	5 (62)	0 (0)	1 (12)	0 (0)	0 (0)	8 (100)
	Gouda	Yes	0 (0)	0 (0)	0 (0)	1 (100)	0 (0)	0 (0)	1 (10)
		No	7 (100)	1 (100)	1 (100)	0 (0)	0 (0)	0 (0)	9 (90)
		Total HH	7 (70)	1 (10)	1 (10)	1 (10)	0 (0)	0 (0)	10 (100)
	Golla	Yes	1 (14)	8 (44)	11 (65)	3 (50)	3 (100)	0 (0)	26 (51)
		No	6 (86)	10 (56)	6 (35)	3 (50)	0 (0)	0 (0)	25 (49)
		Total HH	7 (14)	18 (35)	17 (33)	6 (12)	3 (6)	0 (0)	51 (100)
	Total	Yes	1 (6)	10 (32)	14 (67)	4 (50)	3 (100)	0 (0)	32 (40)
		No	16 (94)	21 (68)	7 (33)	4 (50)	0 (0)	0 (0)	48 (60)
		Total HH	17 (21)	31 (39)	21 (26)	8 (10)	3 (4)	0 (0)	80 (100)
SC	Madiga	Yes	3 (9)	4 (36)	2 (29)	0 (0)	0 (0)	0 (0)	9 (18)
		No	29 (91)	7 (64)	5 (71)	0 (0)	0 (0)	0 (0)	41 (82)
		Total HH	32 (64)	11 (22)	7 (14)	0 (0)	0 (0)	0 (0)	50 (100)
Total		Yes	4 (8)	17 (32)	30 (54)	17 (52)	15 (71)	5 (83)	88 (40)
		No	48 (92)	36 (68)	26 (46)	16 (48)	6 (29)	1 (17)	133 (60)
		Total HH	52 (23)	53 (24)	56 (25)	33 (15)	21 (10)	6 (3)	221 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages)
Note: A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

The above table shows the owners of plough across the castes among various landholding categories. Overall 40 percent of the landholding households own plough in the village. In the OC category, 52 percent of the Velama landholding households own plough. In the OBC category on an average 40 percent of the total households own ploughs. However, within this category none of the households from the Ausula and Chakali caste own ploughs in the village. All the farmers from Kummari caste

own plough. In case of Tenugu caste, 43 percent of them own plough, and thus, all of them fall in lower medium landholding category. All the Tenugu caste farmers below this landholding category do not have plough in their households. Only ten percent (one household) of the Gouda caste farmers belonging to the upper medium landholding category owns plough. The rest of the Gouda landholdings in the village fall below this category and none of these households own plough. In case of Golla farmers, 51 percent of them own plough with majority of them coming from the upper strata of landholdings within the caste. In the SC category only 18 percent of the landholdings among the Madiga caste households own plough in the village.

In the village good numbers of households from all the caste categories do not have plough. The reasons for this are multiple in natures that differ for different castes as well as different land holding households. Firstly, the use of plough has been coming down across all the categories with the introduction of the metal plough along with the tractor. Secondly, among the middle strata farmers, most of them are hiring these machineries from their owners on rent basis and they have also stopped using the wooden ploughs. In the case of lower strata of landholdings where most of them belong to the Dalit and other backward communities in the village are not able to afford to get a plough. From the beginning, they used to hire these wooden ploughs from the rich farmers in the village in the exchange of either labour work or money. Moreover these households always will be busy in looking out for daily wage earning opportunities and never get focus on buying ploughs and make use of them. That is why good number farmers from such marginal and small landholdings do the plough work in their agriculture fields by hiring a tractor on rent basis. By doing so, they are saving their time and energy in their farm lands.

Table 4.5: Ownership of Bullock Cart:

Social Group	Caste	Ownership of Bullock Cart	Category of Landholding						Total HH
			A2	A3	A4	A5	A6	A7	
OC	Velama	Yes	0 (0)	3 (27)	15 (54)	12 (48)	12 (67)	6 (100)	48 (53)
		No	3 (100)	8 (73)	13 (46)	13 (52)	6 (33)	0 (0)	43 (47)
		Total	3 (3)	11 (12)	28 (31)	25 (27)	18 (20)	6 (7)	91 (100)
OBC	Ausula	No	1 (100)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Kummari	Yes	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Tenugu	Yes	0 (0)	0 (0)	3 (100)	0 (0)	0 (0)	0 (0)	3 (43)
		No	0 (0)	4 (100)	0 (0)	0 (0)	0 (0)	0 (0)	4 (57)
		Total	0 (0)	4 (57)	3 (43)	0 (0)	0 (0)	0 (0)	7 (100)
	Chakali	Yes	0 (0)	1 (20)	0 (0)	0 (0)	0 (0)	0 (0)	1 (12)
		No	2 (100)	4 (80)	0 (0)	1 (100)	0 (0)	0 (0)	7 (88)
		Total	2 (25)	5 (62)	0 (0)	1 (12)	0 (0)	0 (0)	8 (100)
	Gouda	No	7 (70)	1 (10)	1 (10)	1 (10)	0 (0)	0 (0)	10 (100)
	Golla	Yes	1 (14)	8 (44)	11 (65)	3 (50)	3 (100)	0 (0)	26 (51)
		No	6 (86)	10 (56)	6 (35)	3 (50)	0 (0)	0 (0)	25 (49)
		Total	7 (14)	18 (35)	17 (33)	6 (12)	3 (6)	0 (0)	51 (100)
	Total	Yes	1 (6)	11 (35)	14 (67)	3 (38)	3 (100)	0 (0)	32 (40)
		No	16 (94)	20 (65)	7 (33)	5 (62)	0 (0)	0 (0)	48 (60)
		Total	17 (21)	31 (39)	21 (26)	8 (10)	3 (4)	0 (0)	80 (100)
SC	Madiga	Yes	2 (6)	4 (36)	2 (29)	0 (0)	0 (0)	0 (0)	8 (16)
		No	30 (94)	7 (64)	5 (71)	0 (0)	0 (0)	0 (0)	42 (84)
		Total	32 (64)	11 (22)	7 (14)	0 (0)	0 (0)	0 (0)	50 (100)
Total		Yes	3 (6)	18 (34)	31 (55)	15 (45)	15 (71)	6 (100)	88 (40)
		No	49 (94)	35 (66)	25 (45)	18 (55)	6 (29)	0 (0)	133 (60)
		Total HH	52 (23)	53 (24)	56 (25)	33 (15)	21 (10)	6 (3)	221 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages)
Note: A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

The above table describes the number of landholding households that own bullock cart across the various social groups. In the OC category, 53 percent of the Velama caste landholdings own bullock cart. In Velama caste, all the households from the large landholding category own cart. However, none of the households from the same caste with marginal landholding own bullock cart. In the OBC category on an average 40 percent of the households own bullock cart in their household. However, within this none of the households from Ausula and Gouda caste own bullock cart. All the Kummari caste farmers in the village own cart in their house. In Tenugu caste, 43 percent of them have bullock cart and all these households fall in the higher strata of landholdings within the caste. In the case of Chakali caste, only one household that

too from the upper medium landholding category owns bullock cart. Among the Golla farmers, 51 percent of them have carts in their household which is higher than the average ownership among the all caste groups in the OBC category. Within the Gollas all the households from big landholdings own bullock cart. In SC category among the Madiga caste households only 19 percent of them have a cart. This clearly shows that Dalit farmers in the village are far behind in terms of owning bullock carts.

Table 4.6: Ownership of Tractor:

Social Group	Caste	Ownership of Tractor	Category of Landholding						Total HH
			A2	A3	A4	A5	A6	A7	
OC	Velama	Yes	0 (0)	0 (0)	3 (11)	6 (24)	6 (33)	3 (50)	18 (20)
		No	3 (100)	11 (100)	25 (89)	19 (76)	12 (67)	3 (50)	73 (80)
		Total	3 (3)	11 (12)	28 (31)	25 (27)	18 (20)	6 (7)	91 (100)
OBC	Ausula	No	1 (50)	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Kummari	No	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Tenugu	No	0 (0)	4 (57)	3 (43)	0 (0)	0 (0)	0 (0)	7 (100)
	Chakali	No	2 (25)	5 (62)	0 (0)	1 (12)	0 (0)	0 (0)	8 (100)
	Gouda	Yes	0 (0)	0 (0)	0 (0)	1 (100)	0 (0)	0 (0)	1 (10)
		No	7 (100)	1 (100)	1 (100)	0 (0)	0 (0)	0 (0)	9 (90)
		Total	7 (70)	1 (10)	1 (10)	1 (10)	0 (0)	0 (0)	10 (100)
	Golla	Yes	0 (0)	0 (0)	0 (0)	0 (0)	2 (67)	0 (0)	2 (4)
		No	7 (100)	18 (100)	17 (100)	6 (100)	1 (33)	0 (0)	49 (96)
		Total	7 (14)	18 (35)	17 (33)	6 (12)	3 (6)	0 (0)	51 (100)
	Total	Yes	0 (0)	0 (0)	0 (0)	1 (12)	2 (67)	0 (0)	3 (4)
		No	17 (100)	31 (100)	21 (100)	7 (88)	1 (33)	0 (0)	77 (96)
		Total	17 (21)	31 (39)	21 (26)	8 (10)	3 (4)	0 (0)	80 (100)
SC	Total	No	32 (64)	11 (22)	7 (14)	0 (0)	0 (0)	0 (0)	50 (100)
Total		Yes	0 (0)	0 (0)	3 (5)	7 (21)	8 (38)	3 (50)	21 (10)
		No	52 (100)	53 (100)	53 (95)	26 (79)	13 (62)	3 (50)	200 (90)
		Total HH	52 (23)	53 (24)	56 (25)	33 (15)	21 (10)	6 (3)	221 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages)
Note: A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

The above table explains the number of tractor owners in the study village. The usage of tractor has been steadily increasing since from the beginning of canal irrigation in the village. It has become a major agricultural asset because of its multiple usages for different kinds of agricultural activities. Ownership of tractor puts a farmer in a very advantageous position as it simplifies, quickens and saves a lot of time in different agriculture activities. Many farmers who do not own tractor

generally hire from its owners depending on their requirement. Hence, the ownership of tractor is another major indicator to understand the economic position of the farmer in the village along with category of land. The tractor owners earn regular additional income by leasing out this machinery to other farmers on rent basis.

In the study village, only 10 percent of the landholding households own tractor. That means owning a tractor is limited to only few farmers in the village. In the OC category, among the Velamas, 20 percent of their households own tractor. In this caste group, starting from the lower medium landholding to large landholding category there are tractor owners across all these categories. In fact 85 percent of the total tractors in the village are owned only by the Velama households. In the OBC category only four percent of their total households own tractor in the village. There is one Gouda farmer from the upper medium landholding category who owns tractor from this category. Among the Gollas, only two farmers from the big landholding category own tractor in the village. Within the OBCs, no single household from the castes of Ausula, Kummari, Tenugu and Chakali own tractor. In the SC category also, none of the households from Madiga caste, own tractor in the village.

There has been a steady growth in the number of tractor owners in the village. By the year 2012-13 the total number of tractors in the village has reached to 50. That means during a period of last five years it has reached to more than a double number. The number of tractor owners from the Castes of Velama has further increased with few more owners from the Golla caste joining with them. During this period, for the first time, one farmer among the Dalits has also purchased tractor in the village. This clearly shows the continued trend of investing surplus income generated through agriculture into development of forces of production by purchasing heavy machinery by the upward mobile class of farmers.

Table 4.7: Source of Finance (Purchase of Tractor):

Social Group	Caste	Source of Finance	Category of Landholding				Total HH
			A4	A5	A6	A7	
OC	Velama	Own money	1 (33)	2 (33)	3 (50)	2 (67)	8 (44)
		Credit (formal)	2 (67)	4 (67)	2 (33)	1 (33)	9 (50)
		Credit (informal)	0 (0)	0 (0)	1 (17)	0 (0)	1 (6)
		Total	3 (17)	6 (33)	6 (33)	3 (17)	18 (100)
OBC	Gouda	Credit (informal)	0 (0)	1 (100)	0 (0)	0 (0)	1 (100)
	Golla	Own money	0 (0)	0 (0)	2 (100)	0 (0)	2 (100)
	Total	Own money	0 (0)	0 (0)	2 (100)	0 (0)	2 (67)
		Credit (informal)	0 (0)	1 (100)	0 (0)	0 (0)	1 (33)
		Total	0 (0)	1 (33)	2 (67)	0 (0)	3 (100)
Total		Own money	1 (33)	2 (29)	5 (62)	2 (67)	10 (48)
		Credit (formal)	2 (67)	4 (57)	2 (25)	1 (33)	9 (43)
		Credit (informal)	0 (0)	1 (14)	1 (12)	0 (0)	2 (10)
		Total	3 (14)	7 (33)	8 (38)	3 (14)	21 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages)
A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

The above table explains the various sources of money for purchasing the tractors by the owners in the village. Among all the households, 48 percent of them bought tractors with their own money. Another 43 percent of the tractor owners purchased them by availing loans from the government bank. Only 10 percent of the owners took credit from others to buy tractors. In the OC category, among the Velamas, 44 percent of them depended on their own money. Fifty percent of the owners from this caste availed bank loans. Only six percent of them depended on private credit in order to buy tractor. In the case of OBCs, none of the owners from this availed bank loan while buying the tractor. The only Gouda caste owner got credit from the local landlords in order to purchase the tractor. All the tractor owners from the Golla caste have bought it with their own money. The data clearly shows that except for the Velamas, none of the tractor owners from other castes have access to the government sponsored credit resources in the study village. Because of their dominant position in the local power structure and wider social network, Velamas have better access to such resources. The nearest government bank is located in the mandal headquarters of the village, at a distance of 4 kms from the village.

Table 4.8: Ownership of Harvester:

Social Group	Caste	Ownership of Harvester	Category of Landholding						Total HH
			A2	A3	A4	A5	A6	A7	
OC	Velama	Yes	0 (0)	0 (0)	0 (0)	5 (20)	4 (22)	0 (0)	9 (10)
		No	3 (100)	11 (100)	28 (100)	20 (80)	14 (78)	6 (100)	82 (90)
		Total	3 (3)	11 (12)	28 (31)	25 (27)	18 (20)	6 (7)	91 (100)
OBC	Ausula	No	1 (100)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Kummari	No	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Tenugu	No	0 (0)	4 (100)	3 (100)	0 (0)	0 (0)	0 (0)	7 (100)
	Chakali	No	2 (100)	5 (100)	0 (0)	1 (100)	0 (0)	0 (0)	8 (100)
	Gouda	No	7 (100)	1 (100)	1 (100)	1 (100)	0 (0)	0 (0)	10 (100)
	Golla	Yes	0 (0)	0 (0)	0 (0)	0 (0)	2 (67)	0 (0)	2 (4)
		No	7 (100)	18 (100)	17 (100)	6 (100)	1 (33)	0 (0)	49 (96)
		Total	7 (14)	18 (35)	17 (33)	6 (12)	3 (6)	0 (0)	51 (100)
	Total	Yes	0 (0)	0 (0)	0 (0)	0 (0)	2 (67)	0 (0)	2 (2)
		No	17 (100)	31 (100)	21 (100)	8 (100)	1 (33)	0 (0)	78 (98)
		Total	17 (21)	31 (39)	21 (26)	8 (10)	3 (4)	0 (0)	80 (100)
SC	Madiga	No	32 (100)	11 (100)	7 (100)	0 (0)	0 (0)	0 (0)	50 (100)
Total		Yes	0 (0)	0 (0)	0 (0)	5 (15)	6 (29)	0 (0)	11 (5)
		No	52 (100)	53 (100)	56 (100)	28 (85)	15 (71)	6 (100)	210 (95)
		Total HH	52 (23)	53 (24)	56 (25)	33 (15)	21 (10)	6 (3)	221 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages)
A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

The above table explains the details of ownership of harvester machines in the study village. Out of total landholding households, only five percent of them own harvester machines. The ownership these machines is restricted only two caste groups namely Velama from OC category and Golla from OBC category. Among the harvester owners 81 percent of them belong to the Velama caste and the rest 19 percent of the households belong to the Golla caste. None of the households from SC category own harvester. Also in the OBC category, none of the landholding households belonging to the castes of Ausula, Kummari, Chakali, Tenugu and Gouda own a harvester in the village.

In the OC category, among the Velamas the ownership of harvester is restricted to upper medium and big landholding category. All these households are very enterprising in nature and always look for additional sources of income apart

from cultivation. These households earn good income by leasing out these harvester machines to others during every crop season. Some of them personally operate and supervise the work during harvesting and others recruit drivers/operators for their machines. Interestingly, none of the Velama households from the large landholding category which is the highest strata of landholding own harvester in the village. Some of these households belong to the feudal landlord families who do not show any interest in such kind of enterprising activities. They prefer to invest their surplus money into rice mills rather than into this heavy machinery.

In the OBC category, except for the Golla caste, none of the other caste households own a harvester in the village. Two Golla households from the big landholding category own harvester machines. They belong to the top strata of landholding within their caste and are very enterprising in nature. They also earn additional income by lease outing these machines during every crop season. The source of finance for all these harvester owners from both Velama and Golla caste in the village is formal credit and all of them have availed bank loans while purchasing the harvester machines. A harvester machine costs around 30 lakh rupees and these banks provide 20 percent discount on these machinery for the benefit of the buyers. There has been a steady increase even in the case of these harvester machines in the study village. By the year 2012-13 the number of harvester machine has reached to 21 that means within a span of five year the number of harvesters in the village has doubled. The earnings of the owners from this machinery have been attracting many other rich farmers to buy them. These enterprising farmers are exploring new avenues of income due to the variations in the harvesting time for paddy crop across different regions in the state.

In the study village there are total seven households that own both harvester and tractor. There are four Velama and one Golla household from the big landholding category owning both of these machines. Another two Velama households from the upper medium landholding also own both harvester and tractor in the village.

Table 4.9: Ownership of Sprayer:

Social Group	Caste	Ownership of Sprayer	Category of Landholding						Total HH
			A2	A3	A4	A5	A6	A7	
OC	Velama	Yes	0 (0)	1 (9)	12 (43)	19 (76)	14 (78)	6 (100)	52 (57)
		No	3 (100)	10 (91)	16 (57)	6 (24)	4 (22)	0 (0)	39 (43)
		Total HH	3 (3)	11 (12)	28 (31)	25 (27)	18 (20)	6 (7)	91 (100)
OBC	Ausula	No	1 (50)	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Kummari	No	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Tenugu	No	0 (0)	4 (57)	3 (43)	0 (0)	0 (0)	0 (0)	7 (100)
	Chakali	Yes	0 (0)	0 (0)	0 (0)	1 (100)	0 (0)	0 (0)	1 (12)
		No	2 (100)	5 (100)	0 (0)	0 (0)	0 (0)	0 (0)	7 (88)
		Total	2 (25)	5 (62)	0 (0)	1 (12)	0 (0)	0 (0)	8 (100)
	Gouda	Yes	0 (0)	0 (0)	0 (0)	1 (100)	0 (0)	0 (0)	1 (10)
		No	7 (100)	1 (100)	1 (100)	0 (0)	0 (0)	0 (0)	9 (90)
		Total	7 (70)	1 (10)	1 (10)	1 (10)	0 (0)	0 (0)	10 (100)
	Golla	Yes	0 (0)	1 (6)	1 (6)	4 (67)	2 (67)	0 (0)	8 (16)
		No	7 (100)	17 (94)	16 (94)	2 (33)	1 (33)	0 (0)	43 (84)
		Total	7 (14)	18 (35)	17 (33)	6 (12)	3 (6)	0 (0)	51 (100)
	Total	Yes	0 (0)	1 (3)	1 (5)	6 (75)	2 (67)	0 (0)	10 (12)
		No	17 (100)	30 (97)	20 (95)	2 (25)	1 (33)	0 (0)	70 (88)
		Total HH	17 (21)	31 (39)	21 (26)	8 (10)	3 (4)	0 (0)	80 (100)
SC	Madiga	Yes	1 (3)	4 (36)	2 (29)	0 (0)	0 (0)	0 (0)	7 (14)
		No	31 (97)	7 (64)	5 (71)	0 (0)	0 (0)	0 (0)	43 (86)
		Total HH	32 (64)	11 (22)	7 (14)	0 (0)	0 (0)	0 (0)	50 (100)
Total		Yes	1 (2)	6 (11)	15 (27)	25 (76)	16 (76)	6 (100)	69 (31)
		No	51 (98)	47 (89)	41 (73)	8 (24)	5 (24)	0 (0)	152 (69)
		Total HH	52 (23)	53 (24)	56 (25)	33 (15)	21 (10)	6 (3)	221 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages)
Note: A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

The above table depicts the owners of the sprayers in the study village. Sprayers are used for sprinkling pesticides over the plant to fight against various insects that damage the crop. Overall, among all the landholding households, on an average, only 31 percent of them own sprayers in the village. In the OC category, among the Velamas, 57 percent of the landholdings own sprayer in their household. This is much above from the average of all households in the village. In the OBC category, on an average, only 12 percent of the households own sprayer. Within this category, none of the households from the castes of Ausula, Kummari and Tenugu own a sprayer. In the same category, among the Chakali and Gouda castes, only one household from the upper medium landholding own sprayer. In the case of Golla caste

also, only 16 percent of them own sprayer. In the SC category, among the Madiga households, only 14 percent of them own sprayer. The ownership of sprayer among all these caste groups is far below from the total average of village. Again Velamas are in more advantageous position in the village in terms of owning spryer when compared with other caste groups. The sprayer owners in the village also earn little amount of money by giving them on rent basis to other farmers.

There are different types of sprayers namely hand, petrol and battery depending the source of fuel for these instruments. Among these hand sprayer is considered to be of the lowest level of technology which has to be manually operated by hand. The other one runs by petrol reducing the manual effort while operating. Battery sprayers are equipped with latest technology that runs with the help of electric power minimizing the manual effort further. In the village in the OC category, among the Velamas, 63 percent these owners have hand sprayers. Another 23 percent of the owners have battery sprayers and rest of them own petrol sprayers. In the case of OBC category, all the households from the castes of Chakali and Golla own hand sprayers. One Gouda farmer owns petrol sprayer in the same category. In the SC category all the households own only hand sprayer. The only Gouda farmer who has a sprayer owns a petrol sprayer. That means except for the Velamas none of the landholding households in the village own battery sprayers and all these owners belong to the upper medium and above landholdings only.

Livestock:

Animal husbandry is also an important source of income for an agrarian society like India. The households in rural India are usually comprised of different types of pets and animals depending on their socio-economic position. In the study village, selling milk is an additional source of income for many of the households in the study village. In the case of Gollas and couple of households from other castes, goats and sheep are the major sources of income.

Table 4.10: Ownership of Buffaloes:

Social Group	Community	Category of Landholding							Total Buffaloes
		A1	A2	A3	A4	A5	A6	A7	
OC	Muslim	0	0	0	-		-	-	0 (0)
	Velama	3	1	3	47	55	48	58	215 (76)
OBC	Ausula	0	0	1	-	-	-	-	1 (0.35)
	Kummari	0	0	1	-	-	-	-	1 (0.35)
	Vadla	4	-	-	-	-	-	-	4 (1.3)
	Mera	0	-	-	-	-	-	-	0 (0)
	Mangali	2	-	-	-	-	-	-	2 (0.7)
	Tenugu	0	0	1	4	-	-	-	5 (1.7)
	Chakali	0	0	2	-	0	-	-	2 (0.7)
	Gouda	0	0	0	0	3	-	-	3 (1.2)
	Golla	1	3	10	9	7	3	-	33 (11.7)
	Total	7	3	15	13	10	3	-	51 (18)
SC	Madiga	2	3	3	8	-	-	-	16 (6)
ST	Yerukula	0	-	-	-	-	-	-	0 (0)
	Koya	0	-	-	-	-	-	-	0 (0)
Total Buffaloes		12 (4)	7 (2)	21 (7)	68 (24)	65 (23)	51 (19)	58 (21)	282 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages)
Note: A1 = Landless (0 acres), A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres).

The above table explains the ownership of buffalo among various socio-economic categories of the village. In the study village, altogether, there are total 282 buffaloes among all the households. Out of them, 76 percent of the buffaloes are owned by the Velama caste households. This clearly shows that Velamas are in a better position when it comes to the income generation from milk selling. Another 18 percent of the buffaloes are owned by all the castes in the OBC category. Only six percent of the buffaloes in the village are owned by the Madigas from the SC category. In the OC category none of the Muslim households own buffalo. Among the Velamas the ownership of buffalo is spread across all the landholding categories however most of the owners are from the medium and above land holdings. In the OBC category, 65 percent of buffaloes are exclusively owned by the Golla caste households. None of the households from Yerukula and Koya in the ST category own buffalo in the village.

Table 4.11: Ownership of Sheep:

Social Group	Community	Category of Landholding							Total Sheep
		A1	A2	A3	A4	A5	A6	A7	
OC	Muslim	0	0	0	-	-	-	-	0 (0)
	Velama	0	0	0	0	70	0	0	70 (9)
OBC	Ausula	0	0	0	-	-	-	-	0 (0)
	Kummari	0	0	0	-	-	-	-	0 (0)
	Vadla	0	-	-	-	-	-	-	0 (0)
	Mera	0	-	-	-	-	-	-	0 (0)
	Mangali	0	-	-	-	-	-	-	0 (0)
	Tenugu	0	0	0	0	-	-	-	0 (0)
	Chakali	0	0	0	-	0	-	-	0 (0)
	Gouda	0	0	0	0	0	-	-	0 (0)
	Golla	25	50	240	172	200	0	-	687 (90)
SC	Madiga	0	6	2	0	-	-	-	8 (1)
ST	Yerukula	0	-	-	-	-	-	-	0 (0)
	Koya	0	-	-	-	-	-	-	0 (0)
Total Sheep		25 (3)	56 (7)	242 (32)	172 (22)	270 (36)	0	0	765 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages)
Note: A1 = Landless (0 acres), A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres).

The above table explains the ownership of sheep among different households in the village. Gollas are the traditional shepherd caste in the village. There are, a total of 765 sheep in the village. In that, 90 percent of the sheep are owned by the Golla households. Within this caste, except for the big landholding category, households from all other landholding categories own sheep in their house. None of the household from the big landholding have sheep as all of them completely shifted their occupation to agriculture. Nine percent of the total sheep in the village are owned by the Velamas. Only one percent of the sheep in the village belong to the Madiga households.

The above details on ownership of different means of production among different socio-economic categories shows the agrarian class structure in the study village. In the above analysis three major means of productions are analyzed namely land, agriculture instruments and livestock. Velamas, have emerged as the dominant landholding class in the village by owning ¾ of the total agriculture land in the village. With the introduction of canal water, Velamas have started investing their surplus income in buying more agriculture land from other non- cultivators and in the

process have emerged as the rich landholding class in the village. Most of their agriculture lands are comprised of best quality red soil along with best sources of irrigation in terms of both canal water as well as private wells with electricity. This protects their crop during the shortage of supply in canal water. Most of the heavy machinery like tractors and harvesters in the village belong to Velama farmers through which they earn additional income during every crop period. Milk selling is another source of income for them as we see that ¾ of buffaloes in the village is owned by soley by Velama households. Velamas own and control the most of the means of production in agriculture which has resulted in the dominant class position for them in the village.

Gollas, from the OBC category stand second next only to Velamas in the village agrarian class structure. Nine percent of the total agriculture land in the village is owned by households belonging to this particular caste group. Within Gollas 82 percent of them own agriculture land. More than 90 percent of their landholdings are comprised of best quality soil. When it comes to the source of irrigation they fall behind Velamas with only 55 percent of them owing private irrigation facilities. In the case of ownership of agriculture instruments, half of the households own basic instruments like plough and bullock cart. However, when it comes to owning heavy machinery like tractor and harvester only couple of Golla households have them that too from the big landholdings. Even though Gollas lag behind Velamas in owning livestock like buffalo they outnumber all other castes in the ownership of sheep in their household. Being the traditional shepherd caste 90 percent of the sheep in the village belong to only Gollas. In fact, the subsidiary income they earn from these sheep along with their active participation in wage labour activities from both men and women members of the households has put Gollas above all other caste groups from the OBC category.

Apart from Gollas, the only other caste primarily engaged in agriculture is Tenugu. The number of Tenugu households is less than ten in the village however; most of them fall in either small or medium landholding categories. All landholdings from this caste are comprised of best quality land along with private irrigation facility and also canal water. However, none of the Tenugu caste farmer owns either tractor or harvester. In the case of livestock, only half of them own buffalo in their household.

Among the Chakali caste, only 40 percent of them own agriculture land and within this, most of them belong to either marginal or small landholdings that make them insignificant in the local class structure.

Finally in the SC category, seven percent of the total agriculture land in the village is owned by Madiga caste households. However, this becomes very insignificant because of their high number of households thus most of these landholdings belong to the marginal one. Around ¼ of the landholdings from this caste are comprised of inferior quality land. Only 30 percent of the Madiga landholdings in the village own private irrigation facilities making the majority landholdings vulnerable for cultivation during the non availability of canal water. Very few households own minor agriculture instruments and none of them have either tractor or harvester. This makes them to depend on others while carrying out different agricultural activities. Only couple of Madiga landholdings has livestock in their household. Under these material conditions most of the households from this caste survive on daily wage earnings pushing them to the lowest strata of the local agrarian class structure.

The data in this chapter shows there is a high correlation between caste and class status[1] in the study village. That means the introduction of new technology could not break the already existing nexus between the caste-class among Thogata village population. It is still the downtrodden castes that consist of most of the landless households and agriculture labourers. At the same time, most of the means of productions in the village is in the hands and direct control of households from the upper caste background. Whereas as, most of the middle caste (OBC) households in the village are comprised of small landholdings.

[1] Mencher (1978: 126-141) In her study from Tamil Nadu argued that there is a close connection between caste and class with high percentage of landownership is concentrated in the higher castes and vast majority of agricultural labourers belonging to the 'untouchables' and other lower castes.

Chapter 5
ORGANIZATION OF AGRICULTURE PRODUCTION

In the study village, there are primarily two seasons of cultivation in agriculture. The first season is called as Kharif which begins with the month of June and ends with December month according to the English calendar. This season begins simultaneously with the beginning of the southwest monsoon in the area. The second season is called Rabi which begins from January and ends with the month of May. There are only two major crops that are being cultivated by the farmers in the study village. The predominant one among these is paddy which covers almost 95 percent of the total cultivating area in the village. The rest of the area in the village is being cultivated by maize with most of these farm lands located on the niches of the canal area. This chapter, in detail, explains the organization of agricultural production at various stages of paddy cultivation in the village.

The production process in agriculture involves different set of activities engaged by a farmer in cultivation. Agriculture needs the preparation in terms of weather, soil, livestock, capital, seeds, labour, machinery, and many other physical conditions to get it done by any farmer. However, the methods of cultivation vary from one farmer to another depending on their position in the local socio-economic structure. For this data, a sample of total sixty two cultivators were selected across various landholdings on the basis of stratified random sampling method. Indepth interviews were conducted among these households to get data on sources of agriculture inputs, labour and marketing of the paddy. The following sections in this chapter contain this analysis and thus explain the changing relation of production in the village agriculture.

Procurement of Seeds:

Farmers in the village depend on various sources to procure seeds for cultivation. These sources include, from own field, other farmers, *dalari* (agent) and shops in nearby towns. The reasons for approaching various sources differ from one farmer to another; from one crop season to another; and on the variety of crop that is being cultivated. There are only few farmers using their own seed for cultivating

paddy in the village. Among the Velama caste, it is found that farmers from all the landholding categories are using their own seeds. Among the OBCs, couple of Golla and Chakali farmers from small and lower medium landholdings also using own seeds for paddy cultivation. However, none of the farmers from Dalit caste prefer using their own seeds in cultivation. The preparation for own seed requires extra effort in the cultivation and because of their dependency and busy schedule in earning daily wage activities, these Dalit farmers could not afford use own seeds in cultivation.

Actually in this case, they buy seed from either a seed agent or from shop for the first time. After harvesting is done they keep some of the grain aside by carefully selecting the good ones and use them as seed for the next couple of crops. Later, they again buy the new seed from outside and follow the same method in the consequent crops. These farmers cite reasons like low capital requirement, assurance of quality and also freedom to sell any one they wish to for using their own seed. The rich enterprising Velama farmers who use own seed opine that it is due to the laziness of the farmer which makes him to depend on agent or shop or any other source to get seed. They say that farmer has to put some extra effort to get their own seed which is not impossible if the farmer plans accordingly. Some of these farmers also sell their seed to other farmers in the village.

Shops are the second source for procuring seeds for the farmers in the village. Many farmers, especially from the small and medium landholdings, across the caste lines buy seed from shops in nearby small town namely Sultanabad, located on the highway road. Most of the farmers from the caste like Golla, Tenugu, Gouda and Madiga buy seeds from the shops in Sultanabad. For this reason majority of the Dalit farmers buy seeds from the shops only. It is also found that some of the Velama farmers from small and medium category also buy seeds from such shops. The popular brand is Mulkanoor seed that is manufactured by one of the most successful co-operative societies in the region. Many farmers in the village have good faith in this brand and they don’t hesitate in buying this brand from whichever shop it is available.

There are two modes of payment for procuring seed from the shops in Sultanabad, one is by paying cash and the other one is on credit. In case of credit the

shop owner charges two percent interest on the total cost of the purchase of seed. Most of the Velama farmers buy seed by cash payment. Only few of them buy them on credit and that too without any interest. However, in case of farmers from other castes with lower economic position do not get the privilege like this. This clearly shows that Velamas with their higher position in the social strata and wider social network are able to begin their cultivation even during the financial crisis which is not available for other social groups in the village.

Apart from these two sources, farmers in the village depend on *dalaris* for seeds. *Dalari* can be understood as middle man, broker or an agent. It is observed that this practice has started around 20 years ago and before this period farmers in the village used to procure seeds only from shops. These *dalaris* hail from the neighbouring villages of the study village. All these *dalaris* belong to Velama caste (one of them hailing from the village itself) except one Reddy caste person. All these *dalaris* are from the rich agriculture background and took up this business as part time. Around 65 percent of the farmers in the village approach/depend on these *dalaris* for procuring seeds with most of them belonging to the Velama caste farmers. Only few farmers from other castes, that too with an ownership upper medium and above categories of landholding buy seeds from these *dalaris*.

In this mode of procurement *dalari* supplies seed to the farmer in advance without any cash payment. The names of the seed receiving farmers are entered in the register along with the quantity of seed that is being received. Each bag (25 kg) of seed cost around 450 Rs (price during 2006-07). However, the *dalari* supplies the seed to the farmer on the pre condition of selling the paddy to himself. The cost of the seed will be deducted from the total cost of paddy that is sold to the *dalari* by the farmer. No insurance is provided for the crop in these cases and *dalari* does not take any responsibility for this.

This mode of seed procurement has some advantages for the farmers in the village. Firstly, farmers have great confidence in the quality of the seeds that are supplied by *dalaris* and they say that these seeds have never failed. Secondly, in case of a poor famer he doesn’t need to worry about the capital that is required for buying seed and more over *dalari* can also provide other major agriculture inputs like

pesticides and fertilizers if the farmer requires. Thirdly, *dalari* offers the better price for paddy when compared with rice mills or and any other source of market. Finally, in this method, seeds will be delivered at farmers' doorstep and they don't need to worry about going outside to get seeds and also it also saves their time and energy in looking for the buyer for their crop after harvesting is done.

However this system of seed procurement has some disadvantages also. Some of the farmers complain that these *dalaris* delay the payments for their crop. In some cases, it may take even 40-60 days for a farmer to receive his money. Some farmers also complain that *dalaris* charge interest amount on the price of the seeds that are supplied by them. Interestingly, most of these farmers belong to the lower strata of landholdings in the village. Mostly farmers from the lower economic strata face this problem in the village. In one such case one Velama farmer from marginal landholding got fed up delay in the payment by the *dalari* who hails from the village. More over this farmer was offered lower than the market price and after this incident he stopped buying seed from this *dalari* and started buying from shops in Sultanabad.

Finally, we also have cases where farmers buy seed from other farmers in the village. We found these instances mostly in the case of Dalit and Golla caste farmers from the lower strata of landholdings in the village.

Procurement of Fertilizers:

Majority of the farmers in the village buy fertilizers in Sultanabad. Velama farmers with their better knowledge on agriculture inputs always look for quality of the product. This is well explained in the words of one young educated Velama farmer who says *"If I find any product with lack of quality I never buy from the same shop again and I simply shift to some other shop as I never compromise on the quality of the fertilizer that I buy"*. He buys fertilizer from shops in Sultanabad on cash payment. He is also aware of the central government sponsored shop (Hariyali) for fertilizers located in another town in a distance of 15 kms from the village. Otherwise most of the Velama farmers purchase fertilizer from the shops in Sultanabad. In general, they buy them by paying cash however; some of them buy them credit either with interest or without interest and the interest rate again varies between 1-2% depending on the relationship with the shop owner. In the case of one farmer from big

landholdings he buys fertilizers both on cash and credit mode depending on the availability of money with him. However, he never pays interest for his credit amount as he clears the amount with the shop owner within a period of one month. Generally farmers pay the credit total amount after six months when he gets money after selling the crop after harvesting.

Among the OBCs, the situation differs from one caste to another based on their financial background. For example one Gouda farmer with upper medium landholding says *"I buy fertilizer in a shop from Sultanabad on credit with two percent rate of interest. However, I am not charged with additional price on the price of the bag because I am a regular customer for that shop since many years"*. One small farmer from Ausula caste usually purchases fertilizer on credit from the shops in Sultanabad and he is charged with two percent of interest rate. To avail the stock for credit, he has to pay an additional five rupees on the price of each fertilizer bag to the seller. In another case of small farmer from the Chakali caste, when he buys fertilizer on credit from the shop owner he is charged with compound interest which in turn increases his financial burden further. As farmers usually pay the credit amount only after six months when their harvest arrives, in such situation it is the marginal and small farmers who are forced to incur lot of expenditure in the form of compound interest. This clearly shows that the better off farmers from the OBC social group have better access to credit facility when compared with other farmers in the same group.

In case of Dalit farmers also, most of them buy fertilizers from the shops in Sultanabad. However, they buy them in smaller quantities as and when they are required. Because of their poor economic condition they are unable to buy the fertilizer at once in huge quantity for the entire crop season. This makes them vulnerable during the time of shortage of stock when they actually need them. As a result, at times they will not be able put sufficient amounts of fertilizer for their crop and this eventually may result in the low yield for these farmers. Because of their poor financial background the chances for availing credit facility for them are also meager, which results in the impoverishment of their economic condition with high interest rates. However, it seems there is a slight relief in the terms of interest rates in the recent years. One young Dailt lower medium landholding farmer says *"Earlier I used*

to pay three percent interest for buying fertilizer. However, with the introduction of the "pavala vaddi scheme"[1] by the Chief Minister of Andhra Pradesh state Mr. Y S Rajashekara Reddy, the shop owners now reduced the interest rates to two percent". This clearly shows that farmers from the lower socio-economic strata are further deprived in terms of availing credit facilities when compared with other better off farmers in the village. More over majority of these farmers belong to either Dalit or other backward communities whose social network is not strong enough to avail the benefits of a customer in a wider agriculture economy.

Procurement of Pesticides:

The procurement of pesticides requires good knowledge on the product because it is a crucial input that protects the crop from various diseases. Velama farmers become precarious before buying pesticides in any shop and most of them buy pesticides from shops in Karimnagar, the district headquarters. Sharing his experience of buying pesticides, one Velama farmer with lower medium landholding says *"From the last five years I have been buying pesticides in a shop from Karimnagar. The traders in Sultanabad are cheating people with duplicate pesticide products"*. There were several instances where these farmers complained of low quality and duplicate pesticide products being sold by the shops in Sultanabad. They got fed up of this and started buying pesticides from shops in Karimnagar. Apart from the quality of the product they get these pesticides at fifty rupees lower rate than in Sultanabad. There is an added advantage for the rich farmers who buy pesticides at once for the entire crop. One big landholding Velama farmer who also buys pesticides in Karimnagar says *"I always buy pesticides in bulk quantity directly from the dealer in Karimnagar. Because of this the price is always less when compared with other customers buying from the shops in Karimnagar"*. Apart from the Velamas, the young and educated farmers from the castes like Tenugu, Golla and Madiga are also buying pesticides from the shops in Karimnagar because of their quality and competitive price. Majority of these farmers frequently travel to Karimnagar for various works and while returning to village they buy these pesticides in the shops.

[1] This is a social welfare scheme that has been introduced by the Andhra Pradesh government during the Chief Minister ship of Late Y. S. Rajashekar Reddy during 2005. The main aim of this policy is to provide loans at cheap interest rates of as low as 0.25% for the Women SHGS (self help groups) of the rural areas. In the study village it is found by the researcher that many families from the lower level of socio-economic status have utilized this scheme and cleared off their debts over a period of time.

There is one single shop mentioned by majority of these farmers who buy pesticides in Karimnagar. This shop was introduced by a Muslim boy from the village who has been working as a sales person from many years. While mentioning about the quality service of this particular shop one of the old, wise, and rich Velama farmer says *"This shop gives good quality products with less price. And the shop fellow gives exact product for any kind of disease for paddy crop and no scientist is required."* Generally in most of the cases, farmers who buy pesticides in Karimnagar make only cash payment. However, it is found that some of the richest Velama farmers who have been regular customers for this shop are able to get them on credit and that too in some cases without any interest.

In the study village we do have farmers who buy pesticides from shops in Sultanabad. Among the Velama caste, some of the farmers with small landholdings buy pesticides from the shops in Sultanabad. There are some educated farmers who also buy pesticides in Hariyali and some other shops from the nearby town Peddapalli, the division headquarters. However, when it comes to the farmers from other castes like Chakali, Ausula, Golla and Gouda, majority of them buy pesticides in Sultanabad only. Most of these farmers fall in the lower strata of landholding and due to their limited exposure to wider market and also busy schedule in wage earning works always prefer to but the pesticides from the shops in Sultanabad.

Preparation of soil:

The farmer initially has to prepare his land ready for cultivation. He deposits the manure and spreads it across the agriculture land. There are two major sources for the manure for the farmers in the village, namely sheep and cattle dung stored at household. The first method is generally practiced for the Kharif crop just before the beginning of monsoon season. The farmers in the village who need sheep manure approach the Golla households in the village who own large number of sheep. These farmers enter in an agreement with the sheep owner and they have to pay Rs. 200 per acre for an overnight stay of hundreds of sheep in their farm lands. During their stay the sheep defecate in the farm land and with the rains beginning it gets absorbed into the soil providing it with natural manure. In some cases farmers buy loads of sheep dung directly from the owners' house and dump it with the help of either bullock cart or tractor. Majority of the Velama farmers from upper medium and above categories

of landholding hire sheep for adding manure to their lands. There are some educated younger generations farmers from other castes also follow this method.

In another method, those farmers who own livestock, daily collect the cattle dung and store it in their house. During the beginning of the crop season they dump this natural manure in their farm lands with the help of bullock cart or tractor. Those who do not own any of these transporting vehicles hire them from the owners. For bullock cart they are charged with Rs 50 and for hiring tractor they have to pay between Rs 150 -200 per trip depending on the distance of the farm land in the village. The rich Velama farmers get it done with the help of their attached labour or by hiring daily wage labour for this. In the case of small and medium farmers across the castes dump the manure with the help of their own family members. Some other farmers get it done with the exchange of labour. Here is a special case of group of Velama farmers who live in the street of Velupuri wada[2] who share the work of dumping the manure in the farm lands. There are some Velama households from this street who always share work in their farm lands by exchange of labour. Members from all these households including both men and women help each other while loading, transporting and also dumping the manure in their farm lands.

However, providing manure to the farm lands is not taken very seriously by farmers from the other castes. For example most of the Dalit farmers do not take up this work in their farm lands for the reasons like most of them they do not own any livestock. Also because of their busy schedule in earning daily wages they are unable to focus on this small yet significant aspect of cultivation. In most of the cases the same reasons apply to the farmers from other caste backgrounds in the village. However, there are some young educated farmers from these castes who regularly provide manure to their farm lands to achieve better yield in the crop. For example there is one Dalit farmer from lower medium landholding category who gets the manure from a different source. He buys 'Janumu' (manure extracted from one type of plant) bags from the office of the agriculture department situated in the mandal head quarters and he regularly puts manure to his farm land.

[2] This is one of the streets located in the village has the exclusive presence of only Velama caste families. This street has got a cement road linking from the main road in the village and at the end of it gets connected to Golla caste households where the cement road also ends.

The next step involves the leveling and strengthening of the bunds of the farm land. The setting up of the bunds for different blocks of the farmland is crucial for a better cultivation. During the beginning of the every season these blocks in the farm land have to be fixed properly by the farmer. They have to fill the holes along with the boarder with wet mud to avoid the rats damaging the crop. This also improves the water supply for the paddy crop among all the blocks in the farm land. In case of small and medium farmers across the castes this task is done with the help of family labour. The rich farmers engage either hired labour or get it done by their attached labour. Except for the Velamas from the upper strata of landholdings women from all other caste households engage in this activity in their own farm lands.

Ploughing:

Ploughing can be done by two methods. One, with the help of wooden plough with bullock cart and the other by using tractor that has metal blades. Before the introduction of canal water, all farmers in the village used to plough their lands with the help of their bullocks with wooden plough. They used to get the plough ready by the carpenters from the village and used to pay grain in return. However, the scenario has changed in the post canal period with the introduction of tractor use in agriculture by some of the rich farmers in the village. From this period onwards there has been a steady increase in the use of tractor for ploughing the land and at present majority of the farmers in the village are depend on tractors to plough their lands.

After dumping the manure in the farm land, farmers in the village puts water to it for couple of days. With this the soil becomes wet enough and gets ready to plough the farmer does the initial round of ploughing with bullocks. This is done for a couple of times. Out of total farmers in the village only 40 percent of them own bullocks. Among these good number of farmers from the castes like Velama (58%), Golla (45%) and Tenugu (42%) own bullocks in their households. It is very low when it comes to the castes like Madiga (10%), Gouda (20%) and Chakali (12%). This means majority of the farmers from these castes have to depend on others in order to plough their lands. In the study village farmers who do not own bullocks hire them from the owners. In exchange they offer their labour for the plough owner on some other occasion. Otherwise they simply get it done by hiring a tractor in the village.

After couple of rounds of ploughing with bullocks they repeat it with tractor for further soil mixing. Due to lack of bullocks and also with the increased speed of cultivation process farmers in the village are heavily using tractor for second stage of ploughing the land. In case of complete dependence on tractor for ploughing a farm land it again has two steps that are locally called “garru kottuta” and “jambu kottuta”. The tractors need specialized attachments for this task and all the tractor owners in the village get these tasks done by themselves.

If we see the ownership of tractors in the study village, only 10 percent of the farmers own them. The tractor owners are comprised of only few castes like Velamas (18), Golla (2) and Gouda (1) out of total households in the village. These farmers get the ploughing done with the help of their own tractors. Among the farmers who do not own a tractor majority of them hire this machinery from their owners to plough their lands. This includes even good number of farmers from marginal and small landholdings. There are multiple reasons for this. For example one small Dalit farmer says that *“My farm land does not have passage route directly from the road hence I can’t plough my land with bullocks separately. Due to this reason, I am forced to plough my land along with the neighbouring Velama farmers by hiring the same tractor.”* In other cases many of the farmers with marginal landholdings to save their time and energy are hiring tractors to plough their agriculture lands.

The Farmers who hire tractor pay Rs 1600 (by the year 2013 the hiring charges are increased to Rs 3000) per acre for ploughing their land. In case of mud type farm land they have to pay Rs 2000 (charges increased to Rs 3500 by the year 2013) per acre as it requires tiller tractor to plough these types of land. In order to save some money on this expenditure in hiring tractor, good number of farmers do the initial rounds of ploughing with the help of their bullocks and hire the tractor only for the final rounds of the ploughing. In this case, they need to pay only Rs 800 (by the year 2013 it became Rs 1500) as a rent to the tractor owner. This trend is observed more among the Golla caste farmers with a background of small and lower medium landholdings.

Transplantation:

After ploughing is done, farmers sow the seeds in a small portion of agriculture land. After 1-2 weeks, these seedlings grown in nursery will be ready to be transplanted in the farm land. In the study village transplantation work is exclusively carried out by female labour group[3] locally called as *gangs*. These *gangs* consist of a group of 8-10 female labour who form as a team and take up the task of transplantation work on *gutha*[4] (piece-rate) basis for a fixed amount of money on acre basis. At present, there are eight female labour *gangs* that are operating in the village. These *gangs* are formed on the basis of caste and all the members of a *gang* belong to one single caste only. There are two female labour *gangs* from Chakali, Golla and Madiga castes and one *gang* each from Tenugu and Gouda castes that are operating in the village.

Generally the farmer gets into an oral agreement with these *gangs* before the work begins and pays the total amount of money after the completion of the work. However, there are some instances where some farmers have to book these *gangs* in advance by paying partial amount of money in advance. The rest of the money is paid after the completion of the work. With the introduction of canal water, majority of the farmers in the village are beginning their cultivation work simultaneously. This has resulted in the labour shortage during the transplantation work. To avoid this situation, the rich Velama farmers started offering advance money to the labour *gangs* in order to make sure their work gets priority over others. Later, this trend spread to all categories of the farmers and paying partial amount of wages in advance has become a common trend now. In general, farmers pay the rest of the amount with one week waiting period after the transplantation work is over.

In general, the wages for transplantation work ranges in between Rs 650 – 800 (by the year 2013 wages are increased to Rs 1500-1600) per acre depending on the situation. In case the transplantation work is done by the labour from within the caste

[3] Epstein (1962: 64) in her canal irrigated village study has found a similar kind of labour arrangement by the farmers in paddy cultivation.

[4] This is the local term used for wage payment made through piece-rate method. In his mode of payment both parties agree for a fixed amount of wage payment for specific amount work done by the labour irrespective of the time it takes for the work to be done.

it is charged with Rs 650 (by the year 2013 it became Rs 1500) per acre. In the case of hiring labour from outside the village for the same work the cost of work goes from Rs 800 to even Rs 1000 (by the year 2013 it became Rs 2000) per acre. This hiked amount is included of transport charges and along with this money the farmer has to offer toddy for the labour during the work.

Each of these female labour *gangs* is headed by one person who is part of the *gang*. On behalf of the *gang* the leader of the each *gang* enters into agreement with the farmers before for the transplantation work. She alone receives the money from the farmer and later distributes it among her *gang* members. However, during this work, male labour are also arranged by the farmers to help the female labour in the tasks like carrying the bundles of seedlings along the bunds and spread them in the land during the transplantation. Depending on their size of landholding, some farmers employ their family labour, some other recruit daily wage labour and others get it done by their attached labour. In some other cases, farmers also make arrangements of exchange of labour which is more prevalent among the farmers from marginal and small landholdings.

In some cases, farmers hire labour *gangs* from outside village also. Apart from the shortage of labour, the far location of the farm land forces them to hire labour from the surrounding villages. The cropping season also plays an important role in hiring labour for transplantation. As one big landholding Velama farmer says "*For Kharif season, for transplantation work, I always hire labour from within the village, however in case of Rabi season there will be shortage of labour because all the farmers begin the cultivation work simultaneously due to shortage of time. And during this season I hire labour from outside the village*". Otherwise most of the farmers in the village hire these female labour *gangs* from within the village itself.

Primordial expectations play an important role in the hiring of these female labours from within the village for transplantation work. There is one rich big landholding farmer from Velama caste who claims, that since generations, theirs will be the first agriculture land where transplantation work begins during the beginning of every crop season in the village. Accordingly, since from the beginning, they have been hiring the same Dalit female labour *gang*g for transplantation work in their land.

In the case of one Ausula caste women who is a tailor has got many customers among the Golla caste women. This has helped her to gain good will among Golla women who always come for the transplantation work in their farm land. In another case one rich old Velama farmer regularly hires one Dalit female labour gang from a very far off village. Actually he gave money to them on credit and they promised him to work in his farm land during the transplantation work during every crop season.

In the case of Tenugu caste farmers, they hire female labour *gang* from within their own caste. This female labour *gang* from Tenugu caste first does the transplantation work among their fellow caste farmers' lands. After that only they go out to work in the farm lands belong to other caste farmers. The same is applicable to one of the Golla female labour *gangs* in the village who go out to work in others' lands only after completing the transplantation work among their own farm lands. Most of these farmers belong to small and lower medium landholdings with strong ties of kinship relationship among themselves. They also actively engage in exchange of labour among themselves during various agriculture activities. However, in case of Dalit female labour *gangs* they say that they first complete the transplantation work of other farmers, and after completing this, they do transplantation work in their own fields. Majority of the Dalit households in the village are poor and they always look for wage earning opportunities in order to survive. Apart from this, most of the agriculture lands belonging to Dalits are located in little far distance from the canal stream which results in the delay of water supply. Thus lands belonging to Dalits are the last one to get transplantation work done in the village.

Weeding:

One week after the transplantation is done, the paddy plant starts growing. However, at this stage, waste grass also grows along with the paddy plant and because of this, paddy plant growth will be slowed down. Removing this waste grass is called weeding. This task is crucial because the presence waste grass will have a negative impact on the healthy growth of the paddy plant. Farmers in the village follow different methods for weeding activity for the paddy plant. The most common trend is that farmers using *gaddi mandu* (local terms used for weedicide) to control the growth of waste grass. This product is available among the shops in Sultanabad and most of the farmers buy this product from these shops. Farmers spray *gaddi mandu* after one

week of transplantation work, however, weeds will not get destroyed completely by simply using this chemical. They have to further pluck the remaining weeds in the farm manually. For this purpose, they engage labour that could be either male or female depending on their availability. Hiring of the labour for weeding activity is done in two methods. Firstly, on daily wage basis and second one is on *gutha* basis. In the first method, farmer has to pay a fixed amount of daily wage to the each labour engaged in weeding activity. In the second method, farmer enters in agreement with a group of labour for a fixed amount of payment on per acre of weeding work in the total farm land.

In general both of these methods are followed by the rich farmers in the village. In case of hiring daily wage labour for weeding activity the farmers pay Rs 120 (by the year 2013 it has increased to Rs 350) for male and Rs 60 (by the year 2013 it has increased to Rs 150) for female per day. In weeding activity, male labour are involved in spraying the chemical on plants to kill the weeds. In case of female labour, they are involved in the weeding activity and in manually removing the weeds from the paddy plant. The wage rates for weeding activity in *gutha* method is not standard for all the farmers as it varies from one farmer to another depending on the extent of weeds that are present in the farm land.

In general, among the Velama farmers from the upper medium and above, landholding categories hire labour for weeding activity. These farmers also use their attached labour in weeding activity on a daily basis. However, in case of small and medium farmers category, weeding is being done with the help of family members and in some cases farmers also hire labour. The rich Velama farmers always complain that they are not able to get labour for weeding activity. However, their problem is with increased bargaining capacity of the labour for such works. One rich farmer sharing his experience with labour for weeding activity in his farm land he says that he is forced to accept the terms by them to get the work done on daily wage basis instead of *gutha* basis. Moreover, he has to pay more than the daily wage amount for the labour who actually belong to another village. There are couple of cases of very rich Velama farmers who even engage their family members in weeding activity citing the reason of high wage rates for weeding work. Further they also spray *gaddi mandu* in huge quantities to control the weeds in their paddy plants.

In the OBC category, among the Gollas, most of them get the weeding work done with the help of their relatives and fellow caste members by exchange of labour. Golla outnumber any other caste households in the village to work with exchange of labour. However, the upper strata of landholding farmers from this caste also employ hired labour for weeding activity. Some of them also use *gaddi mandu* to control weeds in the paddy plant. In case of Tenugu caste, family members along with exchange of labour from relatives participate in the weeding activity. However, the younger generation farmers from this caste think using *gaddi mandu* is more viable than hiring labour for weeding activity. Among Dalit farmers, it is mostly the family labour that gets engaged in the weeding activity. Among these farmers, those with better landholdings hire labour either on *gutha* or on daily wage basis for this work. When asked about weeding activity, one Dalit small farmer said that he does the weeding by himself with the help of his family members. He also uses good quality *gaddi mandu* bought from Karimnagar to control the weeds in his farm land.

In the recent visit to Thogata village in the year 2013, it is observed that there has been an increasing trend of using *gaddi mandu* in high quantities to control the weeds in paddy crop. In order to cut down their expenditure in rising wages of labour majority of the rich farmers are shifting towards using *gaddi mandu* to control the weeds. With the availability of many brands of weedicides in the market, farmers with small and medium landholdings are also preferring to use *gaddi mandu* instead of human labour.

Harvesting:

In the study villag,e harvesting of the crop is done by two methods namely by human labour and by the harvester machine. There is heavy usage of these harvester machines in the village which accounts for the 98 percent of the total harvesting land. Farmers from across all the socio-economic categories are using these machines for harvesting their crops. Only in few cases human labour is used for harvesting of paddy crop in the village.

The charges for hiring the harvester machine are in between Rs 1000-1200 (by the year 2013 the charges remain the same) per acre of agriculture land slightly varying from one crop season to another. Generally, during the Kharif season, more

harvester machines will be available in the village which results in less charge. However, during the Rabi season, most of the harvester machines will be operating outside the village across the coastal areas of the state. Because of this, the availability of machines becomes less in the village resulting in slight hike in charges for harvesting. Sometimes, the demand for these machines also comes down especially in case of crop failure. In one such example, one big landholding Velama farmer tells that *"During the rabi season I paid Rs 1300 per acre for harvesting the crop with machine. However, due to shortage of rain fall in the Kharif season there was no canal water and the total cultivated area has come down drastically in our village. Because of this, there was very less demand for harvester machines and I just had to pay Rs 800 per acre during this time"*.

Inter personal relations also play an important role in the charges for hiring in the harvester. For example, it is the Velamas who constitute the majority of the harvester owners in the village. Many of them have close personal or kinship relations with other Velama families in the village. One Velama farmer says that *"Since last five years I have been approaching only one person to hire the harvester machine for my paddy crop. Since I am a regular customer I seek concession on the charges for hiring and I get it from him"*.

There are several reasons for farmers to shift to these machines from hiring labour for harvesting their crops. The highest landholding farmer in the village says that *"we have been using the harvester machine from the last several years otherwise we used to get it done with the help of migrant labour from Adilabad district. However due to NREGS, rice mill work and construction work, shortage of labour has occurred in the village. Moreover, the work with harvester machine is resulting cheaper than the manual labour work for the harvesting"*. It is not the rich farmers, even small landholding farmers from this caste also preferring these machines over the labour. In one such case, a small farmer from Velama caste once made an agreement with labour for harvesting his crop. After completion of harvesting work in some portion of the crop he needed tractor for thrashing *(locally called as "banthi*

kottuta[5]*")* the harvested crop. For this purpose he planned to hire a tractor, however, he could not get it on time. Fed up of this situation he simply hired the machine for harvesting in the rest of the farm land. He felt very happy for saving his time and energy by hiring the machine for harvesting.

The declining charges for hiring harvester machines is also encouraging many farmers from other castes with small landholdings to hire these machines for harvesting their paddy crop in the village. In one such case, one Golla lower medium landholding farmer says that "*the charges of harvester machine have been coming down year on year and that is why I have also started preferring the harvesting work to be done by hiring a harvester machine"*. In the study village, there has been a steady growth in the number of harvesters in the village with many rich farmers buying them to earn additional income. With the increased competition among these harvester owners, they are forced to cut down the hiring charges for the harvester machines. In fact, one of these harvester owners has expressed his doubt on the viability of this business in the coming years with such growth in the number of harvesters in the village.

This situation has also provided several options for the farmers to choose in hiring these machines from different owners. Sharing this kind of experience one small landholding Dalit farmer tells that "*In the beginning, I used to approach one harvester owner from Velama caste for harvesting the crop in my farm land. However, over two years I had a fight with him on the payment of money after the work is done. After that, I have been getting the harvesting work done with another harvester machine owner from our village"*. We also have many cases where farmers hire harvesters from the neighboring villages as their farm lands are very closely situated to these villages.

There are few cases where farmers get the harvesting done with the help of manual labour. In case of one small farmer, from Chakali caste, he used both harvester and manual labour for harvesting of his crop. He says that his farm land is

[5] This is one process where the paddy grains are separated from the harvested crop after the labour completes the harvesting crop. However, in case of harvesting is done by the machine this task is not required as the machine while cutting it separates the grain from the paddy plant.

adjacent to village tank and the soil will be very muddy in his farm land, and that is why he has to hire manual labour for harvesting. In fact, there is a similar case from a big landholding farmer from Velama caste who says that "*Since many years I have been hiring labour from the neighbouring village for both transplanting and also harvesting the crop as my farm is located in the borders of this village. Due to the muddy type of soil, I always use manual labour for harvesting the crop. Another reason is that I have many cattle in my household and by getting the harvester done with manual labour I can also avoid the loss of grass*[6] *from the field*". These labour have taken money from this farmer that is also another reason he always hires them for works in his farm land. Except for these few exceptional cases, most of the farmers in the village across the socio-economic categories are hiring the machines for harvesting their paddy crop.

Before transporting the grain, the farmer has to load the grain into vehicle and for this purpose, the farmer recruits *hamali*[7] labour from the village. The farmers enter into agreement with the leader of the *hamali gang* for the completion of work on fixed amount of wage payment for this work. There are two such labour *gangs* that are operating in the village and farmers get this work done by either of these two *gangs* for this.

Transport:

In most of the cases, farmers from the village either sell paddy to the *dalari*, who provides the seed for the crop or in the rice mills that are located in the nearby town. In case a farmer buys seed from a *dalari*, the *dalari* arranges the transport while collecting the harvest directly from the farmer. In case the farmer wishes to sell his grain in rice mills, either he has to arrange the tractor by hiring it or the buyer of the crop may provide it. However, in both the cases, only the farmer has to bear the cost of transportation charges. Usually, the charge for one trip of a tractor load grain is Rs 200 which may vary depending on the distance of the rice mill from the village. Most

[6] It is a fact that while doing harvesting with machines there will be plenty of grass that goes waste in the field itself. And whatever grass is leftover is not liked by the cattle. Many other farmers in the village have also complained the same thing and this also another reason for good number of farmers in the village for selling off their cattle in the household.

[7] This is a group of labourers who are specialized in packing the grain in gunny bags and loading these bags into the vehicle for transporting. This is very hard job requiring good muscle strength for lifting heavy bags of paddy grain that is the reason only young men enter into this work.

of the rice mills that buy paddy from the study village are located in the vicinity of 3-4 kms from the village. Hence, Rs 200 per trip has become a standard fare for any farmer in the village. Either the farmer or buyer of the paddy grain hire tractor from the village and pay the rent to its owner accordingly.

After the harvesting of the crop is done, the field is left with the waste grass and it has to be carried to the farmers' residence. Farmers get it done using various methods depending on their requirement. For example, marginal and small landholding farmers irrespective of their caste background carry the grass on their own with the help of their family labour and get it transported on a bullock cart. In case they do not have a bullock cart, they hire it from other farmers in the village. Mostly, this grass is used as fodder for their cattle. In case of medium size landholding farmers, they get it done with the help of exchange of labour. In this category, exchange of labour is practiced across the caste lines for this work. In majority of these cases, the owners of the farm land also engage themselves in the work of loading of grass into the tractor. Large landholding farmers get it done by hiring labour on daily wage basis and hiring a tractor for transportation. Those who have attached labour in their household engage them in this work.

Market:

In most of the cases, the farmers in the village sell their crop in the rice mills that are located in the surroundings of the village. Otherwise, they sell the crop to the *dalari* from whom they purchased the seed. In case of fine variety paddy crop which they usually cultivate during the Kharif season, they keep it for themselves for household consumption. The majority of the farmers approach the rice mills as the best possible market source for their crop which is located in a very close distance from the village. The trend of selling paddy for different categories of the farmers is explained below.

In general, the price of one bag (70 kg) of paddy grain will be in the range of 790-850 Rs (by the year 2013 the price has reached to Rs 1500). Farmers in the village cite different reasons for selling their paddy to various rice mills that are available in the market. Kinship relationships also play an important role for some of the farmers in deciding the buyer of the crop and also the price that is offered by him.

Many of the Velama farmers prefer to sell their crop to those rice mills where the owners belong to their own village. In one such example, one lower medium landholding Velama farmer along with his own land, he is cultivating his brother in law's land who lives in Sultanabad on share cropping basis. His brother-in-law owns a rice mill and as part of obligation he always sells his crop in his brother-in-law's rice mill.

Apart from kinship relations, the relations of credit also influence the farmers while choosing the buyer of the crop. For example, one young Dalit farmer with lower medium landholding says that *"I always sell my paddy to one rice mill located in the neighboring village. This is because the owner of the rice mill gives me money on credit whenever I ask him even up to the amount of Rs 50,000."* There are few other cases of lower strata of Dalit farmers sell their crop to those who provide credit for them. In another case, one lower medium landholding Golla farmer sold his paddy crop in a rice mill in Sultanabad where his son is working as an operator. That means familiarity with the buyer also influences while marketing the crop by the farmers in the village. However, in some other cases, mostly in the case rich farmers, across the caste groups keep their options always open and will sell their crop to any buyer whoever offers them the best price for their crop.

The payment of money by the buyer of the crop is not a smooth process. Especially in the case of small and medium landholding farmers, they face many problems with the buyers on payment. One Ausula farmer from the village has sold his crop in the rice mill owned by one rich Velama person. He was offered the cash payment with a waiting period[8] of 15 days. However, he complained that even after one month period he was not paid his money for the crop. The lower strata of the Dalit farmers are also facing the same problem where the paddy buyers always stretch the time period for payment of money for the crop from 15 days to 45 days. Because of this delayed payment some of these farmers are forced to sell their crop to others at a lower price than the then prevailing market price. Their vulnerability in surviving without money makes them to commit for low price for their product. The lack of

[8] This is the time period where the buyer of the crop agrees to pay the money to the farmer while collecting the paddy grain from him. A period of 15 days is standard for any farmer in the village to receive his payment from the buyer of the crop.

proper storage facility also forces such lower strata of farmers across the castes to sell their grain immediately after the harvesting. The marginal and small landholding Dalit farmers, who are in great numbers in the village, face another kind of situation while selling their paddy in the rice mills. Due to their small holdings of agriculture land, the yield also will be less. It seems the owners of the big rice mills don't buy paddy in such small quantities. Hence, they have to look for some small size rice mills to sell their paddy. Hhowever, in their case the cash payment is done on the spot.

The terms of sale are completely opposite when it comes to the farmers from rich farmers from Velama caste background. To cite one example, one rich farmer from Velama caste approached the Velama rice mill owner from the village for selling his crop. As he was in need of money urgently, he requested him to make spot cash payment. The rice mill owner has agreed for spot payment of cash but offered to pay him twenty rupees less than the market price on each paddy bag. The farmer got very angry upon the rice mill owner and he immediately approached another rice mill owner in Sultanabad. He sold his crop to him at market price and also got his cash payment on the spot. These rich Velama farmers always keep their options open and they sell their crop to those buyers whoever offers them the best price.

In fact, these farmers are very vocal in raising the problems of farmers in any public space. As one rich Velama farmer while sharing about the cheating by the rice mill owners says *"since beginning of the rice mill, they used to cut Rs 2 per each bag from the market price showing the reasons like gunny bag weight and also the wastage in the paddy because it is thrashed on the ground after harvesting. When harvesting is done by the machines, the grains don't carry any dust. But the rice mill owners are still deducting Rs 2 from each bag of grain they purchase from the farmer. All the rice millers have become a lobby on this issue and exploiting the farmers"*. This shows the emergence of another class among the rich Velamas from the village in the context of agriculture prosperity in the post canal period.

As we have seen with the introduction of 'new technology' agriculture in Thogata village has got transformed from subsistence oriented to market oriented cultivation in majority cases of the farmers. The large landholding farmers, in order to increase the yield and better management of farm operations have started merging

small blocks into bigger one to the maximum of one block per one acre agriculture land in the recent times. They are hiring machinery or getting it done by the labour for leveling their farm land to reduce the number of blocks. This also enables them for optimum use of canal water by having uniform landscape of farm land. The intensive cultivation of paddy crop that has been carried out with the support of 'new technology' has resulted in improvement of living conditions of the farmers to a great extent. In case of large landholding farmers they further became very rich and small and medium landholding farmers were able to achieve self sufficiency in agriculture. The opinions of various farmers on contemporary agrarian scenario in the village are explained below.

Perception of Farmers on Present Agriculture:

The introduction of 'new technology' through modern inputs like HYV seeds, fertilizers and pesticides along with canal irrigation has brought many changes in the total agrarian scenario in the village. The opinion of farmers differs from one person to another depending on their social, economic position and also the generation of which they belong to.

Velamas in the village are known for their hard core passion for agriculture since from the beginning. On the issue of Velamas' attitude towards agriculture the largest landholding farmer among Golla caste says that "*Velamas always prioritize agriculture over any other matter in their life like friendship and relationships etc. They leave everything behind and put their full efforts in their agriculture for the sake of earning money*". Especially after the introduction of 'new technology' with their intensive cultivation methods they took lead part in the agriculture growth in the village.

There is one rich farmer who is awarded with 'adrasha rythu[9]" title from the state government for his innovative adaptation of new technology in terms of going for new variety of cultivation called 'Sri Paddy cultivation'. He owns some portion of mud land and harvesting is done manually in this type of land. He hired labour from the neighbouring village and got it done. Due to the small size of land he has asked

[9] This is a complementary award given by the state government for the contribution of a farmer getting updated with the newly available techniques of cultivation and also being the most consistent and merit achiever in the government sponsored training programs for farmers in the state. As part of this award, the farmer is also offered a cash payment of Rs 1000 per month for a period of one year.

his attached labour to get the paddy loaded on the bullock cart and dump at his home. His attached labour was not attending the work for ten days and the paddy was lying in the field. Getting frustrated with this situation he blames that this is the problem with the kind of old practices in agriculture where labour are required for various farm operations. He told that in case of use of harvester machine he could have avoided the issues of absence of labour and also loss of time. If harvester is used the paddy grain will directly get loaded into a tractor which will be immediately send to the rice mills for marketing. One need not bother about threshing of paddy grain as the machine does it automatically while harvesting the paddy crop.

However, there are few old age persons belonging to Velama caste who have got a different opinion on this. While comparing the agriculture between old and present time one rich old age Velama farmer says, *"I feel old days were good because labour used to come to work for us but now no one cares us. Earlier they used to come to us and ask to provide work but now we have to go and request them to work for us. Today the labours are not obedient and if we scold them they are leaving the work with us. They always try to escape from working with us because now they have got other options to work. Women in the village are regularly attending the meetings of the SHG groups and by taking loan from these sources on very low rate of interest clearing their debts immediately. They are not ready to bear any scolding by us"*. This clearly shows the frustrations among the feudal mindset farmers from the older generation who are feeling bad about their losing control upon the labour population in the village.

Another old, very rich Velama farmer says, *"older days were good for us because even though we were not rich, the labour used to come to our home and work for us. But now with the labour becoming independent we have lost our patronage over them. Apart from this with the emergence of different political parties in the village, our Velama community got divided into factions breaking the unity among ourselves. Moreover, with the provision of reservations in the electoral bodies like Gram Panchayat for the backward communities and scheduled caste has further weakened our control over the labour in the village"*. Apart from the newly emerging labour opportunities in outside agriculture, the political affirmative steps taken up by the government also had great impact on the process of de-patronization of Velamas

over the agriculture labour in the village. However, contrary to the above opinions one rich old Velama farmer from the large landholding category opines that the condition of agriculture in the present time is good when compared with the older days. He further says that there is no problem of shortage of labour in the village. It is observed that this old farmers is very good person and always has genuine concern for his labour. Unlike his other fellow caste landlords he has a softer attitude towards the labour and the labour also like working in his farm land. There are also some other Velama farmers who share the same opinion of achieving prosperity in their life with the introduction of 'new technology' in village agriculture.

On the present state of agriculture another young educated farmer from Velama caste says that "*all the farmers from the village are sending their children to pursue higher education. As it is unlikely that these children will take up agriculture as their occupation in future only the older generation is practicing agriculture. With the breakup of joint families into nuclear farmers have to depend on others to perform several tasks in agriculture. The use of bullocks is going to disappear in the coming years with the kind of mechanization that is taking place in agriculture. The government is also encouraging the farmers to buy the machinery by providing subsidy on the price of this machinery. The infrastructure facilities also increased to a considerable level and farmer is the one who is going to be the king in the coming years"*. He also cites that the policy of US government of providing 100 percent subsidy to the benefit of farmers on all the agriculture inputs that are required in cultivation. This young farmer is a science graduate and took up agriculture with passion as his main occupation by seeing the growth potential of agriculture with the introduction of 'new' technology. He started cultivation with only 3-4 acres of land and he kept on reinvesting the surplus money back in buying more agriculture land that resulting in ownership of total 10 acres of land over a period of time.

On the viability of agriculture in the contemporary time,s one of the richest Velama farmers insists that *"both agriculture and business have their own positive and negative sides. However, one should have at least 10 acres of land in a single plot of land for a viable agriculture and then only in will be fruitful for a farmer in the present day agriculture. This is because every year mobile bill, gas bill and electricity bill have been increasing and to cope with this situation one should have minimum 10*

acres of land for better income in agriculture." Adding further on the present condition of agriculture he criticizes the move of the government to waive off the crop loans[10] by the farmers. He says that *"this will only encourage fraud attitude among the farmers because there is no encouragement given by the government for those farmers who are paying their crop loans regularly. Instead of waiving these loans, they should cut down the interest rates for crop loans and that could help the farmers in much better manner"*.

Similar kinds of protests were raised by many farmers from small and medium landholding categories across the caste groups. All of them criticized that the policy of government that completely ignored the small and medium farmers with benefits going to exclusively to the rich farmers. They strongly felt that the government's act has clearly discriminated against their interests who actually have been paying the crop loan very regularly. In such conditions, clear cut differences seem to emerge among the farmers with different landholdings even among the Velamas who otherwise show great solidarity to their fellow caste farmers in any matter in the village.

In another case, one young Golla caste farmer from lower medium landholding category works as operator in a rice mill in Sultanabad. Along with this he helps his father in the cultivation of their paddy crop. This person opines that agriculture is more profitable than a job; and in the present scenario while doing cultivation one can also work outside also like operating tractor/harvester which doesn't require any schooling. With the introduction of 'new technology' the actual input of labour hours has drastically come down and especially for a crop like paddy the farmer gets lot of free time in cultivation. Majority of the Gollas belong to small landholding households and both men and women members always engage in multiple sources of wage earning labour activities. In this background the process of mechanization has facilitated them to spare time for other works along with agriculture.

[10] As part of its electoral promise the Y.S. Rajashekar lead Congress (I) government after coming into power in Andhra Pradesh in the year 2004 has waived off all the pending crop loans of farmers that exceeded an amount of one lakh rupees.

Sharing his experience one small landholding farmer from Ausula caste says, *"I entered into agriculture after the canal irrigation was introduced in the village. I started cultivating my father's inherited land and after few years I have also purchased some more land for cultivation. There is not much demand for the goldsmith work in the village that is why I entered into agriculture. I feel agriculture in the present time is much better than the earlier days but increasing of costs of inputs for agriculture is a worrying factor"*. Here in this case the 'new technology' has paved ways and encouraged persons belonging to traditional artisan castes have also to take up agriculture as their primary occupation. On the condition of farmer in the present days, one marginal landholding Dalit farmer says that *"to have a secure life one must have at least three acres of land with a bore well fulfilling the irrigation requirements for the field. In these days a minimum of two acres of cultivable land with irrigation facility can provide a comfortable livelihood for a farmer"*. This is very much true especially in the case of Dalits in the village with majority of their landholdings fall in the small and marginal categories. Because of which, majority of the Dalit population in the village still depend on various wage labour activities for their livelihood.

With regard to the rising cultivation charges, one Velama farmer from lower medium landholding shares similar opinion and he says that *"the older days were good because the yield was low and the expenditure was also low in agriculture. But now in the present time, the yield is high and also the expenditure"*. This is very much true in the case of paddy cultivation because as the farmers have informed that *"around 8-10 years back few two drops of endo sulphon (name of one type of pesticide) used to be enough to fight against the diseases for an acre of paddy crop. But now they are forced to use one liter quantity of the same pesticide to control the disease as over a period of time the insects in the farm have developed their resistance power in fighting with these chemicals"*. The intensive cultivation of paddy in the village has been simultaneously accompanied with the increasing expenditure in various inputs for agriculture. Increasing prices of inputs like fertilizers and pesticides every year and indiscriminate use of such inputs in huge quantities is resulting in more financial burden for the farmers. This is the major concern for all the small and marginal farmers in the village who generally belong to the poor economic background.

The issue of union for farmers is also discussed among the farmers in the village but very rarely. One Velama farmer with upper medium landholding feels bad that there is no union for farmers in the village who can take care of farmers' welfare activities. He opines that internal differentiation among the peasantry and presence of multi party politics in the village are the main reasons for this. He says that there is no unity among the farmers and except for the farmers, all other groups have unions. He is unhappy about the exploitation by some of the rice mill owners on offering low price for the crops to the farmers. He strongly insists that government authorities should take action against rice millers by imposing restriction on the quantity of grain that they purchase from the farmers. In support of this argument another rich Velama farmer says that the rice mill owners, while buying paddy grain from the farmers, fix a waiting period of 15 days to pay their amount. After collecting from the farmers they sell the gain to the government bodies like FCI within short period of two days and also receive their payment. Instead of paying their dues, they indulge in rotation of this huge amount of money in their own interests at the cost of farmers' waiting for their due money.

The above data clearly shows the diverse opinion among the farmers of Thogata village with their own caste and class interests playing an important role in the way they look at the changing agrarian scenario in the village. However none of the farmers are bothered about the soil depletion with the practice of mono cultivation of paddy crop. It is true with use of modern inputs they could able to achieve higher yields and better income for them however, in the long run it will surely affect the soil fertility in the village. Apart from this due to the introduction of new technology in agriculture all the farmers in the village have to depend on market for availing various inputs for agriculture. The rich farmers with better financial resources could able to meet the requirements in agriculture sufficiently however, the small and marginal landholding farmers are finding it difficult to meet the capital requirements in changing scenario of agriculture. Alary (1999: 1404) while analyzing a similar situation in an irrigated village from south Telangana region concludes that with the introduction of canal irrigation farmers are being totally governed by the state and administration for water management. This shows their present dependence on an agriculture system that is imposed on them and as well as it got embedded in their behavior. The same trend is observed in Thogata village as there has been an

increased dependency of farmers over the market and government in organizing agriculture production.

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Chapter 6
TRENDS OF AGRARIAN CHANGE

The present chapter deals with the analysis of various trends of agrarian change that are taking place from the year 1980 onwards as a result of introduction of 'new technology' in terms of both canal irrigation and High Yielding Variety (HYV) seeds in the study village. These changes have differential impact on various socio-economic groups. Rao & Nair (2003) in their analysis, further explain that the impact of forces of change affecting the rural economies and societies results in uneven growth and development across various states, regions, castes and classes for historical and contemporary socio-political factors. Faster economic growth takes place among the regions that are relatively more advanced and also among the families with more assets across various caste and class categories. However, the affirmative actions taken by the government can improve the living standards of the marginalized social groups living in the village but again the poor performance of the public authorities in the implementation might nullify the positive impact at ground level (p. 3349). This chapter tries to focus on analyzing some of the major aspects of agrarian change like cropping pattern, mechanization, labour relations, women and emergence of new non-farm occupations that have taken place during this period.

Cropping Pattern

As we discussed in the previous chapters, farmers were cultivating maize, chilly, cereals and other varieties of millets before the introduction of canal irrigation in the village. The limited resources of ground water and uncertainty of rainfall have given no other option for farmers to grow except for the dry crops. Except for few landlord households who own wells, none of the farmers were able to cultivate crops like paddy. However, the introduction of canal water has altered this situation and over a period of time, majority of the farmers in the village shifted to an intensive cultivation wet crop[1] of paddy.

[1] Epstein (1962: 50), Breman (1985: 29-30), Gorter (1989: A100), Wilson (2002: 1231) and Anil Kumar (2006: 1), from their village studies, observed that with the introduction of canal irrigation already existing dry crops like cotton, millets, jowar and other cereals have got completely disappeared and they were replaced by wet crops like paddy and sugar cane in the due process.

The support from the government for the paddy cultivation has motivated the farmers to go for paddy after canal was introduced in the village. After Independence, the Indian government aimed at achieving self sufficiency in food production in the country. For this, the government chose the 'Green Revolution' program, to achieve its goal and started providing farmers many agricultural inputs like fertilizers with subsidy amount. The impact of this is explained by Vakulabharanam who says that from the 1980s onwards, there has been a rapid increase in the use of HYV seeds, synthetic fertilizers, and pesticide use in Telangana. As a result, during 1985-2001, huge growth is witnessed in the crop-area of paddy in the region (Vakulabharanam, 2004: 1423-24)[2]. The following sections, in detail, explain the process and reasons for shift to paddy cultivation in the study village with the introduction of new technology.

In the beginning, farmers started cultivating paddy only in few portions of land. Majority of the farmers were still cultivating other dry crops even after the introduction of canal irrigation. The authorities used to release canal water only for Rabi crop and HYV seeds were also gaining popularity among the farmers in the village. Initially, Velama farmers from the upper strata of landholdings started using HYV seeds of paddy in small portion of land during Rabi season. However, once one young educated Velama person (son of rich landlord) started experimenting in the cultivation of paddy with HYV seeds in his entire agriculture land. He is a graduate in science and after his education, he worked as a teacher for couple of years in private schools in the nearby town. He later decided to engage in agriculture as a full time activity by seeing its potential with the introduction of 'new technology' in agriculture in his village.

Sharing his experience on his successful paddy cultivation he says, "*During one season I decided to cultivate paddy in our entire agriculture land which was never done before by any farmer in the village. In my first attempt, I was not successful and I couldn't achieve good yield in the paddy crop. But, I again planted paddy in the next season in the entire land and this time I was successful in achieving a good yield. The harvest was so huge that I had to hire labour from Adilabad district*

[2] In the same study the author revealed that during the period 1971-2001, among all the districts from Telangana region it was Karimnagar that has witnessed the highest growth rate in terms of being provided with canal irrigation facility.

for harvesting the crop. I hired 40 labour and they finished the work in a week. I got total 1000 (70 kg each) bags of grain from our 25 acres of land. All the Velama elders in our village were surprised and started praising me on my achievement. I felt very special and proud for setting a trend of cultivating paddy at such huge level in our village". This person with his established financial background and better knowledge took risk in experimenting with cultivation and was successful in his second attempt. His achievement later paved way for many other farmers to go for paddy cultivation on a much larger scale.

The eating habits of the people in the village have also changed during these years. In the pre-canal period, eating rice has been a privileged option for the rich landlords of the Velama caste to show off their "higher social status" in the village. During this time majority of the people in the village used to survive on maize and other food items for their daily consumption. Most of these farmers belong to small and medium landholdings and because of their poor economic condition they could not afford to invest in private irrigation facilities like wells and pump sets. With the canal water, the efficiency of the land has increased which benefitted all the farmers cross the different landholdings. With this, even small landholdings, most of them comprising backward and Dalit communities were able to enter into paddy cultivation along with the large landholdings of Velama caste group who are equipped with better capital resources[3].

There is an ecological aspect also for the shift in cropping pattern in the study village. As discussed earlier, farmers in the village used to cultivate maize along with paddy in the initial years of canal irrigation. However, many farmers were compelled to cultivate paddy due to the location of their agriculture land. The canal stream in the village passes through at a high altitude. Majority of the farm lands in the village are located on the both sides of this canal stream at a lower altitude. When a farmer at the higher altitude land cultivates paddy it increases the moisture levels in the entire land that is surrounded by his land. These moisture levels damage the dry crops like maize in case they are located in adjacent to these paddy fields. Hence, those farmers who

[3] Attwood (1988:68) in his paper argues in a similar line from his findings from the state of Maharashtra where the introduction of huge canal irrigation system has turned the small size lands that were unviable for dry crops into prosperous lands for sugar cane cultivation.

are cultivating maize in these locations were compelled to shift to paddy cultivation for the fear of loss of crop. Over a period of time the entire region along with the canal stream was converted into a rice belt[4] with most of the farmers shifting to paddy crop in the area.

In the beginning, canal water was released only for the Rabi crop and farmers used to cultivate paddy only once in a year. However, from the year 1990 onwards, the authorities started releasing the canal water for both Kharif and Rabi season in the village. With the availability of abundant water for both crops through canal water, many farmers, including those from the small landholdings, started cultivating paddy crop in the village. In fact, the entire village agriculture lands were converted into paddy fields in the subsequent years with most of the farmers in the village shifting to mono cultivation of paddy crop. This has further resulted in new emerging marketing opportunities for the paddy crop in the form of rice mills. Many rice mills have come up in the nearby town Sultanabad to cater the needs of farmers in the region who started producing huge quantity of paddy crop.

These rice mills are located in the close vicinity of the village making it more approachable for the farmers in the village to sell their paddy crop. The availability of market facility in the form of huge number of rice mills, that too in such close distance from the village, ,made many farmers feel safe and encouraged to cultivate paddy over any other crop for the ease and convenience in marketing the crop after harvesting. When asked about preferring paddy cultivation, one of the rich farmer says, *"with the regular supply of canal water, farmers were able cultivate paddy even for two crops. Moreover, when compared with other crops, paddy requires less labour also with many machines available during its cultivation. Most importantly the location of our village also has been encouraging the farmers to go for paddy cultivation with the presence of many rice mills in a very close distance from the village as they get better price for their paddy when compared with farmers from other remote villages"*.

[4] In a similar findings Alary (1999) in her study of canal irrigated district namely Nalgonda from South Telangana region explains how the government policy in terms of providing irrigation facility has transformed the entire region into a rice belt.

Apart from this, there has been a steady growth in the minimum support price (MSP) for paddy grain declared by the government of India from the last few years. This increasing price support has also been encouraging majority of the farmers to prefer paddy crop over any other crop for cultivation. Even though the new technology initiated the farmers to shift from multiple to mono crop cultivation of paddy crop, in the later period, various other factors like improved market facility along with institutional support in the price for the crop has consolidated the cultivation of paddy crop in the village. However some scholars have raised serious questions on the sustainability and viability of this mono cultivation of paddy in the long run. In her study from canal irrigated zones of South Telangana region, Alary observes that due to the farmers' dependence on state for maintenance of canal and efficient water management they are hardly left with any alternative in terms of technology and choice of crop. In this situation, the revenues from agriculture for the farmers are completely depended on the minimum support price that is offered by the government. Lack of research and institutional support in terms of MSP is blocking these farmers to experiment with other commercial crops while diversifying their cropping pattern from paddy to other crops (Alary, 1999: 1403-1404). Over the last decade there has been a positive support from the government side with regard to the MSP for paddy crop in the country. This has resulted in the continued mono crop cultivation of paddy in the study village during this period.

Mechanization of Agriculture

With reference to agriculture in Asian countries, Jose says that the development of farm mechanization cannot be viewed in isolation from broader question of technological change in agriculture. As the specific components of agricultural technology such as hydrological technology (related to the use and management of water resources), mechanical technology (use of farm equipments) and seed fertilizer technology undergo technical change over a period of time, there will be a remarkable trend towards a gradual decline in the participation of human labour for specific farm operations (Jose, 1984: A97). The below sections deals with the process of change that took place in terms of mechanical technology in Thogata agriculture over a period of time.

The initial process of mechanization in Thogata village agriculture has begun with the introduction of diesel motor pumps by very few farmers of Velama landlords. With the introduction of electricity supply to the village in the year 1964, few prominent Velama farmers have fixed motor pumps for their wells in the agriculture fields. With the increased electricity facility in the later years, many other Velama farmers also started buying these electric motor pumps for their farm lands. Slowly the better off farmers from other castes also started fixing them over a period of time. Further with the introduction of canal irrigation in the village water levels have gone up. To make benefit of this, by exploiting the natural resource of water, for their intensive cultivation the Velama farmers from the upper strata of landholdings started expanding their old wells by digging them further deeper and modifying with the construction of boundary wall with stones.

In Thogata village, around 85 percent of the farmers from the Velama caste have motor pumps in their wells. There is high presence of these wells with motor pumps among the large landholding farmers when compared with the smaller landholdings within the Velama caste. In the case of Golla and Gouda caste farmers half of them have motor pump facility for their agriculture wells. Among the Dalits only 30 percent of them own pumps. Only 12 per cent of the farmers from the Chakali caste own wells with motor facility. This shows that Velamas are standing far above from any other caste farmers in mechanizing their private irrigation facility by fixing motors in their wells. These wells with motor facility provide a back up support in case of delay or failure in the release of canal water during any season that could be affected by bad monsoon or shortage of water availability for other reasons. In the year 2004, after Mr. Y. S. Rajashekar Reddy became the chief minister of Andhra Pradesh, all the pending electricity dues by the farmers were waived by the government. Along with this the farmers in the state were given assurance of free electricity supply for the agriculture fields. This kind of institutional support from the government has further benefitted the farmers in the village that own motor pumps with most of them belonging to the upper medium and above landholding categories. It seems such a positive move from the government also encouraged some of the farmers from small landholdings to electrify their wells in order to provide better irrigation facility to their farm land.

Table 6.1: Purchase of Tractors (Year Wise):

Year of Purchase (Tractor)	Category of Landholding					Total HH
	Caste	A4	A5	A6	A7	
1988	Velama	0	0	0	1	1
1995	Velama	0	0	0	1	1
1999	Velama	0	0	1	0	1
2001	Golla	0	0	1	0	1
	Velama	0	2	0	1	3
	Total	0	2	1	1	4
2002	Velama	0	0	1	0	1
2003	Velama	0	2	0	0	2
2005	Golla	0	0	1	0	1
	Velama	1	1	1	0	3
	Total	1	1	2	0	4
2006	Gouda	0	1	0	0	1
	Velama	1	1	3	0	5
	Total	1	2	3	0	6
2007	Velama	1	0	0	0	1
Total	Gouda	0	1	0	0	1
	Golla	0	0	2	0	2
	Velama	3	6	6	3	18
	Total	3	7	8	3	21

Source: Field survey, 2006-7.
Note: A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

The next level of mechanization can be understood in the purchase of heavy machinery like tractor and the above table describes data on this over a period of time. The first tractor in the village was purchased by the feudal landlord in the year 1988. The next tractor in the village was purchased (1999) by again a Velama farmer from the large landholding category. Among the non-Velamas for the first time in the year 2001 one Golla person with big landholding has bought this machinery. From the year 2005 onwards few Velama farmers even from the lower medium landholdings have bought tractor in the village. In the year 2006, for the first time one Gouda caste farmer from upper medium landholding has bought tractor. During the decade of 1988-1997 only two farmers from the large landholding that too from only Velama caste bought tractors. However, the next decade that is between 1998 -2007 has witnessed unprecedented number of tractors with a total 19 tractors being purchased and within few non-Velama caste owners are also included. By the year 2007, there were 21 tractors owned by different farmers in the village. All most of all of these

owners are from the dominant caste of Velama, except that of two Golla farmers and farmer from Gouda caste. (As per the latest data (by the year 2013) from the village the number of tractors in the village has gone beyond 50. This includes one first time owner from Dalits hailing from lower medium landholding category).

Introduction of 'new technology' in Thogata agriculture in terms of HYV seeds and canal irrigation has lead to unprecedented mechanization of agriculture in paddy cultivation[5]. The rigorous schedule of farm operations and the need for more efficient delivery of the newly introduced inputs like HYV seeds, fertilizers and pesticides plays an important role in the mechanization for selective farm operations (Jose, 1984: A100). In a complimentary observation from his findings in canal irrigated village of Gujrat, Gorter (1989) argues that mechanization is not the result of a singular cause like irrigation but also the increasingly capitalistic outlook of large farmers where their rising profits are being invested in buying more and more expensive implements like tractors. Also with the canal water the soil has become hard and tough making it difficult to cultivate the land by plough with bullocks. (Gorter, 1989: A102 - A103).

Agriculture in Thogata village has gone through similar kind of change after the introduction of canal irrigation in terms of buying heavy machinery for agriculture. The competitive attitude among the rich Velama farmers in conducting various farm operations in appropriate time has resulted in buying more and more tractors by them. With the increased availability of tractors in the village many farmers who do not own them also started hiring these tractors in order to save their time and energy in the changing agrarian scenario in the post canal irrigation period in the village.

[5] Mohanty (1999: A57) in his study from Satara District from Maharashtra found a huge increase in the number of tractors that are purchased by the farmers with the introduction of 'new' technology in the agriculture in the region.

Table 6.2: Leasing in Tractor:

Social Group	Caste	Whether Leased in Tractor	Category of Landholding						Total HH
			A2	A3	A4	A5	A6	A7	
OC	Velama	Yes	1 (33)	3 (27)	16 (64)	15 (79)	11 (92)	3 (100)	49 (67)
		No	2 (67)	8 (73)	9 (36)	4 (21)	1 (8)	0 (0)	24 (33)
		Total	3 (4)	11 (15)	25 (35)	19 (26)	12 (16)	3 (4)	73 (100)
OBC	Ausula	Yes	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Kummari	Yes	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Tenugu	Yes	0 (0)	2 (50)	3 (100)	0 (0)	0 (0)	0 (0)	5 (71)
		No	0 (0)	2 (50)	0 (0)	0 (0)	0 (0)	0 (0)	2 (29)
		Total	0 (0)	4 (57)	3 (43)	0 (0)	0 (0)	0 (0)	7 (100)
	Chakali	Yes	1 (50)	4 (80)	0 (0)	1 (100)	0 (0)	0 (0)	6 (75)
		No	1 (50)	1 (20)	0 (0)	0 (0)	0 (0)	0 (0)	2 (25)
		Total	2 (25)	5 (62)	0 (0)	1 (12)	0 (0)	0 (0)	8 (100)
	Gouda	Yes	6 (86)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	6 (67)
		No	1 (14)	1 (100)	1 (100)	0 (0)	0 (0)	0 (0)	3 (33)
		Total	7 (78)	1 (11)	1 (11)	0 (0)	0 (0)	0 (0)	9 (100)
	Golla	Yes	5 (71)	12 (67)	13 (76)	6 (100)	1 (100)	0 (0)	37 (76)
		No	2 (29)	6 (33)	4 (24)	0 (0)	0 (0)	0 (0)	12 (24)
		Total	7 (14)	18 (37)	17 (35)	6 (12)	1 (2)	0 (0)	49 (100)
	Total	Yes	12 (71)	21 (68)	16 (76)	7 (100)	1 (100)	0 (0)	57 (74)
		No	5 (29)	10 (32)	5 (24)	0 (0)	0 (0)	0 (0)	20 (26)
		Total	17 (22)	31 (41)	21 (27)	7 (9)	1 (1)	0 (0)	77 (100)
SC	Madiga	Yes	18 (56)	10 (91)	4 (57)	0 (0)	0 (0)	0 (0)	32 (64)
		No	14 (44)	1 (9)	3 (43)	0 (0)	0 (0)	0 (0)	18 (36)
		Total	32 (64)	11 (22)	7 (14)	0 (0)	0 (0)	0 (0)	50 (100)
Total		Yes	31 (60)	34 (64)	36 (68)	22 (85)	12 (92)	3 (100)	138 (69)
		No	21 (40)	19 (36)	17 (32)	4 (15)	1 (8)	0 (0)	62 (31)
		Total	52 (26)	53 (26)	53 (26)	26 (13)	13 (7)	3 (2)	200 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages)
Note: A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

The above table describes the extent of tractor use for ploughing in paddy cultivation among all the farmers across different castes and landholding categories. Among the Velamas, 67 percent of the farmers hire tractor for various farm operations. This percentage further goes up among the upper strata of landholding farmers with all the large landholding farmers using tractors. In the OBC category, all the farmers from Ausula and Kummari caste hire tractor for farm operations. Among all other castes from this group, majority of the farmers are using tractors in

cultivation. It is the small and medium landholding from these caste groups who are not hiring this machine. Most of these farmers have pair of bullock and plough that they use it to plough their farm land.

In case of Dalits, 64 percent of them use tractors for their agriculture activities. Interestingly, among Dalits, more than 90 percent of the small landholders are hiring tractor in agriculture. Also in the case of farmers from other castes with same size of landholding, many of them are doing the same. This is because most of them cannot afford to keep pair of bullock and own a plough and actually hiring tractor might not be helpful in effective ploughing because of their small and uneven farm lands. However, the pressure of timely operation of ploughing in the changed agriculture scenario with the introduction of 'new' technology they are forced to hire tractors from the owners (Wilson, 2002: 1233). In the study village also a similar trend is observed with regard to the small and marginal landholding farmers with many of them started hiring tractors for various operations like ploughing and transporting[6].

There is another level of mechanization that took place in agriculture in Thogata village. From the year 2004 onwards harvester machines were introduced replacing the human labour for harvesting the paddy crop. The first experience of harvester was associated with one rich velama farmer that can be dated back to the year 2004. During the harvesting time for his paddy crop he was looking out for the labour for this work. He had to wait for his turn for the migrant labour to work in his farm because all of them were busy in working in other lands. However, in order to protect his crop from the rain, he decided not to wait for the labour to come and instead, opted for the machine to harvest the crop in his farm land. He hired the harvester machine from the neighbouring district and got the work done fast. Farmers from the entire village watched this scene of harvesting by the machine that took very less time when compared with the manual labour harvesting. With his experience the same Velama farmer who tried the harvester machine for first time purchased harvester machine in the next year. The consequent years further resulted in some other affluent Velama farmers including couple of rich Golla farmers buying

[6] Anil Kumar (2006: 2) observed a similar trend of tractor use among the small and marginal cultivators in the paddy cultivating villages from south Telangana in post canal irrigation period.

harvester machines in the village. The following table explains the pattern of harvester purchase in Thogata village.

Table 6.3: Purchase of Harvesters (Year Wise):

Year of purchase (harvester)	Category of Landholding			Total HH
	Caste	A5	A6	
2005	Velama	1	0	1
	Total	1	0	1
2006	Golla	0	1	1
	Velama	2	0	2
	Total	2	1	3
2007	Golla	0	1	1
	Velama	2	3	5
	Total	2	4	6
Total	Golla	0	2	2
	Velama	5	3	8
	Total	5	5	10

Source: Field survey, 2006-7.
Note: A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), HH = Households.

The first harvester in the village was bought in the year 2005 by a Velama caste person from upper medium landholding. In the year 2006, for the first time one Golla caste person has bought a harvester belonging to big landholding. In the same year two Velama farmers from upper medium landholding purchased harvester. In the year 2007, two more Velama farmers from the same class bought harvesters. In the same year one Golla and three Velama farmers from big landholding purchased harvesters in the village. During the period of 2007-2013 the number of harvesters in the village has reached to more than double with a total 21 harvesters in the village. This clearly shows the increasing number of capitalist oriented farmers in the village whose motive is to reinvest the surplus money that is earned in agriculture in mechanization for an efficient and labour saving agriculture production.

Interestingly, none of the farmers from the top stratum (large) of landholding own harvester in the village. In fact, it is the upper middle strata of the landholding that took initiative in using this machine and also half of the owners belong to this stratum only which clearly shows their capitalist orientation in agriculture. Another

half of the owners belong to the big landholdings. Except for Velamas and Gollas, none of the other caste farmers own this machinery. Among the Gollas only big landholding farmers were able to purchase this costly machine. However, in case of Velamas, we have owners even from the upper medium landholding farmers. One harvester machine costs around Rs 30 lakhs and all these owners availed bank loan for purchasing it. They also benefitted with 50 percent discount on the total price of the machine as subsidy which is offered by the government.

The institutional support by the government in procuring the various agriculture inputs that are part of 'new technology' with better credit facilities[7] has encouraged many enterprising farmers in Thogata village to follow the capitalistic approach in agriculture. While analyzing this trend in Indian agriculture Omvedt (1981) argues that the large increments given in terms of agriculture credit for buying various agriculture inputs shows that the means of production that are controlled by the rich farmers are significantly and increasingly being provided through the market by both industry and state. Also, most of the debts that are incurred by the rich farmers are actually provided by either co-operatives or banks instead of traditionally available money lender or other farmers. This trend shows the transition of dominant class in agriculture from primarily being landlords to primarily capitalist farmers (p. A147). Further Hanumantha Rao (1972: 395) argues that lack of alternative sources of investment the rich farmers in the prosperous regions started investing in huge machinery which have also become status symbols for them.

[7] Epstein, Suryanarayana & Thimmegouda (1998: 160) from their longitudinal study of irrigated village in Mandya region of Karnataka have found that over a period of time farmers have purchased different types of capital assets like pump sets, power tillers and tractors. For example in case of one power tiller owner, he availed loan from a bank at a lower interest rate and he is confident of clearing his loan amount within 2-3 years with the income he would earn by hiring his power tiller to others.

Table 6.4: Leasing in Harvester:

Social Group	Caste	Whether Leased in Harvester	Category of Landholding						Total HH
			A2	A3	A4	A5	A6	A7	
OC	Velama	Yes	0 (0)	2 (18)	21 (75)	18 (90)	12 (86)	6 (100)	59 (72)
		No	3 (100)	9 (82)	7 (25)	2 (10)	2 (14)	0 (0)	23 (28)
		Total	3 (4)	11 (13)	28 (35)	20 (24)	14 (17)	6 (7)	82 (100)
OBC	Ausula	Yes	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Kummari	Yes	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
	Tenugu	Yes	0 (0)	1 (25)	3 (100)	0 (0)	0 (0)	0 (0)	4 (57)
		No	0 (0)	3 (75)	0 (0)	0 (0)	0 (0)	0 (0)	3 (43)
		Total	0 (0)	4 (57)	3 (43)	0 (0)	0 (0)	0 (0)	7 (100)
	Chakali	Yes	1 (50)	3 (60)	0 (0)	1 (100)	0 (0)	0 (0)	5 (62)
		No	1 (50)	2 (40)	0 (0)	0 (0)	0 (0)	0 (0)	3 (38)
		Total	2 (25)	5 (63)	0 (0)	1 (12)	0 (0)	0 (0)	8 (100)
	Gouda	Yes	5 (71)	0 (0)	0 (0)	1 (100)	0 (0)	0 (0)	6 (60)
		No	2 (29)	1 (100)	1 (100)	0 (0)	0 (0)	0 (0)	4 (40)
		Total	7 (70)	1 (10)	1 (10)	1 (10)	0 (0)	0 (0)	10 (100)
	Golla	Yes	2 (29)	5 (28)	8 (47)	5 (83)	1 (100)	0 (0)	21 (43)
		No	5 (71)	13 (72)	9 (53)	1 (17)	0 (0)	0 (0)	28 (57)
		Total	7 (14)	18 (37)	17 (35)	6 (12)	1 (2)	0 (0)	49 (100)
	Total	Yes	8 (47)	12 (39)	11 (52)	7 (88)	1 (100)	0 (0)	39 (50)
		No	9 (53)	19 (61)	10 (48)	1 (12)	0 (0)	0 (0)	39 (50)
		Total	17 (22)	31 (40)	21 (27)	8 (10)	1 (1)	0 (0)	78 (100)
SC	Madiga	Yes	1 (3)	7 (64)	4 (57)	0 (0)	0 (0)	0 (0)	12 (24)
		No	31 (97)	4 (36)	3 (43)	0 (0)	0 (0)	0 (0)	38 (76)
		Total	32 (64)	11 (22)	7 (14)	0 (0)	0 (0)	0 (0)	50 (100)
	Total	Yes	9 (17)	21 (40)	36 (64)	25 (89)	13 (87)	6 (100)	110 (52)
		No	43 (83)	32 (60)	20 (36)	3 (11)	2 (13)	0 (0)	100 (48)
		Total	52 (25)	53 (25)	56 (27)	28 (13)	15 (7)	6 (3)	210 (100)

Source: Field survey, 2006-7, (Figures in brackets are percentages)

Note: A2 = Marginal (above 0 – 1 acre), A3 = Small (above 1 - 2.5 acres), A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

The above table gives the details of the farmers who lease in harvester on rent basis for harvesting their crops. Among the Velamas, 72 percent of the farmers hire this machine. Again within these, most of the farmers in the category of lower medium and above landholding are using this machine for harvesting. All the large landholding farmers from this caste hire harvester machine. This clearly shows that majority of the Velama farmers prefer to machinery over labour for harvesting their paddy crop. In the OBC category, all the farmers from Ausula and Kummari depend

on this machine for harvesting. In case of Tenugu, Chakali and Gouda castes, more than fifty percent of them hire machine for harvesting paddy crop. However, when it comes to Gollas, only 42 percent of the farmers from this caste use the machine which denotes majority of them still depend on human labour. The reason for this is majority of the Golla caste landholdings belong to small and medium landholdings. Most of these farmers engage in exchange labour within their own caste and thus save good amount of money in terms of wages. The use of harvester machine among Dalit farmers is very less with only twenty four percent of them using it. Most of them either depend on family labour or exchange of labour for harvesting their crop.

In the beginning, farmers were hesitant to use this machine for harvesting paddy crop in the village. However after the successful experiment of few rich and enterprising Velama farmers many other farmers from the upper strata of landholding have followed using them in cultivation. The uncertainty of weather during the harvesting, advantage of requirement of very less time for harvesting with machine, non-availability of tribal migrant labour and also low cost factor all these have encouraged many farmers to shift to machine for harvesting their paddy crop[8]. The surplus amount of profit generated from cultivation is being invested in buying more and more machines like this by the rich and enterprising farmers. Because of this the number of harvesters in the village has been steadily increasing because of which the hiring charge for harvesters has been very competitive during all these years. This has also enabled many of the medium level farmers who were looking for cost cutting methods in their farm lands. Lack of storage facility, bad weather conditions during harvesting and lack of time for looking after the farm operation are also forcing many small and marginal landholding farmers to hire this machine. All these factors are resulting in the increasing use of harvester across all the socio-economic categories of farmers in Thogata village.

The impact of mechanization had differential impact among the various categories of agrarian population. In the case of motor pump owning farmers, mechanization improved their irrigation facility to the crop with better management of

[8] Kalpana Bardhan (1989: A26) has observed similar kind of reasons as the motivating factors for the shifting of farmers towards mechanization of harvesting activity in cultivation.

water source. Institutional support in terms of discounts and subsidy on both equipment and power tariff helped them to cut down their expenditure further in cultivation. In case of heavy machinery owners of tractors and harvesters, they were able to engage in more efficient and timely operation of various farm activities in their agriculture lands. Apart from these, they started earning huge amounts of income by hiring the machinery to other farmers both inside and outside village. Certainly the owners of this machinery with most of them belonging to Velama caste along with couple of rich Golla farmers have further become richer over a period of time.

By hiring this machinery for various activities in the cultivation of paddy, majority of the farmers also benefitted. These machines helped the upper strata of farmers to successfully counter the situation of increasing wage rates for the agriculture labour in the changing scenario in the context of introduction of 'new' technology in Thogata agriculture. They were also able to extract additional amount of surplus amount in agriculture by replacing the manual labour with machinery for different activities in the farm. Apart from the cash benefit they were able save lots of time and energy and could focus on other productive activity in that leisure time. However, in case of small and medium size of landholdings, there was only minimal impact as majority of these farmers are dependent on their family labour or exchange of labour for various farm operations.

Lastly with regard to the agriculture labour, at every level of mechanization in village agriculture, it has displaced the labour from their wage earning opportunities. It is true that the beginning of the introduction of 'new technology' in the village has resulted in huge increase in the labour opportunities with the intensive cultivation practiced by the farmers. However, in the later period, machinery took away the employment opportunities from many of the agriculture labour in the village. The entering of tractors has resulted in displacement of male labour in ploughing. On the other hand, harvesters replaced the female labour in harvesting activity. However, good numbers of agriculture labour mostly from the younger generation are getting absorbed into agriculture again as the drivers of this machinery.

Labour Relations

Agricultural labourers constitute a large section of the rural population in India. Most of them are drawn from the socially and economically deprived sections of the society constituting the lowest section of the rural hierarchy (Unni, 1988: A59). For the large number of the rural poor who do not have access to any productive assets like land, employment is the only means of subsistence. Apart from this, it is a source of personal fulfillment and social recognition which becomes vital for their self sustaining growth (Gaiha & Spinedi, 1992: 461). In the village there are broadly two types of labour, namely, attached and casual labour. In case of attached labour, the male labour enters into an agreement with the employer (usually a Velama rich farmer) to work for a period of one year and his wages are paid on an annual basis. The casual labour includes both male and female labourers who are hired by the farmers for specific agricultural activities with a payment on either daily wage or *gutha* basis.

Paleru (Attached Labour)

While explaining the importance of attached labour in Indian agrarian society Jodhka (1994) says that **"***One of the central questions in the literature on agrarian transition during the post-independence period has been the nature of changes in relations between the landless agricultural labourers and the landowning employer farmers. Perhaps the most contentious issue in this literature is that of explaining and conceptualising the phenomenon of attached labour"*. (p. A102). The system of attached labour in Telangana villages has its roots in the feudal culture during the rule of Nizam kingdom during the pre Independence period in the region. In the previous chapters, we discussed various types of labour arrangements like *Vetti* and how the landlords used to extract free labour and goods from various artisan and service castes along with the Madigas from the landless agriculture labour population. However, due to several factors like abolition of zamindari & vatandari systems under land reforms programs, and also the activities of revolutionary left wing politics in the post independence period in the region, over a period of time, the practice of *Vetti* has been out of the scene in rural Telangana. However, in the place of free labour, the rich landlords have started hiring labour initially for payment in kind and later in cash. The increasing area of cultivation among the rich farmers in the village required full-

fledged labour to take care of various activities in their large farm lands. To meet such high requirement of labour, the rich Velamas started hiring farm labour for a fixed period of one year. Such labour is obliged to work as farm servant exclusively for his employer on a fixed amount of wage for a year and consequently such specific type of labour has been termed as attached labour.

The attached labour in Thogata village locally called as *Jeethagadu* meaning labour who works on salary basis. In the later years the term *paleru* has also become popular term while referring to an attached labour. Broadly there are two types of attached labour are hired by the Velama farmers. They are C*hinna Paleru* meaning small attached labour and secondly *Pedda Paleru* meaning big attached labour. Usually the C*hinna Paleru* is hired from the age groups of adolescence (between 12 to17) for taking care of works like taking out the cattle for grazing and cleaning the cattle shed etc. In case of *Pedda Paleru* such labour are hired from the grown up age who can take up the hard work like ploughing, weeding and transporting of agriculture inputs etc. The following sections deal with this type of attached labour in the village that is actually crucial in organizing the agriculture production for the rich Velamas in the village.

This practice is exclusively limited to the Velama caste farmers in the village. In fact, having a *paleru* working for the farmer has been a symbol of status for them, especially, before the introduction of 'new technology' in the village agriculture. It is said, that in the older days, the biggest feudal landlord family used to have 10 *paleru* working with 10 pairs of bullocks in his farm land. The next is the family of present patwari family who used to have six *paleru* working with six pairs of bullocks in the village. Next comes the ex police patel family who used to employ five *paleru* with five pairs of bullocks. There were couples of other families who also hired *paleru* in multiple numbers. Nevertheless, over a period of time the number of *paleru* labour has gradually declined due to various reasons like sub division among family landholdings, intensive cultivation methods through mechanization of agriculture, increasing dislike of agriculture labour towards the *paleru* labour work and also emerging new labour opportunities in the non-farm sector.

By the year 2007, in the study village, there were 29 persons working as *paleru* for different farmers in the village. Among these, one each is from Ausula and Erukala caste and ten men are from Koya community (the tribal migrant labour from Adilabad district). There are six men from the Chakali caste who are the traditional cloth washing community in the village. Among Dalits, there are ten men working as *paleru,* which is the highest in number from any single caste/community from the study village. There is also one young landless labour from Velama caste working as *paleru* in the study village. He belongs to a very poor economic background and was indebted to the landlord in the village and with no other option available for him to earn livelihood has started working as *paleru.* It is observed that good number of *paleru* that are working in the village actually belong to dry regions of Adilabad district who were brought to the village by the Velama landlords. From many years, they have been living in the village along with their family members either in the temporary shelters or old houses that were provided by their employers. These migrant labourers have been most favored by the landlords when compared with the locally available labour for various reasons. In the words of one richest Velama farmers in the village *"the paleru from the village are not obedient and they demand more money. They work out of fear rather than with interest. That is why we brought both of our paleru from outside the village."* The Velams always have better control over such illiterate migrant labour with their dominance in the local socio-economic and political structure.

Duties of the *Paleru*:

The *palreu* has to reach the house of his employer by 5 0' clock in the morning. He has to clear the dust and wastage from the cattle shed by sweeping the entire area. Next, he has to take the cattle for grazing in the village. After that he has to provide water for the cattle and also has to put water to the farm land. After doing this work, while returning, he has to collect fresh grass for feeding the cattle later in the evening. He takes lunch around 1 pm in the afternoon either at his home or his master's house. He comes back to the work in an hour and again cleans the cattle shed collecting the dung of the cattle. Later in the evening, he goes out again for collecting the grass for cattle. After coming back, he collects milk from the cattle. After this work, he returns to his home in the night around 7 pm.

Apart from these regular duties, he is supposed to take up different tasks during the crop cultivation. He has to participate in several activities like leveling the farm land, fixing the boarders within the field, spraying the fertilizers & pesticides, transporting various inputs of agriculture from his employer's house to farm land and support the hire labour while doing transplantation and any work during the harvesting. However, this schedule stretches a bit more for few more hours in case of working at the houses of big landlords in the village. In their case, apart from the regular work, the *paleru* has to do any other work that is assigned by his master at any point of time. It is a well known fact in the village that the feudal landlords in the village never keep their *paleru* idle for a moment also. They always keep assigning tasks for them for the whole day. Moreover, they always keep supervising the work of *paleru* personally and keep giving instructions during the work. In fact, they always try to look for faults in the work of *paleru* and they never come forward to help him in the work even if it is required.

The employer provides lunch at his home to his *paleru*, free of cost. On the issue of food that is offered by the Velama landlords in the village, one *paleru* says, that during the older days they used to provide the same food that is consumed in their household. However, with the beginning of differentiation between coarse and fine varieties of paddy grain, they started offering the coarse rice to their *paleru*. However, few years back one *paleru* rejected this food offered by his employer which is followed by some other *paleru* labour in the village. From then onwards, due to resistance from the labour the landlords in the village started providing the fine variety rice to their *paleru*. At present, most of the Velama farmers offer the fine variety rice to their *paleru* labour in the village.

In the present system of attached labour, the farmer enters into a formal/informal agreement (depending on the mutual trust and understanding which actually depends on the vulnerability and necessity for work on the part of the labour) with the labour to be hired as *paleru* for a period of one year. This period is generally in between the months of June and May for every year with a payment of Rs 25,000 – Rs 30, 000 to the labour as a salary. A good portion of this amount is paid by the farmer before the beginning of the contract itself. This advance amount is generally around 40 -60 percent of the total payment depending on the need of the *paleru*. Some

farmers enter this agreement on paper and some don't. However, the payment of the farmer is assured in all the cases. In the older days, especially during the pre-canal period, the wages for the *paleru* were used to be paid in kind. For example, according to one informant, around 30 years back, the wages for a *paleru* used to be in kind and they were paid 7 kunchas of grain for one year period of their work. One kuncha is equivalent to 10 kgs of maize or 7 kg of paddy grain and that were the standard measurement during those days.

The major reason for a person to become a *paleru* is his need for credit. In general, most of the agriculture labour households, in order to meet their sudden expenditure for reasons like medical treatment or life cycle ceremonies in the family, depend on the local rich farmers or money lenders. In the Thogata village, it has been the rich Velama farmers who have been the major source of credit for many poor households in the village. Because of their inability to repay their loan amount in cash, they instead offer to provide their labour services in the form of working as *paleru* for these rich farmers. Apart from this, while joining as *paleru,* the employer again offers some amount of money in advance (which will be deducted from his total amount of salary) that is given free of interest. The amount is required by the labour to meet his daily expenditure during this period. In the village, one young Golla person joined as attached labour at one of the feudal landlord's house. His mother took money on credit from the landlord for the purpose of house construction. In order to repay the money, she arranged her son to work as *paleru* with him. An agreement is made between the two parties to pay Rs 20,000 per annum for his labour services. Apart from this, her family will also get ploughing done free of cost by the landlord in her one acre land. From many years the dependence of the poor upon the rich landlords in the village for credit has forced them to become as *Paleru*[9]. This cycle of repaying debts to the farmer has been forcing them to be part of the system of tying of labour to a specific employer in the village.

[9] Jodhka (1994: A104) while analyzing the reasons for agriculture labour in Haryana to become as attached labour argued that it is the credit amount that is forcing them to do so. In the absence of access to any institutional credit they are compelled to approach the farmers and has to mortgage his labour power in the form of willingness to work as attached labour in exchange of availing credit from the farmer.

Ties of Debt:

The rich farmers in the village, in order to counter the tendencies of increasing wage rates in the changing agrarian scenario, started using their *paleru* with their tricks of showing patronage by providing loans on a regular basis and getting them trapped into being indebted to them[10]. There are cases where attached labourers have been sincerely working for many years for a single farmer family. Two brothers from the Dalit caste in the village have been serving their master for decades. Their father also worked as *paleru* when they were kids and after they were grown up, they continued the *paleru* in their generation. These two brothers are from a very poor background who are known for their loyalty and hard working attitude. They do not have the habit of drinking liquor and always save money with their employer. With their saved money in all these years, both of them also bought each one acre agriculture land in the village. The other fellow caste members complain that they always stood by their masters' side and never reveal anything about them to others in the village.

In another case, one tribal migrant labour has been tied up with a large Velama farmer as *paleru* for more than 30 years. This illiterate tribal person was brought to the village when he was a kid by giving money on credit to his parents in his native village. He is partially mentally challenged person who is not married. They provide only food to him and do not pay any cash as salary. He is allotted all kinds of works like household activities, grazing the cattle, cleaning the house and cattle shed, lifting the dung, washing the clothes and bringing water from outside etc. He has to take care of the bathing and other daily cores of his employer's father who is very old and a bed ridden patient. In another case, a young Velama farmer with landlord family background has brought two persons from outside village to work as *paleru* in his farm. Both these person are living along with their family members in small temporarily build huts in the cattle shed of the farmer that are in very unhygienic condition. They have been working in his family farm for the last four years. This

[10] Da Corta & Davuluri (1998: 92) from their village study from Rayalaseema region of Andhra Pradesh observed that the Reddy Capitalist farmers in order to *secure* labour especially during the peak periods of cultivation and also to *reduce* the cost of labour are recruiting tied labour through credit. However, such arrangement is for temporary period unlike the attached labour where the period usually is for one year. The labourers compelled to accept the tied labour conditions because of their pressing need to meet their consumption expenditure, especially during the lean season, ceremonial costs to cover medical costs and due to greater alcohol consumption.

Velama farmer always supervises their work from close distance as his residence is very closely located to his farm land. Taking advantage of their illiteracy and vulnerable position as migrant in the village he always tries to squeeze the maximum amount of work from them.

A Velama landless labour has been working as *paleru* with the most powerful feudal landlord in the village. After working for couple of years, he wanted to quit his job and the landlord calculated his total amount of dues with him which was decided as Rs 40, 000. The *paleru* was ready to pay Rs 36,000 immediately as part of clearing his debts and assured his employer that he will pay the balance of Rs 4,000 later. However, the landlord was very adamant on total payment and in fact was arguing that he will not let the *paleru* relieve from his duties in his farm land unless he pays the total amount immediately to him. These cases show that, even today, the powerful feudal landlords in the village want to control their labour with whatever means that are available with them.

In another case, one old Velama farmer says that *"My Paleru has been working with me for the last five years and I am presently paying him Rs 15,000 per annum and from this year onwards it may go up to Rs 18,000 per annum. He is a very sincere worker and even in our absence he does work with good commitment. We share food and tea with him. He took credit from me for buying land and constructing a house in the village. Some other farmers in the village have asked him to work with them as attached labour and offered him a better salary, but they abuse their Paleru a lot. That is why he didn't leave me even though I am giving him low salary."* Here the employer has been showing soft attitude towards his *Paleru* and also providing regular amount of loan as and when required by his farm labour. Such patronizing tactics are forcing some of the *Paleru* to show their obedience by not shifting to another employer and also not demanding for a better increase in his salary pay.

The largest landholding Velama farmer says that to avoid the problems of escaping by *Paleru* labour he has employed four migrant labours to work in his farm land. He tells that he won't scold them strongly unlike some of other landlords in the village and moreover, he increases their salary amount every year. This particular Velama farmer actually does not hail from a landlord family background but has

many enterprising qualities from the time he started doing agriculture with small landholding. However, with his reinvestment in buying more agriculture land along with milk selling business, he actually became the richest farmer in the village. That is why unlike his counterparts among his own caste landlords, he appears to be softer in dealing with his labour.

In Thogata village, there are only a couple of cases of *Paleru* from migrant tribal background who are forcibly attached to their employer by means of feudal domination. Otherwise, most of the *Paleru* in the village are obliged to continue in their work because of their dependency on their employers for availing credit or otherwise for clearing their debts. Indebtedness to one's employer does not necessarily make the attached labour a bonded labourer even though he may not be in a position to easily switch jobs for economic reasons. It is true that the economic constraints faced by the attached labourer are much more severe and they frequently push him into unequal relationships of mutual dependence with the landlord-creditor-employer. However, such unequal contracts and economic exploitation cannot be considered as the distinguishing features of feudalism as opposed to other modes of production (Bardhan & Rudra, 1978: 384).

Case Studies:

Case A: He is 40 year old and his is native village is Annaram near Manthani in Karimnagar District. In the year 1989 one rich Velama landlord from the village has brought him to work with him as *Paleru*. During that time, no works were available in his village and also for the little work that was available, wages were used to be very low. In all these years, except for one year, he has been working with the same employer. He is supposed to take care of collecting milk from buffaloes, cleaning cattle shed and house, feeding the cattle, ploughing the land, fixing the boarders of the farm land during cultivation and piling up the grass at the cattle shed etc. After he started working in the village as *Paleru*, some of his close relatives also came to the village and started working as *Paleru* with some other farmers in the village. He informed that he wanted to come out of this job from this year but his master has asked him to stay back. And then they increased his salary to Rs 30,000 and also provided an additional amount of Rs 30,000 as loan. His wife is a member of self help

group for women in the village and she also availed loan from this source for an amount of Rs 20,000.

This *Paleru* is trying to make his children to have the best quality education and all his savings and loan amounts are being used only for this purpose. His daughter secured a seat in a medical college at prestigious Gandhi Medical College located in Hyderabad, the capital city of the state and he is very proud about it. However, he is not happy with his son who is studying his Intermediate in private college in Karimnagar. He informed, that till now, he has debt of Rs 80,000 that is incurred for the purpose of his children's' education. In between, he was able to purchase around 1.5 acre of agriculture land in his native village and gave it for others to cultivate on share cropping basis. When asked about new opportunities in nearby rice mill jobs, he told that he has got adjusted to agriculture work and also because of his debts he cannot venture into rice mill work like others from the village. However, he wants to go for rice mill work from next year onwards. In the absence of agriculture work, his wife goes for rice mill work in nearby town and also works that are provided in the village under MGNREGA program by the government.

Case B: He is 37 years old and has been working as *Paleru* in the village from the year 2001. He lived in Hyderabad for a period of 12 years working as casual labour and finally got a job in a plastic manufacturing company. However, due to the losses, the management has closed the company and he was forced to come back to his native village. After returning to the village from Hyderabad, initially he started learning electrician work with the help of one of his relative. However, he could not get any job in this field. During this time, his wife was pregnant and she had to go undergo for caesarian surgery during the delivery. He was in need of Rs 15,000 urgently to pay the hospital bill for his wife's surgery. During that time, one of his friend who was working as *Paleru* in the village suggested him to join in *Paleru* work so that he could avail that amount as advance. He approached one of the rich Velama farmers in the village and he was offered to work as *Paleru* in his farm for a salary of Rs 15,000 per annum with a leave for 12 days during his tenure. In case he is absent from work for more than 12 days, salary will be deducted proportionately. He agreed to these terms and joined to work as *Paleru*. He was paid his total annual salary as an advance payment immediately. Apart from this, he also received Rs 10,000 from his employer

in the form of credit with a two percent interest rate. After working for three years, his employer increased his salary to Rs 18,000 per annum. Because of the heavy work pressure during the previous summer his health got deteriorated and his health was not supporting for work. Now he is more worried about the debt amount that has piled up with his employer for all these years. Soon he wants to leave *Palereu* work and join his cousin as electrician who is working under a contractor in apartments in Karimnagar town.

Case C: He is also one of the persons from the older generations who has long experience working as *Paleru* in the village. He is born in Dalit caste and soon after his marriage got settled in Godavarikhani town where his wife's parents are living. He started his career as a daily wage labour for Rs 13 per day in this town. This town is closely surrounded by coal mines and his brothers – in – law asked to him to join the labour work in these coal mines. However, the officials have to be bribed to get a job in these coal mines. For this purpose he came back to the village and got the required money with the help of his relatives. His brother-in-law spent that money but he couldn't get the job in the coal mines. Again he tried bribing the coal mine officials by collecting some more money from his relatives from his village. However, this time also he couldn't get the job in the coal mines.

At this stage he started struggling for his survival with huge debts upon him even starving for some days. Later he approached one rich Golla person in the town and asked him money. The golla person has good faith in him and readily gave one new dress, half bag of rice and cash of Rs 3000 for his expenses. With this money he shifted his family back to his native village and again built his hut in the village. He straightaway went to the house of patwari and asked money by showing his willingness to work as his *Paleru*r. Then the landlord gave him Rs 10,000 as advance which he took and cleared his debt amount with the Golla person in Godavarikhani town. He also got credit for an amount of Rs 8,000 from the landlord and cleared all his debts with his relatives in the village.

He continued his work with the same employer for the next six years. Later, he worked for a period 10-15 years for a Muslim person as an attached labour. He praises him a lot because the Muslim landlord used to give good food and beef used to be his

regular diet. He used to be healthy and there was also no pressure of work during this time. Later for another 6-7 years, he worked for different farmers and after that he stopped working as *Paleru* because of health problems. Recently, he cleared the due amount of credit with his employer of an amount of Rs 27,000. This was possible for him with the help of loan that is availed by his family members from women self help group (SHG). He firmly says that he don't want to take any more money on credit from the farmers. He further says that now he has to pay the money to the government and he is confident that if three of his family members are healthy and go for work for daily wage labour in the rice mill, they can clear this amount also. When asked about his life experience as attached labour he humbly says that "*it was satisfactory and life went on well. I worked very sincerely with whomever I worked with. And nobody can raise a finger to me in the village and everybody knows how good I am*". However, his son who works as rice mill labour says that he father is afraid of Velamas but these days the situation has changed and in his generation no landlord can touch them. This clearly shows the submission of labour from older generation to the landlords but the younger generation labour are not willing to be part of that culture.

Case D: He is 28 years old Dalit born person from the study village. He started earning his livelihood at a younger age of 12 when his father put him for a shepherd duty in the village. Once, he was beaten up severely by another farmer for grazing the sheep in his land. Later, he joined as *Chinna Paleru* with one of the Velama landlords in the village. Speaking about his experience as *Chinna Paleru* he says that "*I was made to carry out many hard works and was always abused by the landlord. He used to scold me for petty things every day. They took me granted for working so many years with them. I felt bad many times and wanted to come out of that job. But they were confident that I could not go anywhere because our family is indebted to them. After spending few years, I approached another big farmer in the village and he accepted to take me to work as Pedda Paleru with an annual salary of Rs 2500. Our family cleared the dues of credit with my former employer and I started my career again from here. The landlords used to give less money as salary for the young age Paleru saying that they don't have any knowledge on agriculture"*. In between, he opened a small cycle repair shop at his home and slowly started dreaming of setting up a big mechanic shop in Sultanabad town in future. During this period, he faced some mental health challenges and was admitted in Erragadda mental hospital in

Hyderabad. It took few years for him to recover from his health problem. Later he started working as *Paleru* again along with cultivating on small plot of his own. His brother is pursuing education and for that he has to make this sacrifice of working as *Paleru*. However, he wants to come out of his work soon. He wants to try for a job in the railway department with the help of his friend who assured him the job provided he is ready to pay Rs 25,000 as bribe to the officials. This shows the tendency of the landlords in appropriating the surplus by extracting huge amounts of labour however by paying low amount of wages. Also the vulnerable condition of *Paleru* labour who were forced to enter into this work because of their debt bondage.

Changes in the *Paleru* (attached labour) System:

However, over a period of time the *Paleru* labour became conscious about their degraded position and started disliking their job. Gradually, unrest started prevailing in the minds of the *Paleru* and they started looking out at various options to get freedom from this work. Unlike the older days of feudal landlord dominated period, at present, the persons working as *Paleru* are able to choose their employer in the village in case they are not satisfied with the salary or work environment with the existing employer. Several cases of this type were reported in the village where many *Paleru* labourers shifted to other employer for various reasons[11]. Here is the case of a labour from Gouda caste who was working as *Paleru* for a large Velama farmer in the village. This person was forced to work as *Paleru* two years back due to the debts that were incurred by his parents for his sisters' marriages. His family even sold their agriculture land in the due course and left with huge debts. He asked for hike in his salary after the completion of his tenure in the second year. However, his employer didn't accept for his request for increasing his salary.

Then he shifted to another farmer who accepted to pay Rs 25,000 per annum and also he could avail leave for one month during the harvesting season so that he can work as hamali labour and earn some extra money out of it. He confidently says that his employer will never get a worker like him. In fact, this farmer's brother who lives in the same compound requested him to work with him as *Paleru* but he simply

[11] Reddy & Rao (2008: 222) in their study of village from Warangal district of Telangana region have also concluded that in the recent past the attached labouerers could able enjoy more freedom in selecting their employers, hours of work and other labour conditions.

rejected the offer. Because, both the brothers live in the same compound which will not be comfortable for him in this case to work and also there will be more work burden in their family because he might be obliged to share the work of his brother also some times. This shows the increasing bargaining capacity of the *Paleru* hailing from the village[12].

In the recent years, there were many incidents of escaping of *Paleru* from the work place in the village were reported. However, none of these persons hail from either Dalit or tribal caste group. All most all of them belong to backward communities with majority of them belonging to Chakali caste while few are from Gouda caste. Two years back, one *Paleru* from Chakali caste ran away from the village after receiving an advance of two lakhs rupees (including fresh amount of credit) for joining as with one Velama landlord. His employer was very powerful and as a result of this the *Paleru's* father was forced to work in his place. The young generation labourers are not interested to work as *Paleru* in the village. In the contemporary times, working as *Paleru* is a degradable position for the labour class in the village. That is why those who were forcibly entered because of their obligations from family are always looking out various options to come out of this work. Few among them are running away from the village in search of other livelihood option for them. This clearly shows the decline of feudal dominance in the village as the *Paleru* are not even worried about the reaction of their employers unlike the older days where a *Paleru* always has to be very attentive and loyal to their Velama employers. Because of such incidents, a sense of insecurity is arising in the minds of rich Velama farmers while recruiting *Paleru* labour from within the village. The richest Velama farmers, to avoid such uncomfortable situations, have started showing a softer attitude towards their *Paleru* and were only focusing to recruit only the migrant tribal labour in working as *Paleru* for them.

There are also many cases of *Paleru* who are coming out by clearing debts with their employers by availing loan from some other cheap sources of credit. The female members of such *Paleru* households are availing loans from the government

[12] Jodhka (1994: A106) concludes that development of capitalism in Haryana agriculture has eroded the ideology of patronage and loyalty with labour started questioning the power of landlords in the village.

sponsored program of women SHGs (Self Help Group)[13] that are sponsored by the government and using that amount to make their male members free from the work of *Paleru.* Many such cases are reported in the village and this institutional support by the government in the form of credit facility at low interest rates has enabled some of the *Paleru* in the village who were otherwise have been trapped by debt by the rich Velama farmers. Apart from the lower status, the increasing wage earning opportunities and demand for labour in the non-farm sector has been encouraging many *Paleru* labour to quit from their present occupation.

On the issue of attached labour, one young enterprising farmer from Velama caste says that *"this system of attached labour may vanish in the coming years. Because the existing attached labour are retiring from their job and there are no new entries of persons who are joining as attached labour in the present time"*. We have a case of another large landholding farmer from Velama caste talking about his attached labour, he says that *"his term is getting over in the coming month. And these days he is absent for work on several days. Moreover he is also going for rice mill work. And I think I have to look for someone else to work at my farm land"*. In fact the rich Velama farmers are getting worried about the possible non-availability of *Paleru* labour for them in the coming days.

In general, the number of *Paleru* labour has been declining in the village over a period of time. Firstly, strong dislike is emerging against the job of *Paleru* among the labour especially the younger generation labour are not willing to join as *Paleru* with the changes in broader socio-political structure in the village. Secondly, the labourers are shifting towards non-farm occupations[14] that are increasingly available outside the village with the integration of village economy with the regional economy. Thirdly, with the support of cheap rates of loans that are provided by the government the existing *Paleru* labour are clearing off their debts with the farmers and coming out

[13] This scheme is meant exclusively for women where government provides loans with cheap interest rate to women groups (one group consists of 20-25 women) that are registered. These women divide the amount of loan equally among them and again repay their loan to the government collectively. Under this scheme women are encouraged to buy any capital assets or goods like livestock, small business or any other purpose that can improve their economic condition. This scheme more popular from the year 2004 onwards with the new chief minister of Andhra Pradesh started offering loans with very low interest rate of 0.25 percent which is popularly known as *pavula vaddi pathakam.*

[14] Different types of emerging non-farm labour opportunities are explained in the next chapter.

of their debt bondage. Finally, with the heavy mechanization process the role of labour has been declining in the village agriculture in the recent years. Interestingly, some of the young attached labourers are getting trained as operators of such heavy machinery owned by the rich farmers and entering into a new type of attachment as driver job. It is the tribal migrant labour who heavily indebted by the rich landlords in the village who constitute the majority of the *Paleru* in the village. Many *Paleru* from the backward communities are coming out of their job completely or joining as drivers of tractors/harvesters owned by the farmers with a modified contract of attachment. Among the Dalits it the poorest households of the labour who are continuing as *Paleru* however none of the labour from young generation is entering into this work now.

Casual Labour:

In Thogata village, with the entering of 'new technology' in agriculture, the agriculture labourers have witnessed several changes in their lives. The shift in cropping pattern from multiple dry crops to mono cultivation of paddy has resulted in huge loss of employment to the labour in the village. In the beginning of 'new technology' in village agriculture, because of intensive cultivation method has resulted in increased labour opportunities for the labour in the village. However, in order to counter the increasing wage amounts that are paid to the locally available labour, the landlords in the village have started hiring cheap labour from outside village. With this, slowly, the agriculture labour in the village started losing their working days. The mechanization of agriculture which is taken up extensively by the rich and enterprising Velama farmers in the later years has further resulted in huge levels of displacement for human labour[15]. This consequently has reduced the available working days of employment for labour in agriculture. Except for the transplantation work during the paddy cultivation that is taken up by the female labour and *hamali* work for men after the harvesting is done, there are no regular works that are available for agriculture labour in the village. In the changing agrarian scenario the participation of human labour in various farm operations of paddy cultivation has become a negligible aspect in the recent years.

[15] Lerche (1998b: 187-188) in his 'green revolution' affected village study from Western Uttar Pradesh has also found that the huge mechanization of agriculture has resulted in the displacement of large number of agriculture labour in various farm operations.

The next aspect change can be understood in terms of wages for the agriculture labour. With the introduction of 'new technology' in Thogata village agriculture in the year 1980, the first phenomenal change that took place among the agriculture labour is increase in their wages[16]. The intensive cultivation practices and increasing total cultivating area in the village with the support of canal water has resulted in huge growth in agriculture activity for labour in the village. This has facilitated a requirement of more labour for the farmers in the village. However, the canal water also motivated many households with small and marginal landholding to do their own cultivation. Otherwise, before the canal water, most of them used depend on agriculture labour for their livelihood. This situation has caused imbalance of supply and demand for labour in the village resulting in the favour of agriculture labour. During the late 1980s and early 1990s, the activities of naxalites inevitably boosted the morale of the marginalized sections like Dalits and other backward communities in the village and consequently their bargaining capacity for better wages was further strengthened. To counter this situation, the landlords in the village from the mid 1990s onwards started looking out for cheap labour to work in their farms. As they could not hold their control any more on the labour with low wages, they started hiring tribal migrant labour from the neighbouring dry acres in the region. The rich Velama farmers followed the footsteps of the landlords so that they can also reduce their expenditure on wages to the agriculture labour.

Again from the year 2004 onwards, demand for local labour increased as the migrant labour stopped visiting the village during harvesting of paddy crop. The institutional support in terms of providing wage earning employment opportunities within the village for a minimum period of 100 days has boosted the morale of the local labour further. The emergence of non-farm employment opportunities outside the village also pushed the labour demand further. Nevertheless, the wage rates of agriculture labour in the village have been in upward mode during all these years for various reasons mentioned above[17].

[16] Narayanamoorthy & Deshpande (2003: 3722) from their longitudinal study of changes in agriculture wage rates across India have concluded that there is a positive and significant relationship between canal irrigation and real wage rate of agriculture labour.

[17] Reddy, P. (1998: A17-A18) in his study of agriculture wages during the period of 1981-1991 in Andhra Pradesh has found that irrigated zones showed higher wages and they were almost double when compared with the other dry regions in the state.

Over a period of time, the mode of hiring for agriculture labour also has changed. In many of the farm operations, daily wage system is getting replaced with *gutha* (piece-rate)[18] system. In order to limit their expenditure on wages, the rich farmers in the village started hiring the labour for a fixed amount work instead of a fixed amount of time. In the beginning, this practice has started in harvesting activity where wages are paid on the basis of size of the farm land (per acre) to the labour. Slowly, the same method was extended to the transplanting, weeding, hamali labour and even for some casual works also farmers in the village haves started paying wages on *gutha* basis only. In a similar kind of findings, Som (2005) argues that the younger generation labours prefer to work on contract system over daily wage labour. They recruit a group of members who might consist of their immediate family members and with their efficiency they would complete the work in short time (Som, 2005: 2441). This has also helped them in reducing their burden in supervising the work of the labour and further it helped them in getting the work done in less time.

Under this *gutha* system in the employer (here mostly the rich farmer) enters into agreement with the leader of a labour *gang* for the completion of specific task in agriculture. The contract specifies the task to be performed, the payment and usually a time limit within which the work should be finished. The contract is negotiated by either the male or the female leader of the *gang*. When the job is finished, the payment is divided among the workers equally. The *gangs* work intensively for longer hours when compared with daily wage work and by doing so the individual workers gain higher income in this method (Athreya, et.al., 1990: 139). The intensive cultivation of paddy crop with the advent of 'new' technology in Thogata village agriculture has forced many rich farmers to finish various tasks in cultivation in right time by coordinating with the release of canal water by the authorities. In such scenario, the *gutha* mode of labour recruitment has certainly helped them in more efficient cultivation. In case of labourers also, it is not a bad option, especially in the case of young able persons who could have chances of earning more income through this method by working for more number of clients in short period. Nevertheless, this

[18] Athreya (et.al)., (1990: 139-143) in their study from irrigated zones of Tamil Nadu and Ballabh & Pandey (1999: A15) from their study from 'green revolution' affected rice cultivating villages from Uttar Pradesh found a similar trend of change mode of recruitment of agriculture labour.

new system has become disadvantageous for the old and disabled labours that are not preferred by the leaders of these *gangs* citing the reasons of low performance.

Mode of payment to the labour has also completely monetized with replacing the payment in kind to cash. The huge levels of rice production in the village enabled the poor farmers and labourers not to become dependent on others for their diet unlike the older days. Moreover, the poor households in the village get rice on a very less price (two rupees per one kilo of rice) through the public distribution system supported by the government. In the case of employers also it has also worked in their interests with the rising inflationary charges for food prices every year.

The labour relations in Indian agriculture during the last five decades present the contemporary changes that can be explained in the following stylized shifts: From caste-based or personally bonded labour sometimes secured by debt frequently extending across generations to long- and short-duration credit contracts apparently with no such tying; from informally defined and open ended obligations to formal contractual arrangements; from relations based on 'extra-economic' sanctions to ones based on voluntary agreements; from a reliance on intra-village labour exchanges to the conjoint employment of local and migrant workers; and, from permanent farm labour to casual labour. These shifts seem broadly to be correlated also with the growth of non-agricultural employment (Mohan Rao, 1999: 243). With the introduction of 'new' technology, similar trends of changes are taking place in labour relations of Thogata village agriculture during the last three decades.

However, in spite of such positive changes in terms of breakdown of traditional exploitative labour arrangements, the agriculture labour in Thogata village could not improve their economic position in the village[19]. The vulnerability of these agriculture labourers in terms of credit availability during the times of sudden major expenditure in their households is still forcing some of them to enter into tied contractual labour arrangements by availing cash advances from the rich Velama farmers. There has been a huge decline in the participation levels of these agriculture

[19] Ramachandran, Swaminathan & Rawal (2002: 465-469) in their longitudinal study of impact of 'green revolution' technology in village from Tamil Nadu concluded that still high incidence of poverty continues to prevail among the agriculture labour households.

labourers in various farm activities in the changing agrarian scenario thus blocking their earning capacities in the village in the process of agriculture growth. It is true that the wages have also been on the rise with the beginning of capitalist oriented agriculture that lead by the rich Velama farmers the increasing cost of living is stooping them to reap the benefits of such increasing wages. Above all, their lack of access to any major means of production like land or any other productive assets does not provide any scope of upward mobility for them in the local agrarian class structure. The living conditions of the agriculture labour in the village, especially among the Dalits, are still in poor condition and they lack basic amenities in their houses. The young educated youth among the Dalits are not showing interest in working as agriculture labour at the same time they could not get employment into some private sector jobs outside the village.

Women and Agrarian Change:

For various historical, cultural and socio-economic reasons there has been gender wise division of labour both within the home and outside in any community. As women are confined to certain specific task barring from other works in agriculture the impact technological change on the already existing differences in labour use will certainly have differential impact on both men and women in their access to employment in agricultural and non-agricultural work (Agarwal, 1984: A39). Hence, it becomes essential to understand the changes that took place among the lives of women in the context of agrarian change in Thogata village. This section specifically deals with such changes among the women from different caste and class categories among agrarian population.

With the emergence of canal irrigation, as mentioned earlier, there has been an increase in total cultivated land with the intensification of agriculture by the farmers in the village. With the help of HYV seeds, fertilizers and other modern inputs that are supported by canal water the agriculture in the village took shift from subsistence based agriculture to market oriented agriculture over a period of time. The large landholding farmers started reinvesting their profits further in agriculture and improved their economic position further. This situation has resulted in differential impact on women in Thogata village. Among the Velamas, slowly, the womenfolk among the medium and above categories of landholding farmers started staying away

from the work in their farm land with rising income in their households[20]. By doing so, they became restricted to their households core activities along with minor farm works at home itself. Their improved economic position brought changes in their social values as they started following the lifestyle of the wives of big landlords in the village. However, Velama women from the poor households kept working in their own agriculture fields supporting their male members in the family.

The agriculture growth in the village had resulted in a complete opposite direction for women from other caste farmers. The female members of farmers among non-Velama households further increased their participation in cultivation in the changing scenario. Especially the Golla caste women who are the second largest landholding caste in the village next to Velamas have also moved upward economically with the rising productivity in agriculture with the introduction of 'new' technology. However, they continued to play their role by taking part in all the activities in cultivation. Moreover, their participation levels also have increased further with the intensive cultivation and they started engaging in exchange of labour among their own caste members during the peak hours of work in cultivation. Majority of these women belong to the small and lower medium landholdings and even after their improved economic position, they continue to actively engage in different wage earning labour works in the village during the entire crop season. The same is applicable to women from other backward castes also. Among the Dalits, majority of them belong to small and marginal landholdings and because of their vulnerable position they actively take part in different activities in their own agriculture fields and earn wages by working for other farmers. These women continue to take part in various farm works like leveling, fixing the boarders in farm land, transplanting, weeding and all other major works supporting their male members of the family.

The next aspect of change occurred in terms of type of female labour recruitment for different works in village agriculture. For example, the farmers in the village now recruit female labour *gangs* on *gutha* (piece rate wage payment) basis for

[20] Bina Agarwal (1984: A46) in her study of impact of HYV technology on women in Andhra Pradesh and Tamil Nadu has concluded that there is a negative association of female family labour use with farm size and percent of area irrigated in rice cultivation.

paddy transplantation work[21]. Farmers in the village hire labour from one of these *gangs* by paying them fixed amount of money on acre basis. These labour *gangs* are headed by one woman who coordinates her team in this work. She directly enters into agreement with farmers who approach her for work and get the work done with the participation of her team members. After the completion of work, she collects the money from the farmer and distributes the money equally among all her team members. She is allowed to keep little extra amount of money in the total amount of wages.

In Thogata village, there are eight such labour *gangs* are operating in the village. Among these, Chakali, Golla and Madiga caste women have two *gangs* each. Apart from this, Kummari and Tenugu caste women also have one *gang* each from their caste group. The wage rate per acre is fixed as Rs 700-800 for the transplantation work. There has been a steady increase in their wage rates every year. By the year 2013 it has reached to Rs 1500 per acre for transplantation work by these labour *gangs* in the village. In some cases the large landholding farmers recruit these female labour *gangs* for weeding activity also. In Thogata village, transplanting of paddy crop has been exclusively done only by the female labour. With the emergence of *gutha* system, the old and disabled women labours have started losing their work opportunities in the work of transplantation[22]. The leaders of the female labour *gangs* in order to gain more income from this seasonal work, started recruiting only active and young women in their *gangs.* As Revathi (2008) revealed *"Only labour in the prime working age get opportunities in the Gutha system, where they can withstand long hours of work."*(p. 170-171). Thus this new system has resulted in a sense of competitive conditions for the female agriculture labour in the village.

The next aspect of change is in terms of availability of employment opportunities for the female agriculture labour in the village. Sudha Pai observes that with the introduction of 'green revolution' technology in Indian agriculture the female

[21] Saradamoni (1987: WS4) in her study from three states of Kerala, Tamil Nadu and West Bengal also observed similar trends of change taking place where the wages of female agriculture labour are paid through contractual system of payment for works of transplanting and weeding in rice production.

[22] Athreya et al., (1990: 145-146) also found similar results in paddy cultivating irrigated villages in Tamil Nadu where the newly emerged piece-rate work method (locally known as *kothu*) has resulted in the exclusion of potential share workers from sharing a given quantity of employment opportunities.

agriculture labourers have suffered. She says "*Women have remained within their traditional jobs and have not gone into newer and better paid jobs which have gone to men, leading to increasing concentration of women in unimportant low-skilled, laborious jobs, thereby leading to a process of 'marginalization' within agriculture. Paradoxically, economic development has strengthened rather than broken down the traditional sexual division of labour and values"* (Sudha Pai, 1987: 20-21). In Thogata village, the shift in the cropping pattern from multiple dry crops to mono cultivation of paddy cultivation has resulted in loss of work for the female agriculture labour in the village. In case of dry crops like millets, maize and cereals the female labour has to perform work during entire period of cultivation. These crops require daily participation of labour and it was a rewarding activity for them as they could avail wage earning opportunities for the maximum number of days throughout the entire crop period. However, paddy cultivation does not require daily supervision and work and consequently the number of working hours in village agriculture has come down for the female agriculture labour in the village.

It is true that in the beginning, due to intensive cultivation of paddy, the labour working days for the female agriculture labour in Thogata village has increased. However, at a later stage, due to the mechanization of agriculture, slowly they started losing employment in some activities. Unlike the men whose participation in agriculture is widely spread in various activities the participation of women in agriculture is exclusively limited some operations. This task specific nature of women's participation in agriculture makes them to depend on such work for livelihood results in more vulnerable position for them, with the introduction of new technology displacing them in activities like harvesting, threshing of paddy, resulting in the decrease in the demand for female labour in such operations (Agarwal, 1984: A45).

Sudha Pai (1987) through her study argues that "*The introduction of mechanical devices in agriculture which are labour saving can also displace female agricultural labour. However, it is the mechanization of harvest and post-harvest operations with the use of combine-harvesters, wheat threshers, rice hullers, etc., rather than activities such as ploughing, land preparation, etc., with the use of tractors that is important for women workers."* (p. 24). In the same way, in Thogata

village, the introduction of tractor in the late 1980s did not have much effect on the participation levels of female agriculture labour. However, with the introduction of harvester machines from the year 2004 onwards it has drastically declined the labour opportunities for the female agriculture labour in harvesting and post-harvesting paddy processing works[23]. The capitalist Velama farmers in the village, in order to cut down their expenditure on labour, have been investing their surplus money in buying machinery resulting in the huge displacement of human labour in cultivation. However, even before this, the Velama farmers used the migrant labour in the place of locally available labour in countering the hike in wages. Women used to be the prominent labour for the harvesting of paddy crop in the village. Because of the hiring in of such harvesters even by the small and medium landholding farmers, the role of women in harvesting has drastically come down. The use of machines not only resulted in the loss of employment for female agriculture labour in harvesting alone but also in the paddy processing activities like threshing the grain during the post harvesting time.

Apart from the mechanization of paddy cultivation, the increasing use of modern inputs for agriculture like chemicals is replacing the female labour in some other farm operations. For example, in the recent years the indiscriminate use of *gaddi mandu* (weedicide to control the weeds in paddy plant) by the rich farmers resulting in the loss of working hours for female agriculture labour in weeding activity. From the beginning weeding has been an exclusive activity taken up by the female labour in the village. The rich farmers, to cut down their labour charges further in weeding work, prefer to use chemicals like *gaddi mandu* over the labour. This trend has got momentum in the recent years and in the coming years it may result in the complete displacement of female labour in weeding activity in the village. These evidences show that participation of rural female labour is becoming restricted to only few operations in paddy cultivation which means they are becoming to form as seasonal labourers in the village agriculture[24].

[23] Bhalla (1989: WS-67) also found a similar declining trend of female labour absorption in Haryana agriculture during the second phase of mechanization even though both the yields and cultivation area of the crop have been were on the rise.

[24] Sudha Pai (1987: 23-24) argues that with seasonal employment becoming as the primary source of income for the female agriculture labour they have been pushed in to the category of "helpers" in agriculture.

Even though the wages for female labour have increased considerably in the recent times, they still fall much below than their counterparts of male labour. This applies to both farm and non-farm labour works that are available for them. That means the 'new' technology in agriculture could not bring down the gaps that are existing in the wages paid for male and female labour[25]. Even today, the female labour receives only half of the amount of daily wage amount that is paid to the male labour. This clearly depicts that the entering of 'new' technology in Thogata village agriculture did not result in the favour of female agriculture labour in the long run.

The agriculture growth in the region has started offering new opportunities for the female agriculture labour in the village. The emergence of rice grain processing industries locally known as rice mills in the nearby town Sultanabad that is located in 2-3 kms resulted in the creation of new work opportunities for the female agriculture labour in the village. However, only Dalits were able to explore these new employment opportunities along with couple of labourers from scheduled tribe households in the village. None of the women from the backward communities entered into this profession which is forbidden for them citing the reason of low social status by performing a non-farm labour that too outside the village.

In the beginning, men from the Dalit caste started going for the construction work in rice mills and in the later period, their womenfolk followed them in venturing into this work. In fact, today, many of the families in the Dalit wada will be seen daily morning going to work in several rice mills located around the village, walking through the agriculture fields. Apart from the construction work, these rice mills also offer some other petty labour activities like stitching the gunny bags, carrying the load of bags and also other cleaning activities for these female labourers of Thogata village. Interestingly some Dalit women with small landholdings who actively participate in agriculture labour work do not prefer to work in these rice mills.

The institutional support provided by the government also has an impact on the increased employment for the agriculture in the village. For example, the

[25] Ram Singh (1996: 117-118) in his all India analysis of impact of 'green revolution' technology on the female agriculture labour has found that even though the real earnings of female agriculture labour have increased over a period of time however it did not result in the decline in the wage differences among male-female labour.

minimum assurance of 100 days work availability (later it was raised to 150 days) for agriculture labour within the village through MGNREGA has boosted the morale of female agriculture labour in the village. This program was launched in the year 2006 in the study village. At this time, the female agriculture labour have lost their most of the working days in agriculture due to the effect of 'new' technology and also because of the tactics of rich labour for cutting down their expenditure in labour charges. Both male and female labour are paid equal amount of wages under this program. The daily wage is fixed as Rs 100 per however; the labour has to fulfill the standards for the amount of work to be done in a day. Under these conditions the MGNREGA program has attracted huge numbers of female labour in the village who were searching for some work in the village.

Among these, the Golla women top in numbers as they always look for some work to contribute towards their family income. Golla women are equally hard working labour along with their counterpart of men from their own caste. Apart from this, most of the female members from other backward castes are turning towards this work in huge number. In the absence any other alternative work available for these female agriculture labour within the village, all of them have started working under this program. However, this program did not attract much female labour from Dalits as good numbers of them were already occupied in rice mill work. These Dalit labour preferred rice mill work over MGNREGA works because of their early payment of wages. In construction work they receive wages weekly basis however for MGNREGA one has to wait for 15 days to receive the payment. The Dalit female labourers complain that it become difficult for them to manage without money for such long period as most of they survive on buying their household commodities on a daily basis. Nevertheless those Dalit female labours who do not go for rice mill work have started joining this work. Otherwise also, in the absence of rice mill work many of the Dalit labour are engaging in works under MGNREGA. The work under this is also allotted to group of labourers that belong to specific castes. There could be intermixing of labour in case of labour groups belonging to backward castes. However, the female labours among Dalits are not allowed to part of other caste labour group.

Apart from the better wages, the absence of strict supervision on part of the farmer, free environment and the association of peer group from the same gender in the form of close relatives and friends from the village have been the crucial factors for many of the female labour for their active participation in the wage earning works that are allotted under the MGNREGA program in the village. The female labour in Thogata village are no more obliged to work under the terms and condition that were prescribed by the feudal mindset farmers in the village. There is one incident that occurred in the village recently where one day, several Golla women were sitting in the premises of the post office in the village to collect their wages that were earned under the MGNREGA scheme. The most powerful feudal landlord of the village reached there who is known for his notorious activities of beating and ill treatment of agriculture labour in the village. He asked them in a commanding manner to come and work in his farm for weeding activity. However, none of these women stood up and they were silently waiting for the payment. The landlord was getting very angry as the time was passing on and he started threatening them that if they don't get up he will see so that they will not get any work in the village. Even that warning could not help him in gaining the women for his work and finally after some time he left the place with great frustration. It is very interesting to see the courage of these women labour in resisting the dominance of feudal landlord in the present time.

Over a period of time, different reasons like activities of naxalites, democratization of electoral bodies in the village level, increased employment opportunities outside the village female labour from various caste groups became empowered to bargain for better working conditions and wages while working for the Velama farmers in the village. It is true that the introduction of 'new' technology in agriculture has resulted in the loss of working days over a period of time. The agriculture growth that is induced by such technology interventions have also opened up new employment opportunities for these female labour in the form of rice mills. Also, the institutional support from the government in generating additional working days by public investment has also supported the vulnerable female labour population in the scenario of loss of employment in agriculture.

However, in spite of these newly emerging employment opportunities, both within in and outside village, the large section of the female labour population in the

village are deprived of their earning opportunities as these new opportunities are not able suffice their working capacity and most of them are forced to sit idle in the absence of enough work for them because of the loss of work in agriculture. Firstly, the number of working days under the MGNREGA program is very less as assured by the government due to the lack of sufficient government land that is available in the village. Moreover, the availability of work under this program purely depends on the institutional support which is not guaranteed by the local officials. With regard to the work in rice mills also, female labour from only few castes could able to explore such works which are also not available in throughout the year.

This chapter in detail has explained the changes that took place in Thogata village agriculture in terms of cropping pattern and mechanization of agriculture that took place due to the introduction of 'new' technology in agriculture. Apart from that, this chapter tried to analyze the broad changes that have taken place in labour relations in agriculture and the impact of agrarian change among the lives of women. The next chapter further describes the emerging new employment opportunities in case of agriculture labour and enterprising activities that have been taken up by the capitalist farmers in Thogata village.

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Chapter 7
EMERGENCE OF NON-FARM OCCUPATIONS

The most important aspect of transformation in rural culture in India can be explained by the extent of rural non-farm employment that took place in the last couple of decades (Gupta, 2005: 756). Over a period of time, the introduction of 'new technology' in Thogata agriculture has resulted in emergence of new occupations in non-farm sector for various households in the village. Broadly, they can be categorized into non-farm wage labour, salaried employment and own enterprising activities. In the first category, many agricultural laborers in Thogata village started shifting towards various wage labour opportunities like construction work, rice mill work and other casual labour works that were available in the nearby towns. The second category includes couple of young skilled labour from the village who are working as operators in the rice mills. The last category is comprised of rich enterprising farmers of Thogata village who started investing their surplus income in buying heavy machinery, establishing rice mills, dairy business and other small enterprising ventures.

Agricultural growth is supposed to open up agro-processing and non-farm activities, the agrarian change in terms of non-farm employment has to be analyzed on the basis of different new activities taken up by the villagers (Sudarshan Reddy & Venkateswara Rao, 2008: 212). Hence, this chapter deals with different types of non-farm occupations that were taken up by various socio-economic groups of agrarian population from Thogata village. The emergence of the various non-farm occupations have resulted in differential impact upon the people of Thogata village based on their socio-economic background. This chapter is broadly divided into two sections. The first section deals with the emerging non-farm employment opportunities with regard to the agriculture labour in the village. Secondly, it deals with the non-farm occupations that are taken up by the enterprising rich farmers from the village. Specific case studies of such individuals who have ventured into these non-farm occupations are also incorporated as part of the analysis. To begin with, the following section deals with various non-farm wage labour opportunities that have emerged for the agriculture labour in the village.

Construction Work:

The major source of non-farm labour opportunities for the agriculture labour in Thogata village is construction work[1]. With the emergence of huge number of rice mills and *godowns* (warehouses) in the nearby town Sultanabad, many agriculture labourers from Thogata village joined in the construction work of these rice mills. However, the participation in construction labour activities is exclusively taken up by Dalit households. The increasing number of new rice mills year by year enabled the labour from the village to gain wage labour employment in construction works on regular basis. The location of these rice mills is also an added advantage for them, as they are located in a distance of 2-3 kilometers. In the recent years, due to the huge amounts of paddy production in the entire area, many new *godowns* are being constructed for grain storage. Both government and private investment is being pumped in establishing these *godowns* in the area. All these factors generated employment opportunities in the construction work[2] for the agriculture labour of Thogata village.

The history of construction work could be well explained in the life story of a Dalit who has been working in the field of construction work for the last 25 years. Recollecting his younger days while working in the agriculture fields of Velama landlords in the village, he says *"we were forced to work very hard without any leisure even for drinking water even though we felt thirsty. Whenever the "dora" comes we would stand up quickly. If we don't do so, they would keep it in their mind and abuse us some other time. However, these days, we don't have such fear for doras in the village. We are no more dependent on them for work. But I feel sad sometimes for myself by seeing other farmers producing paddy in their fields. Many times we need money for some emergency immediately and no one gives for credit and for that we have to own agriculture land in the village"*. He left the village under these circumstances and went in search of work in the industrial areas of Chandrapur and

[1] Srivastava (1998: 281-283) in his study of villages in Uttar Pradesh has found that the principal source of local non-agricultural employment is the construction sector, followed by agricultural processing.

[2] Parthasarathy & Anand (1995: 814) while analyzing the trends in employment opportunities observed that for both male and female labour in rural areas construction work has become most prominent source of non-agricultural employment.

Balharsha in the neighbouring state of Maharashtra. He was cheated by an agent there and had to settle in the construction work of a paper mill located in Adilabad district.

After spending few years, he returned to his native village and started working as construction labour in the rice mills of Sultanabad under a *mastry*[3] who is a migrant from Andhra region. His *mastry* used to exploit the labour by not paying their wages properly. He adds that, work in the rice mills was a very tough job as they need to erect walls of a height of 36 feet with high risk of accident involving in it. He doesn't like *jabardasti* (use of force) in the work and always love to work on his own will. With this experience, he decided not to work again under an Andhra *mastry*. Then he started taking up the house construction work as *mastry* for the *Indiramma Illu Pathakam*[4] in the village itself. He feels comfortable with this work; moreover he is preferred by many villagers as *masteries* from Andhra charge more money than him.

The major works that are involved in construction are digging deep level pits for foundation pillars and walls while constructing the rice mills, warehouses and residential houses. In the beginning, men from the Dalit households started going for these works. Later, their wives and other female members also started joining with them in the construction work. At present, good number of both men and women from Dalit households can be seen daily in the morning walking through the agriculture fields towards their work places of construction. As it is described in the previous chapters, the new technology has resulted in the displacement of manual labour which has forced these Dalit landless laboueres to look for alternate employment sources. Interestingly, in Thogta village, the shifting of many Dalit labourers into construction work has resulted in positive effect on the wages for agriculture labour in the village[5]. The same is reported by the rich Velama farmers in the village who say that with the

[3] This is the position of leader for a group of construction labourers who has few years of work experience along with technical skills in the field. He directly enters into agreement with the employer and gets the work done along with other labourers whom he would recruit with his own discretion. He also receives higher wage amount in his group.

[4] This is a housing scheme initiated by the state government in the year 2004 for the benefit of rural poor families. Under this scheme around half the total cost of a house construction belonging to the poor families will be beard by the government.

[5] Lanjouw & Shariff (2004: 4442-4443) in their study across the states in India have also noted that non-farm employment rates in construction are positively related with agriculture wage rates along with agriculture productivity.

availability of construction work in the rice mills many labourers in the village are not preferring the work in farm lands.

The mode of wage payment in construction work is also increasingly made on *gutha* basis. In most of the cases, a couple, comprised of male and female labour (usually husband &wife) is assigned for specific amount of work and a fixed amount of money is paid as wage to them together. Otherwise, wages are paid on a daily basis and it depends on the nature of work they are assigned for. In general, a female labour is paid Rs 80, a male labour Rs 120 and the *mastry* is paid Rs 200 on daily basis as wages in the construction work of rice mills.

Rice mill Work:

The rice mills, once they are in operation, offer wage labour opportunities like loading and unloading of paddy grain in the rice mill, stitching of gunny bags, rice mill operator and electrician etc. Over a period of time, all these specialized labour works have started providing good number of employment opportunities for the labour in the village. There are total five men from Thogata village who are working as operators in rice mills. Three of them belong to Dalit background, one is from Golla caste and other one is from Velama caste. This specific non-farm occupation belongs to the salaried employment category and receives regular income on a monthly basis.

Dalits of Thogata village who already have exposure to labour opportunities outside village with the construction work of these rice mills also started taking up these new employment opportunities. Majority of them (both men and women) are working as casual labour in these rice mills with few men working as operators. Couple of the members from migrant tribal households from the village also joined as casual labour in these rice mills. Unlike the construction labour work which is considered to be a low grade work, few men from backward communities entered into operator job in rice mills, however, except couple of women from Chakali caste, none of the women from these caste groups entered in rice mill work. Two men in Thogata village from poor Velama background are also working in these rice mills. One among these two is an operator while the other person is working as a casual labour in rice mill.

Case A: Here is the case study of 25 year old Dalit youth who is a rice mill operator. He has been working in the rice mills for the last eight years. He started his career as a casual labour in for a daily wage of Rs 60 and his duties were to include the loading and unloading of grain, sand, and other wastage in different locations. This used to be a twelve hours working duty per day running between two shifts from morning nine to night nine. The second shift begins from night nine and ends at morning nine. He continued this work for a period of five years. For the last three years, he has been working as an operator in the same mill. He earns a monthly salary of Rs 3500. However, there is no provision of taking leave in this work and in the case of absent for the work in a day the amount will be deducted from his salary proportionately. He feels that the rice mill work is a tough job and they are exposed to heavy dust constantly and that results in allergies for body. Moreover, there is no rest during the duty except to have food. It seems the employers bear the medical expenditure only for minor injuries. However, they always fail in paying proper compensation to the labour in the case of major injuries.

He informed that there are around 70 rice mills in the area with 400 operators and another 4000 casual labour working in these rice mills. As there is strong labour union, none of them able to raise their demands and if anyone is found involving in the union activities they will be immediately expelled from their duty. It seems there is one labour union affiliated to one communist party operating in the area. However, labours complain that the leadership of this union always acts in favour of the rice mill owners. Few months back, through one of his friends, he got to know that better wages are paid at some other rice mills located in other mandal of the district. He was informed that they Rs 5000 per month for an operator with more flexible working hours when compared with the present location. Apart from this, the labourers are also provided with insurance facility for their life security. The working hours are also only nine hours per day. After getting to know about all these benefits in those rice mills, one day he joined one of those rice mills without informing his employer. Somehow his previous employer got to know about his new work place and immediately he was forced to shift to his old work place in Sultanabad. This shows the extension of ties of bondage in the urban labour space by the powerful lobby of rice mill owners in this area.

Case B: He is 50 year old person from Dalit caste. He worked as *paleru* for a period of 20 years for different farmers in the village. With the coming up of rice mills in the area, initially, his wife joined as a construction labour and later she got the gunny bag stitching work in one of these rice mills. Later, with her established contacts, she got a job for her husband and that is how this person, around 10 years back, started working in the rice mill as a casual labour. He worked there for a period of five years and during that time one of the rich Velama farmers from the village established a new rice mill of his own in the area. The owner of the rice mill insisted that the Dalit person must work at his rice mill and persuaded him to join the rice mill. . After working for few years over here the Dalit labourer took retirement from his work due to ill health. He is known as very humble, sincere and hard working person in the circles of his employers over his entire period of work history. That is why still, some of the Velamas from the village come and ask him to join the work in their rice mills. But he is not interested in working due to his ill health. He owns around 0.5 acre of agriculture land for his livelihood which he has given for a fellow Dalit farmer for cultivation on share cropping basis.

Case C: He is born in Dalit caste. Remembering his childhood days he says, *"Since from my childhood I was always interested in studies. In fact, daily, I used to go to school and sit outside the class room while other caste children used to sit in the class room. In my lifetime I could not pursue education that is why I want to send my younger son to any good school outside the village for better education"*. He also has knowledge on some of the government residential schools that run in the coastal Andhra region of the state and planning to send his son to any of these schools. He started his career as *paleru* in his younger days and has spent many years working in the agriculture fields for several years. Later, he shifted his work to rice mills as casual labour few years back and at present he is engaged in the work of repairing/stitching of the gunny bags in rice mill. He is paid Rs 1 per for stitching one bag earning around Rs 100 per day. While remembering his old days, struggling for food, sometimes, for a whole week, he feels that his present job is better than the job of *Paleru*.

Case D: He is of around 26 years old and had a formal education up to 10th class. He comes from Golla caste background with small landholding agriculture background. After the completion of 10th class, he discontinued his studies and was eventually married to a girl by his parents. He says that "in our Golla caste, marriage is done at an early age". He started his career in rice mills as casual labour and worked for two years period. Later he worked as accountant for a period of one year. After that he has been working as driver (operator) in the rice mill from the last six years. He also supports his father in cultivation apart from his driver job.

Drivers (Tractor/Harvester):

The process of mechanization of agriculture has replaced many of the traditional labour activities that were done by manual labour in the village. As a result of this, many agriculture labourers got displaced from these activities causing loss of employment for them. However, on the other side, use of heavy machinery like tractror/harvester in agriculture started providing new employment for the skilled labour in the form of driver/operator jobs but in a limited number. In Thogata village, there are a total of 14 people working as drivers. Among these, nine are working on tractors and the rest five are harvester operators. Among the tractor drivers, three are from Golla caste, two each from Dalit and Velama caste and one each from Chakali and Gouda caste. In case of harvester operators, four belong to Gouda caste and one is a Dalit. Most of these drivers belong to the young age group of 20-35 who were directly recruited as drivers and few of them worked as a *Paleru* previously. In general, these drivers are recruited for period of one year with a fixed amount of salary per year. The terms of employment are similar to the attached labour system where the employee is obliged to work exclusively for his employer during the entire one year period. The employers offer advance amount of money as part of their wage and also credit facility as and when required by their labour. However, in the changing scenario of labour relations in Thogata village, the employees have freedom to choose their employer and are also able to switch to other employers if they wish so. However, they have to clear off any of their debt amount with their previous employer.

This process of occupational shift of from agriculture labour to driver work could be well explained in the form of a case study mentioned below. This is about a

32 year old Dalit harvester operator from Thogata village. During his childhood, he moved to a nearby town along with his parents. His father, after failing to get a job in coal mines, ventured into flour mill business but faceed huge loss in it. Under these conditions, they came back to the village. Because of the debts that were incurred by his father, he was forced to join in *paleru* work at a very young age. In the beginning, he worked as *paleru* with the feudal landlord in the village. It seems, he used to be very punctual and sincere in his work and the landlord always used to call him by his name only. While working as *paleru* he used to learn driving the landlord's tractor along with the son of landlord who also belongs to his age group. In the third year of work, the landlord's tractor driver died. Then he requested the landlord about his willingness to work as the driver for the tractor. Later he was given the work as the tractor driver and by that time he was just sixteen year old boy. He feels very proud and happy that he is the first person in the village who has learnt tractor driving.

After working for a couple of years with the landlord as tractor driver, he shifted to one rich Golla enterprising farmer. He continued to work at this place for seven years and due to some differences with his employer he left that work. After that, he joined as harvester driver with another rich Velama farmer for a period of five years. Because of the ill treatment and abusing nature of his employer he quit this place also. Recently he joined another Velama farmer in the village as harvester driver for payment of Rs 70, 000 per year. Before joining here, he was offered an advance loan payment however; he rejected the offer because he felt he should not lose his freedom in his work. He says that if they take advance loan from their employers they will not be able to quit working with them for any reasons. On the issue of working conditions, he says that due to continuous sitting on the harvester machine along with the heat produced by the machine he had to face many health problems and he had to spend lot of money for the treatment. According to him, his job is a tough one which does not allow him to take rest as there is no proper time schedule in the work.

As we discussed in the previous chapter, there has been a trend of weakening of the feudal domination upon the agriculture labour in the village. The above mentioned case study shows that the oppressed sections of the society (especially the Dalits) in Thogata village have become conscious about their rights and dignity. In fact they started showing their protest and resistance by shifting to other employers

within the village. As a counter to this, some of the feudal mindset powerful Velama farmers are hiring drivers from outside village. For example, here is the case of one of the most enterprising Velama farmer who says *"we need to have close supervision on the driver while working on the harvester machine because the work requires a skilled person. Also the owner should have proper knowledge about the machine otherwise this business will not work out for them. In our village, there are no skilled persons to work as drivers. They don't work properly and if we become angry on them they spread it out in the village that we scolded them. Moreover, they have other alternatives to work. That is the reason I brought this driver from my wife's native place. This driver is a skilled person and still we need to watch him so that he operates the machine properly. I pay him Rs 70,000 per year which is a good source of income for him."* This clearly makes evidence that in spite of penetration of capitalist oriented agriculture in Thogata village the values of oppressive feudal culture continue to exist in the minds of some of the Velama landlords.

***Hamali* Work:**

This is a specialized labour that takes care of the loading of the paddy grains into gunny bags and get into the vehicles of transportation for sending to the market. The agriculture growth in Thogata village is the main factor for the emergence of this kind of labour in the village. *Hamali* work is one of such opportunity that has started providing an additional source of income for some of the hard working men in the village. The labour for this who actually form as *gangs* are hired on *gutha* basis and fixed amount of wages are paid on the basis of amount of work done. In the beginning, the initiative for taking up *hamali* work by the villagers is made by one Dalit labour in the village. His career has begun as a *paleru* labour and later shifted to construction work and after gaining experience in the construction field he is was promoted to *mastry* position. About his memories of starting the first hamali labour *gang* in the village he says that *"Earlier the merchants from Karimnagar used to bring their own hamali labour at the time of purchasing grain from the farmers in the village. Those days, the production of paddy used to be low but it has become huge now. The work requires more labour now and I realized about the possible huge demand for hamali labour. That is why seeing this opportunity around 10 years back I started a hamali labour gang with my own caste members in the village"*. Over a period of time, this labour *gang* from Dalit caste started earning good income from

this work during every harvest season. By seeing prosperity in this work, men from Golla caste also joined in this *hamali* work by forming their own labourers *gang*.

When asked how this happened he said, "*Because of drinking and movie culture, our men never worked properly. They used to work three days and enjoy the next two days spending the money that is earned through this work. That is how Gollas also joined this work grabbing this opportunity. In this process, the number of hamali labour has increased in the village and clashes started occurring between Gollas and our gang on the sharing of work offers from various farmers in the village. To solve this problem three years back, we decided to share our work among all the households in the village into two equal parts."* He feels sad about this situation and says that his fellow caste men should focus more on working as *hamali* to earn more income as they are deprived of owning agriculture land while recognizing the fact of Golla men being very serious in this work even though they own agriculture land.

At present, there are two *hamali* labour *gangs* operating in Thogata village each of them belonging to Dalit and Golla caste group. There are 13 persons working in Golla *gang* and 9 persons working in the Dalit *hamali gang* in the village. In general, these gangs recruit their own caste men in their group. After harvesting work is completed, they are approached either by the farmer or by the buyer of the crop (it could be a seed agent or a rice mill owner) for loading the grain into gunny bags. These *gangs* appoint one person each from their respective *gang* to maintain the detailed accounts on the amount of the work done and payment to be received from each farmer in the village. After the work is done, they collect their wage amount from all the farmers in the village and share the money equally among themselves. The earning of the single member of a *hamali* labour *gang* will be around Rs 500-600 per day depending on the amount of work done. This *hamali* labour work provides seasonal employment during the harvesting which is generally available for a maximum period of one month during each crop season. The harvesting of paddy crop takes place simultaneously in majority of the landholdings in the village due to the machine cutting. The fear of damage of grain due to bad weather conditions forces the farmers to send their harvester crop to the market as soon as possible. Thus the *hamali* labour work very hard day and night while loading the grain during every crop season.

Interestingly, there is one small landholding farmer from Dalit caste who joined in the Golla *hamali gang* couple of years back. He says that *"I used to work in our caste gang only but in between they stopped working in hamali work and I joined the Golla caste gang and has been continuing working with them till now. This year in our village, the harvest of paddy is very good and there is plenty of wage labour available at least for a period of one month. During this one month, our earnings will be around Rs 20,000 with a daily income of Rs 600-700. I don't want to lose this income that is why I am also working as hamali labour in the village"*. It is also observed that one person from Gouda caste is also working as a *hamali* labour in the Golla *gang*.

Electrician:

As mentioned in the previous sections, the rice mills have started providing diverse employment opportunities with their presence in the area. The electrical work is one among such activities. It is found that few youngsters who are drop outs from their formal education are pursuing these works from the village. Majority of them are from the Dalit caste background. With the increasing number of newly constructed rice mills, every year, this work is attracting the unemployed youth from the village. All these labour are not interested in any of the manual labour activities either inside or outside the village due to their lack of exposure to the work. At the same time, they are not able to get any jobs in the towns for lower education background.

The above section in detail explains about various non-farm labour opportunities that are emerging in the recent times. The emergence of agro-processing industries in the form of rice mills in a short distance from the village has made it possible for many members of labour households to enter into non-farm wage labour works without changing their residence. In Thogata village, among all the households who shifted to non-farm wage labour works, it is the male members who are predominant in number when compared with their female counterparts. Women are seeking seasonal employment in the non-farm sector and they shift back and forth between agriculture and non-agriculture work depending on the availability of work

for them[6]. The data on this shows that Dalits are very aggressive in grabbing such non-farm opportunities that are available outside the village like construction and rice mill works[7]. On the other hand, the labour from OBC caste groups are actively participating in various non-farm works that are available within the village for example as drivers of tractor/harvester and also *hamali* labour. This clearly shows that Dalits of Thogata villages are not interested to work as labour for the Velama farmers in the wake of availability of non-farm wage labour outside the village.

It is interesting to note that the introduction of new technology in agriculture in Thogata village in the long run has resulted in the huge decline in the employment opportunities for labour in agriculture. On the other hand the agricultural growth has generated new wage labour opportunities outside the agriculture, however, to a limited extent. In Thogata village, lack of means of production in terms of ownership of agriculture land[8] and declining labour opportunities in agriculture in the village are the major factors for the landless and marginal landholding household members to shift towards the non-farm labour opportunities that are available outside the village.

Non- farm Enterprising Activities by the Farmers:

Economic diversification is typical of rural elites in almost every region of India, at present and in the past. In some regions this is associated with economic backwardness because of the stranglehold of small elite over the rural economy; in others, it has led to capitalist development as agricultural and trading profits are channeled into more productive activities (Upadhya, 1988: 1439). The introduction of new technology in Thogata village agriculture has resulted in the emergence of several enterprising activities taken up by the farmers in the village. The nature and size of such enterprising activities differs across various caste groups as well as various landholding categories. The agriculture growth in the village has motivated many individuals especially among the top strata of the landholdings to earn more

[6] Basanth & Kumar (1989: 41-42) in their longitudinal study of non-agricultural activities in India have also observed that there is seasonality in the employment of rural non-agricultural labourers mostly among the casual labourers in agriculture who consider this as a secondary employment.

[7] Reddy & Rao (2008: 212-214) in their village study from Warangal district in Telangana region have also observed that Scheduled Castes had greater share in the non-farm employment opportunities.

[8] Ranjan (2009: 69-70) in his study from Uttar Pradesh state concludes landless and marginal landowners are pursuing non-farm labour activities, with many of them having little education and a majority belonging to the socially downtrodden classes due to the distress factors.

income from diversifying into various enterprising activities. The following section deals with the details on such enterprising activities in the non-farm sector that has been taken up by people of Thogata village. Such enterprising activities could be further classified into small and big enterprises which are in detail are explained below.

Small Enterprises:

There are people who are engaged into small self employment activities across the caste groups in the village. To name them, one young boy from Muslim community runs a small cycle mechanic shop where he does minor repairs for the cycles in the village. There are total four grocery shops in the village of which three shops are owned by Gouda caste households and another one is run by a Dalit person. Out of these, two shops are full-fledged grocery shops where one can get all items that can be consumed in any household in the village among which one is owned by Gouda caste farmer and another is run by a retired coal mine worker from Dalit caste background in SC colony. This same person also runs the liquor selling business in his home. The other major liquor selling shop is located in the centre of the village owned by a Gouda caste person. This Gouda person has been winning the open auction bid for the liquor shop that is conducted for every year at Gram Panchayat office. His shop gets customers from all the castes in the village except for the Dalits. However, at the liquor shop that is located in SC colony some of the Golla caste members also visit this shop with most of them belonging to the younger generation. Many farmers in the village who own buffaloes at their home sell the milk to couple of farmers in the village who are engaged in dairy business.

Mechanic:

The mechanization of agriculture in the beginning with the introduction of electricity supply has resulted in huge number of motors fixed in the farm wells. The coming of canal water further resulted in the desire for the better utilization of irrigation facility and the number of motor wells further witnessed growth in numbers. The use of these motors resulted in specialized skills of mechanic in the village. There are two motor mechanics in the village both of them belonging to Tenugu caste households. One of them has rich experience in the field who was also elected previously as the Sarpanch of the village. He owns a motor mechanic shop in the

nearby town. He started learning repairing of small motors and later developed his skills in repairing even much bigger motors used in industries. The emergence of rice mills further enhanced his opportunities in the field. The motors used in rice mills are very costly and in case of any damage the repairing work has to be done quickly otherwise it will incur huge loss of income for the rice mill owners. That is why expertise in this field is highly remunerative and with his hardworking attitude and skills has become very popular in the area. With the growing demand for the work every year due to the rise in the number of rice mills in the area has brought good wealth to his household. Apart from this, he also owns a small agriculture pipe manufacturing factory located on the outskirts of the village on the highway road.

There is one more person among his relatives who is also engaged in the mechanic work. He is a small landholding farmer and along with cultivation he is engaged in repairing motors. However, his work is limited to only motors of farm wells and he usually does the repairing at his home in the village itself. Nevertheless, he visits the town regularly for purchasing various materials that are required for motors. When asked about his mechanic work he proudly told *"every farmer should have additional source of income along with agriculture. They should explore some part time activity like me otherwise it will not be useful for them. Moreover, we get plenty of leisure time in paddy cultivation and one has to utilize this time for some part time activity"*. The farmers in the village come to his house for getting the damaged pump sets repaired. He does this work on part time basis only along with taking care of agriculture in his farm land.

Weighing Machine:

There is one young Velama person from upper medium landholding who, apart from his agriculture, owns a weighbridge machine located on the highway road in Sultanabad in the midst of several rice mills located in the surroundings. During the every harvesting season hundreds of heavy transport vehicles with loads of paddy grain are brought for selling in the rice mills in the area. With the increasing number of vehicles every year that are coming from far places to these rice mills has resulted in good demand for these weighbridges. Apart from this many other transport vehicles pass by this road that connects Ramagundam town, one of the major industrial hubs in the district, where NTPC, FCI and several other industries are located. In fact, this

highway road further connects to other coal mine areas in Adilabad district and further gets connected to other national highways in other states located in central India making it a busy road for many transport vehicles making the weighing machine business a profitable one.

Big Enterprising Activities:

Carol Upadhya (1988: 1438) while explaining the process of rise of entrepreneurial class in coastal Andhra says “High productivity and profit rates in agriculture have contributed to the development of capitalist tendencies in the system of agricultural production, and the 'capitalist farmers' are accumulating surpluses which they seek to invest in ever more profitable enterprises. The result has been a pattern of urban migration and economic diversification among the rural elite which, over several generations, has produced the new urban business class”. Similarly as a result of agricultural growth a new enterprising class is in the process of emerging among the rich farmers from Thogata village. The following sections deal with different types of major enterprising activities that were taken up by them.

Seed Factory:

This is the case of one rich velama farmer from Thogata village who lives in Karimnagar. He regularly visits the village to take care of his agriculture land and also employed a *paleru* to work in his farm land. Along with agriculture, from many years he has been playing the role of the seed agent on behalf of seed companies. As mentioned in our previous chapters the seed agent supplies the seeds to the farmer and in return the farmer is obliged to sell the crop to only to the agent. This person is very popular in this seed business and in fact the villagers always call him prefixing the term ‘seed’ to his name. Over the years he has been running a good business and has many customers from the village across different caste and class lines. He always maintains good relations with all the farmers in the village and supplies seed to all the Velama farmers irrespective of their political affiliation. He is of very enterprising in nature and recently bought an old seed manufacturing plant located on the main road from an owner from the neighboring village. Now he started his own seed processing and manufacturing plant in the village.

Real Estate:

The rich enterprising farmers in the village mostly from Velama caste have also started investing their surplus money earned from the income in agriculture into real estate business. One young Velama farmer from upper medium landholding had bought residential plots in Karimnagar. There are good numbers of farmers from the Velama who ply between Karimnagar and their village. Some of these farmers have built their own houses in the city and keeping their children in those houses who are pursuing their education in the private schools and colleges. This rural urban link has explored some new avenues of investment like real estate for these farmers. Many rich Velama farmers having residential plots in Karimnagar and few of them even purchased plots in the state capital Hyderabad also.

Dairy Business:

This business is one of the flourishing activities in the village that has participation from good number of farmers in the village. The new technology induced agriculture growth in the village has encouraged many farmers to rear cattle in their household. The increasing number of cattle has helped in the growth of milk production in the village. Slowly farmers started selling milk resulting in the emergence of dairy business in Thogata village. Milk selling has become an additional source of income for such type of farmers. In fact, milk selling was taken up very rigorously by some Velama farmers in the top strata of landholdings. Apart from this, many other castes, without any agriculture background, have also started selling milk in the village. At present 62 percent of the Velama households own buffaloes. Among Gollas and Tenugu caste more than forty percent and among the Dalit households 10 percent of them have buffaloes. The milk selling business in the village is comprised of three major milk selling entrepreneurs. One belongs to the highest landholding Velama household, the other one belongs to one rich Velama farmer, and the third one belongs to a lower medium landholding Dalit farmer.

The first person is the most popular and leading personality in dairy business and he is always called with a prefix of ‘milk’ to his name by all the inmates of Thogata village. He was born in an ordinary Velama household with an ownership of small landholding. However, since his young age he used to work in agriculture along with his younger brother. With the introduction of canal irrigation he along with his

brother started intensive cultivation and over a period of time started buying more and more agriculture land. Eventually they became the largest landholding households in the village. They always recruit the illiterate migrants of tribal community to work as *paleru* who are considered to be very loyal and hardworking by the Velamas. Their treatment with their labour is better when compared with other rich landlords of the village. All these years he has been focusing on dairy business while his brother took care of agriculture. He maintains a good number of buffaloes and feeds them properly with a mix of nutritious food.

Every day many cattle owners in the village, from various caste groups come to his home and deposit milk. Along with this, he personally collects milk from some other houses that are located in far distance and after collecting leaves to Karimnagar by his trolley auto. In Karimnagar he daily supplies milk to one of the famous restaurant in the town. He repeats the same in the evening daily and sometimes in his absence, his son takes care of this routine work in his place. It seems that in the beginning he used to sell milk in Karimnagar going by cycle, then started going by bus, later on a two wheeler and now he could afford to use an auto trolley of his own. Even though he is illiterate, he is known for his enterprising qualities by the fellow farmers in the village. He always keeps himself busy and always stays away from village political affairs keeping his focus only on his business. However, it seems he is very strict while paying money and cheats the milk suppliers in the village. He never pays money to them for the milk that is collected on Sundays. Apart from this, even a slight change in the quality of the milk will attract huge price cut for the milk suppliers. There is one Dalit farmer who is also engaged in milk business. He owns around eight buffaloes at his home and he also collects milk from some other fellow caste members. He owns a small moped and daily uses it for selling milk in the nearby town Sultanabad.

There is another Velama person from a big landholding category in the village who is also engaged in dairy business. He is an aged, educated person who is known for his soft and liberal attitude among the labour population in the village making him one of the most approachable Velama elderly persons in the village. He does not own many cattle at his home and collects most of the milk he sells from others. Many villagers come to his house daily morning and again in the evening for depositing the

milk. He maintains the records of these milk deposits with details like quantity and quality of the milk along with the payment for the milk to be paid. He employed a college going Velama boy who lives in his neighbourhood to support in this activity and pays him nominal amount of money for this. However unlike the other Velama person he supplies this milk to a private dairy company. A milk van belonging to this company daily comes to the village and collects the milk from his home. This Velama farmer receives the money from the company and he in turn makes the payment to those who deposit milk at his place.

Leasing out of Agriculture Machinery:

There is one small farmer from Chakali caste who owns an auto trolley. He leases out this trolley to others either in the village or in the nearby town and even in the surrounding villages. He does this to earn money on part time along with his agriculture. He is also member of the village panchayat and active in the village politics. The next level of this business is leasing out the tractors in the village. As we discussed in our previous sections that there has been a mechanization of agriculture that has been taking place in Thogata village agriculture. This has resulted in good number of tractor purchases in the village in order to achieve effective and timely cultivation of paddy crop in the changing agrarian scenario. Even though the rich farmers started using the tractors initially many other farmers in the village even from small and medium landholding farmers also started using them for various activities in the cultivation. This has started giving a very good income for the tractor owners in the village who eventually started hiring out this machinery to other farmers in the village on a great scale. With the displacement of human labour, this activity has become an additional source of income for some of the entrepreneurs in the village. The following table explains in detail about such enterprising farmers in the village who earn regular income by leasing out their tractor to other farmers in the village.

Table 7.1: Leasing out Tractor:

Caste	Whether Leased out Tractor	Category of Landholding				Total HH
		A4	A5	A6	A7	
Gouda	Yes	0 (0)	1 (100)	0 (0)	0 (0)	1 (100)
Golla	Yes	0 (0)	0 (0)	2 (100)	0 (0)	2 (100)
Velama	Yes	3 (100)	5 (83)	6 (100)	0 (0)	14 (78)
	No	0 (0)	1 (17)	0 (0)	3 (100)	4 (22)
	Total	3 (17)	6 (33)	6 (33)	3 (17)	18 (100)
Total	Yes	3 (100)	6 (86)	8 (100)	0 (0)	17 (81)
	No	0 (0)	1 (14)	0 (0)	3 (100)	4 (19)
	Total	3 (14)	7 (33)	8 (39)	3 (14)	21 (100)

Source: Field Survey, 2006-7, (Figures in brackets are percentages)
Note: A4 = Lower Medium (above 2.5 – 5 acres), A5 = Upper Medium (above 5 – 8 acres), A6 = Big (above 8 – 12 acres), A7 = Large (above 12 acres). HH = Households.

There are total 21 persons who own tractors in the village. Eighteen of them belong to Velama caste, two from Golla caste and one another person from Gouda caste. Majority of these tractor owners earn regular income by leasing out their tractors. All the Velama tractor owners from the lower medium landholdings actively hire out their tractors to other farmers in the village. Except for four households from the Velama caste, rest all of these tractor owners give their tractors to other farmers in the village on rent basis. Out of these, three belong to the large landholding category, the highest strata of landholding, and one farmer from upper medium landholding category household all of them belonging to ex-landlords' families in the village. The charges for hiring the tractors differ for each activity in agriculture. They charge Rs 1500 per acre to plough the land. In the case of transporting they generally charge Rs 200 per trip for a distance of around 3-4 kms on an average.

Another major enterprising activity that has emerged in this field is leasing out of harvester machines which could be considered as the extension for the leasing out of tractor activity. The only motive for all the owners of harvester machines while buying it is to earn regular income by hiring out to other farmers on rent basis. The mechanization of paddy harvesting in the state has started providing huge opportunities in this field for them. The institutional support given by the government in terms of availing 50 percent subsidy to the buyers on the total cost of a harvester machine has also been encouraging many enterprising individuals to enter into this business activity. The harvester owners send their machines to different places across

the state during the harvesting season every year. This business of leasing out the harvesters has also spread to other states also over a period of time.

There are 10 households that own harvester machines in the village. Out of these, eight belong to Velama caste and the other two are from Golla caste background. These two Golla owners are from big landholding farmer category. In the case of owners from Velama caste, five are from upper medium landholding category and the rest three are from big landholding category. All of them lease out their harvesters to other farmers on rent basis. Interestingly none of the large landholding (which highest strata of landholding in the village) households own a harvester showing their lack of interest in this enterprising activity. Good numbers of Velama farmers from upper medium landholding are taking more interest in this activity in order to earn more income apart from cultivation.

In general, the harvester owners charge Rs 1200-1400 for harvesting paddy crop of one acre land. These charges may slightly vary from one season to another crop season depending on the availability of the machines in the village. For example, during the Kharif season all the farmers have to get ready for the Rabi season which begins immediately after harvesting is done. During this time most of the farmers in the village complete the harvesting work at same time resulting in high demand for harvester machines and the charges are also increased accordingly. However, it is also observed that the harvester owners charge these prices on hourly basis also for some farmers in the village. It takes one hour to harvest for paddy crop in one acre land by the machine. However, in case there are more blocks within the land it takes more time for the harvester to finish the work. In such case the farmer whose land has more partitions has to bear this extra cost. That is why the harvester owners charge rates differently for different lands which will be a loss for small and medium landowners whose lands usually are consisted of several blocks.

The case studies of such enterprising harvester owners are mentioned below. One big landholding farmer from Velama caste sends his machine across the districts in the state of Andhra Pradesh. In coastal Andhra region the harvesting begins little earlier when compared with other regions. He sends his harvester to this region along with the driver and brings back his machine all the way from coastal Andhra to

Telangana region. Recently he has bought one more harvester due to the increased demand for the harvesters. There is another case of two young brothers whose father is an upper medium landholding farmer from Velama caste. They also own harvester and also a tiller. They operate these machines on their own and earn income by leasing out to other farmers.

There is another rich Velama household consisting of five brothers and among them two are prominent. The elder brother is active in village politics where as the younger brother focuses on agriculture. These two brothers actually work together in other enterprising activities like maintaining the harvester machine and bull dozer etc. The younger brother says that they recruited the operator for their harvester from outside the citing the reasons of obedience and loyalty. His bull dozer is operating in the forests of Adilabad district where the demand for such machinery is increasing in the recent times with the expansion of irrigation facilities in the region. He says that it is better to own a bull dozer rather than a harvester because it requires less supervision. In fact his brother's political contacts have been earning them good opportunities for leasing out their bull dozer for many of the infrastructure development works initiated by the government in the region. In order to cut down their labour charges, they follow the strategy of recruiting labour from outside village. He regularly monitors the work places of the machinery and in case of any repairs he brings them to Karimnagar and gets it done. He further explains that one should have a thorough knowledge of this machinery otherwise the owners will end up in loss in this work.

There is another case where a big landholding farmer owns two harvesters in the village. He has two sons and both of them are young and energetic to work as operators on these machinery. They run this machinery all over the state during the harvesting season. One of these two harvester machines is a chain wheel type. They charge Rs 2800 per hour for renting out this machine. This particular type of machine is used for muddy lands mostly of black soil type farm lands. They operate this machine in few surrounding villages and also farm lands of other Mandals also. They claim that they earn around Rs 40,000 per day on this machine during the harvesting season.

This case is about the son of the first owner of harvester from the study village who is around 26 year old. He started his career helping his father's machinery. In the beginning, he used to supervise the procaine that his father has bought in the year 1998. He used to accompany this machine with his driver and tour the coastal regions of the Andhra Pradesh. He even moved outside the state and toured the neighboring states like Karnataka and Tamilnadu. Later he himself started operating the procaine as the driver. In the year 2001 his father has bought a tractor and started operating and also earning for the family by leasing it out to other needy farmers in the village. In the year 2006 his father has bought a harvester also further building their enterprising business. It is very interesting to see his harvester machine leasing out activity in a harvesting season that touches the several districts in Andhra Pradesh.

January – Chittoor, February – Nellore, March – Praksam & Guntur, April – Kodad, May – Karimnagar, May/June – Warangal.

This is the case of one of the most affluent Velama farmers in the village in whose lands the first sowing of paddy is done by the Dailt female labour gang for every crop season. His is a middle aged person who owns a harvester (chain type) and is in partnership for another two harvesters (tyre type) with a Reddy caste person from the neighboring village. He claims to be the first person in the village who has bought the chain harvester. He goes on telling his experiences of their work in the farm lands in coastal Andhra region of Andhra Pradesh state.

To have the description his experience in his own words "*the size land holdings of the farmers in coastal Andhra are very huge ranging from five to seventy acres. For example we worked on the land of a farmer who was cultivating a land of 70 acres which he took on lease. Due to the nature of flat lands the moisture in the lands doesn't goes out so easily. And it requires the chain harvester machines during the Kharif season for this type of lands. I employ three drivers from Punjab on each harvester paying a monthly salary of Rs 20,000 per month and one supervisor to whom I pay Rs 5,000 per month. I hire these persons for a period of eight months by making advance payment and after that they go back to their native villages. We don't have any direct contact with the farmer and we make deal with a broker (middle man) after personally visiting the farm land. We fix the price and start working on the land. The mobile phones have made our work very easy to contact with our prospective*

clients. We pay Rs 100-150 to the broker for each one hour we run the harvester machine. As you know in India everything runs by broker only (laughing). We partners go for the field supervision for each crop one by one on rotation basis".

Further explaining about the maintenance of the machinery he says, "*We own the harvester that belongs to "CLAWS" company that is bought in Karimnagar, however the workshop for this company is located in Nellore. This company machine is the most successful one among harvesters however, the spare parts of this machine are very costly and also the repairing charges. I purchased it at Rs 16.5 lakh and now it is priced at Rs 18.5 lakh with an increase of one lakh rupees for every year. We need to make an advance payment of money before 9 months of the delivery. We have to pay the total amount before one month of date of delivery. I strongly feel that in the future years the number of harvester machines will increase further with the attractive income opportunity specially this year where harvesting is getting done simultaneously same time in both Andhra and Telangana regions of the state. However, if there is no canal water the business will come down for the harvester machines"*. This enterprising rich farmer has a clear vision of his field and always looks for profitability in agriculture or any other activity. He along with other similar enterprising farmers represents the emerging new generation of capitalist farmers of Thogata village whose motive of cultivation is certainly more market oriented unlike the feudal methods of cultivation that existed in the past.

However, some of these enterprising farmers also raised their doubts on the viability of this business in the future years. They say that the increasing facility of credit and installment payments for purchasing such huge machinery will ultimately make it easier for many people to buy them. This will further lead into more number of machines available in the market and the business may go down in the coming years. However, all these years such enterprising activities have been bringing more wealth for many enterprising farmers in the village. Nevertheless the increasing number of enterprising activities in hiring out the above mentioned agriculture machinery has certainly brought huge changes in the way agriculture is being perceived by the Velama farmers of Thogata village.

Rice mill business:

As explained in the previous chapters the introduction of new technology in agriculture has resulted unprecedented growth in paddy production in the area. This has facilitated many rich merchants in the area to establish rice processing industries locally known as rice mills. These mills engage in the purchase of raw paddy grain from the farmers and after processing, they bring the out the rice from it. Later, the owners of these rice mills sell that rice either in open market or to the government sponsored agencies like FCI. The first rice mill in the area was established in the year 1983 in Sultanabad by a person hailing from Hyderabad. From then onwards every year there has been a steady growth in the number of rice mills and by the year 2007 it reached to 54. More than half of the rice mills in the area are owned by Vysyas locally known as *Komatis*, the traditional merchant caste in the state of Andhra Pradesh. Another 1/4th of the rice mills are owned by Velamas and the rest belonging to the Reddy caste persons. The rice mill business in the state has become an attractive one for many enterprising rich farmers in the area with the regular increase of MSP for food crops like paddy by the government in the recent years.

In Thogata village there are six Velama households who own rice mill business in the area. It is said that these farmers sold of their agriculture lands partially and entered into this business. In general, it takes a capital investment of two crore rupees for the construction of a new rice mill. With the institutional support of government in the form of 50 percent subsidy the actual required amount of investment comes down to only one crore rupees. Nevertheless, in most of the cases group of individuals come together and by pooling their individual investment amount establish a new rice mill and run their business. Seeing the great opportunity in this business, some of the richest Velama farmers from Thogata village also have ventured into this business[9]. As it is mentioned in the previous chapters, rice mill owners play their own tactics in maximizing their profits in the business. It is said that with the kind of returns in rice mill business one can get back the total amount of investment within just two years of period. Because of this, many of them are reinvesting their profit money in this business again by further establishing many more new rice mills.

[9] In a similar kind of findings from his study in Gujarat, Breman (1989: 307) observes that the rich peasants started investing their surplus income from agriculture in establishing cane processing factories with the support of subsidies and credit provided by the government.

Mentioning about one of his childhood friends who is a rice mill owner now, one rich Velama farmer from the village says *"we both were classmates in the school and failed in our 10th class exams. But, his father entered into rice mill business and now he is taking care of that business and leading a very rich and comfortable life. And I stayed back in the same place in this agriculture occupation."* This clearly shows that a new rich class of rice mill owners has started emerging among the Velama farmers in Thogata village with the establishment of agro-processing industries in the area. The integration of rural economy with wider regional economy with the market oriented agriculture has further resulted in the emergence of enterprising rich Velama farmers in the village to grab such new opportunities. The young generation farmers who are educated started capitalist approach in agriculture and by diversifying their activities are looking for more profits in agriculture and its allied activities[10].

As discussed in this chapter, the agriculture growth in Thogata village has resulted in new wage labour opportunities in the non-farm sector. Among these, Dalits took lead in unskilled manual works like construction and rice mill work that is becoming available in the nearby town. On the other hand, a good number of individuals from the OBC caste group have entered into semi-skilled works like driver and operator jobs. In the case of women, only Dalit women could grab the newly emerging non-farm labour opportunities in the town with most of the OBC women staying back in the village itself due to various socio-cultural restrictions. On the other hand, many enterprising activities have also emerged in the area ranging from small to big one. Some of the OBC persons from Thogata village could establish small enterprising activities on their own. However, when it comes to the big enterprising activities, it is the rich Velamas who actually got fully benefitted because of their better socio-economic position in the local agrarian class structure.

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[10] Gail Omvedt (1981: A149) in her study also observed similar trend of capitalist oriented rich farmers diversifying their surplus income into several enterprising activities like small size transport companies, flour mills, oil mills and sugar factories etc.

Chapter 8
SUMMARY AND CONCLUSION

The present study tries to analyze the process of introduction of 'new' technology in agriculture and consequent changes that took place in the local agrarian structure. In this study, the 'new' technology is referred to the introduction of modern inputs like HYV seeds, fertilizers, and pesticides along with the irrigation facility through canal water for agriculture. For this purpose, a micro level village study was taken up in Telangana region of Andhra Pradesh. The study region falls in the semi-arid dry region and historically is known for its stagnated agriculture and feudal type of cultivation practices even a few decades back. The few pockets of the region has started witnessing the 'new' technology in agriculture as part of government sponsored 'green revolution' program only till recently, unlike many other parts of India where such programs were implemented long before. Hence, the understanding the impact of 'new' technology in agriculture through this study will bring up the contemporary trends of agrarian change in the region. For many years, village level empirical studies have been the testing ground, for the analysis of agrarian change in India among the social scientists. In this background, the present study brings up the historical analysis of changes that took place in a Telangana village as a result of introduction of 'new' technology in agriculture. This chapter presents the summary and conclusion that are derived from the findings of the study in the following sections.

I

The introduction of 'new' technology in terms of HYV seeds along with assured supply of canal water has resulted in intensive cultivation methods. The former subsistent oriented agrarian economy was transformed into a more dynamic and surplus producing market oriented agriculture production. The dominant landholding classes took this opportunity to accumulate more and more agriculture land under cultivation by buying it from others. Majority of the land purchases were made from the non-cultivating social groups whose primary occupation is other than agriculture. In the process, the Velamas have emerged as the rich class of farmers

over a period of time. However, the new technology did not lead to the polarization of landowning classes in the agrarian structure. Many of the small and medium landholding farmers continue to hold their agriculture lands more over they also took part in the utilization of new technology in agriculture. However, due to their limited size of ownership of agriculture land they could not reap the benefits of the new technology to its fullest capacity. These findings are similar to the previous studies of Athreya et al (1989), Harriss (1992) and Anil Kumar (2006) in which the introduction of 'new' technology in agriculture has not resulted in the depeasantization among the landholding classes in India.

The new technology could not break down the correlation between landholding categories and caste categories that has been prevailing since ages. The Velamas, who belong to the upper caste, continue to be the dominant landholders with this most of the upper strata landholdings are owned by them. The majority of the small and medium landholdings are comprised of middle caste groups like Golla, Tenugu, Chakali etc. However, the new technology has resulted in the emergence of new rich peasant class among few OBC caste households. A similar trend has been observed in some other studies like Anil Kumar (1999), Alakh Sharma (2005) and many other village studies from Telangana region. The de-concentration of landholdings among the richest Velamas due to diversification of income and expenditure on social occasions of marriage has provided ample opportunity for such middle caste farmers to accumulate more agriculture land further to move upward in the local class structure. Nevertheless, Dalits, are still comprised of marginal landholdings along with huge presence of landless labour households.

The new technology has further augmented the process of development of forces of production in agriculture. This has further resulted in the accumulation of superior means of production like pump sets, tractors and harvesters by the upper strata landholding farmers. Most of the heavy machinery of tractors/harvesters is owned by Velamas along with few owners from rich Golla farmers. The institutional support provided by the government in terms of huge amounts of subsidies further encouraged many upward mobile farmers from these castes to buy such machinery. The wider social network that is ascribed by the Velamas due to their better position

in the local social hierarchy always helped them in availing hassle free formal credit facilities for agriculture purpose. On the other hand, lack of such advantage among the lower strata of farmers is forcing them to depend on rich Velamas to avail credit for any agriculture purpose. The above findings further validate the conclusions that are derived in earlier studies of Berreman (1983), Omvedt (1980) and Chakravarti (2001) while analyzing the link between caste and class in rural India.

II

The introduction of new technology in agriculture has lead to the decline in the absente landlordism resulting in the reduction of tenancy contracts. This correlates with findings from other studies like Parthasarathy & Pothana (1983), Dasgupta (1984), Lerche (1998) and Ballabh & Pandey (1999). Along with the sub-division of landholdings, the new technology induced agriculture prosperity has encouraged the richest strata of landholders to opt for direct cultivation instead of leasing out to others for cultivation.

The introduction of new technology in agriculture over a period of time has lead to the shift in cropping pattern from the cultivation of multiple dry crops to mono cultivation of wet crop of paddy. The same trend is observed in many other studies that were previously conducted by Epstein (1962), Breman (1985), Anil Kumar (2006) Several reasons like assured canal irrigation, changing eating habits, local ecological conditions, improved market facilities and institutional support of MSP by the government have been the major factors for this shift in cropping pattern.

The introduction of HYV seeds has resulted in a new system where farmers started procuring seeds from the *dalaris* (all of them belonging to rich Velama farmers from the same area) who act as intermediaries on behalf of the seed companies. The *dalari* supplies the seeds without any cash payment (the price of seed will be deducted from the payment for the harvested crop) and in return the farmers are obliged to sell their harvest to the same *dalari*. This system in most of the cases works in favour of farmers in terms of assured quality of seed along with better price for the crop. However, sometimes, it could be disadvantageous for the small farmers

where interest rates are charged for the seed bags as well as delay in payment for the harvest on behalf of the *dalari*.

The new technology has resulted in the increasing dependence of farmers over the market for procuring various other inputs for agriculture like fertilizers and pesticides. The rich Velama farmers are in an advantageous position in availing such inputs at cheap rate (due to their bulk purchase) and also in terms of buying these inputs on credit without even paying interest from the market. On the other hand the small and marginal landholding farmers (most of them belonging to OBC and Dalit caste) do not enjoy such privilege and they usually have to pay cash while purchasing inputs and in case of purchase on credit they have to bear the interest charges upon the total cost of the inputs bought from the shops.

The new technology induced prosperity has resulted in the decline of family labour in agriculture among the rich Velama farmers. The intensive cultivation methods along with the increased cultivated area forced them to depend more on labour for various farm operations. On the other hand, majority of the farmers from the small and medium landholdings further intensified their own family members' participation in cultivation. Apart from this, they started depending more on reciprocity of labour services among their own caste members. This enabled them to reduce their expenditure on increasing labour charges in the changing agrarian scenario. The marginal landholding farmers, due to their small landholding size, continue to engage their own family members for various farm operations.

The 'new' technology in terms of canal irrigation and HYV seeds require an effective cultivation and timely operation of various works in cultivation. The increased competitiveness and capitalistic orientation among the rich farmers has resulted in the heavy mechanization of agriculture displacing human labour from most of the farm operations. The same is observed many other studies like Hanumantha Rao (1972), Joshi (1979), Jose (1984), Gorter (1989), Epstein et. al (1998) and Mohanty (1999) etc. This mechanization process has initially begun with motor wells; later, usage of tractor has increased and finally reached its peak level with

harvester machines. On the other hand, those farmers who do not own such machinery have started hiring them from their owners on rent basis. This has further resulted in dependency relationships between these two categories of farmers while conducting various farm operations.

III

The new technology induced agriculture growth has resulted in the emergence of new rich class of Velama farmers whose interests clashed with feudal landlords' interests. The capitalist orientation of this new enterprising class along with the activities of naxalites has resulted in the decline of feudal elements in agriculture. The bargaining capacity of attached labour has increased in terms of better wages and treatment at work place along with the freedom in choosing their employer. These findings support the arguments put forwarded by previous studies of Dasgupta (1984), Ramachandran (1990), Breman (1993) Jodhka (1994) and Mohan Rao (1998) in terms of increasing freedom levels of attached labour. There is a clear downtrend in the number of people working as attached labour in the recent years. However, the debt dependency of the poor households on rich Velama farmers is the crucial factor for the presence of attached labourers even though in a limited number.

As observed in studies like Sudha Rao (1984), it is true that, in the beginning, new technology has resulted in the increased labour opportunities and demand for labour in agriculture. However, this could survive only for short period because of various tactics of rich farmers in cutting down their expenditure on wages. The rich farmers used the migrant labour to counter the increasing wage demands by the locally available labour. The new technology induced mechanization lead by the enterprising farmers has resulted in the huge loss of labour opportunities in agriculture. Studies of Bhalla (1988), Kalpana Bardhan (1989), Ahuja (1991) and Sri Vastava (1999) found similar trends of displacement of labour in agriculture.

On the other hand, the new technology in agriculture has lead to the emergence of new contractual arrangements of labour in the form of piece rate wage

system while recruiting the labour for various farm operations. These observations from the present study are in line with many other studies like Epstein (1962), Athreya et. al (1990), Shankar (1993), Som (2005) and Revathi (2008). The technology induced agriculture growth has resulted in the increase in wage amounts for agriculture labour over a period of time. The same is found in the studies of Jose (1988), Reddy (1998) and Narayanamoorthy & Deshpande (2003). The tightening of labour market along with the availability of non-farm labour opportunities outside the village and government sponsored wage employment schemes contributed for the increase wage amounts for agriculture labour. However as argued by scholars like Ramachandran et al (2002) in spite of agriculture growth in the village, the living conditions of the agriculture labourers have not improved much in all these years, as they lack ownership of major means of production like land.

IV

The new technology had differential impact upon women because of the gendered division of labour in agriculture. Further, internal stratification of women in terms of caste and class lead to specific variation among them. The same is argued in the studies of Deipica Bagchi (1981) and Ursula Sharma (1982). The new technology induced agriculture growth has resulted in the staying away of upper caste women from engaging in farm operations among rich farmers. On the other hand, women from middle and lower caste farmers continued to work in their own farm lands. In fact, they started working more aggressively by reciprocating exchange of labour among themselves thus contributing for better income with their direct participation in agriculture.

Similar to the findings of Billings & Singh (1970), Bina Agarwal (1984), Sudha Pai (1987) and Bhalla (1989) the female agriculture labour has become the worst affected social group with the introduction of new technology in agriculture. The impact of new technology through mechanization and use of chemicals like weedicides has resulted in the displacement of female labour from most of the works in agriculture. As Athreaya et. al (1990) argued in their study it is found that the new labour arrangements of piece rate wage system proved disadvantageous for the old

age and less capable female labour in availing wage labour opportunities in agriculture. On the other hand, due to the social obligations and restrictions, most of the female agriculture labourers are not able to take advantage of newly emerging non-farm opportunities outside the village. However, the recently introduced wage employment opportunities through MGNREGA have provided some relief for the female agriculture labour in terms alternate source of employment within the village.All these recent positive changes could not provide sufficient wage earning opportunities for majority of the female agriculture labour who as described by Sudha Pai (1987) have become the 'seasonal labour force' due to the introduction of new technology in agriculture.

It is true that there has been a considerable increase in the wage for female agriculture labour due to the new technology induced agriculture growth. However, the loss of labour opportunities in agriculture has nullified this positive impact among the female agriculture labour. Moreover, the new technology in agriculture could not bridge the gap in earnings of male and female agriculture labour by reducing the differences in terms of wage payment. The present study supports the findings of other studies of Ram Singh (1996) and Sunanda (1988) in this regard where the new technology in the long run has further deteriorated the condition of female agriculture labour.

V

The 'new' technology induced agriculture growth has lead to the emergence of new non-farm occupations for different categories of landholdings both inside and outside the village. In case of agriculture labour, construction work has emerged as one of the prominent source of non-farm employment with the establishment several agro-processing industries in the recent years. The same is observed in the studies of Parthasarathy & Anand (1995), Srivastava (1998) and Lanjouw & Shariff (2004) on the availability of labour opportunities in construction work. However, only poor Dalit households have entered into this construction work. The agro-processing industries further created some other casual labour works inside the rice mill that attracted few agriculture labours from non-Dalit castes also. The aggressive participation of Dalits

in the non-farm labour opportunities is also reported in the studies of Reddy & Rao (2008) and Ranjan (2009).

The new technology induced mechanization of agriculture has generated new jobs of driver for the tractor/ harvester machines for good number of young men from the OBC castes. The increased production levels in agriculture has also created wage earning opportunities for the *hamali* labour and good number of OBC and Dalit young men regularly are engaged in this work during the post harvesting period. It is observed that while Dalits are more aggressive in capturing most of the unskilled non-farm labour opportunities whereas OBCs are keen in gaining more income from the skilled non-farm employment.

The new technology induced high levels of productivity and increased profit levels have encouraged many capitalist oriented rich farmers to enter into several enterprising activities. These farmers started diversifying their income in agriculture in establishing several other avenues which is also supported in the study of Upadhya (1988). In this process dairy business, motor mechanic services, seed and agriculture pipe manufacturing plants have come up as a result of this. The rich farmers, have entered in to big enterprises like establishing seed factory and manufacturing units of agriculture pipe and some others are investing their money into real estate business also. The leasing out of heavy machinery like tractor/ harvester has emerged as one of the prominent enterprising activity for their owners. In fact, harvester owners have spread their business to different parts of the state and have beem earning good additional income for all of them. Further, the richest strata of farmers have started establishing huge agro processing industries locally known as rice mills. The establishment of a rice mill requires huge amount of investment. However, by foreseeing the rate of profits in this business good numbers of rich farmers are entering into this business even at the cost of disposing their agriculture lands. Apart from the capitalistic orientation of rich farmers, the institutional support given by the government in terms of providing huge subsidies, cheap credit facilities for the purchase of heavy machinery and in establishing rice mill industries have been the

major pushing factors for the positive attitude of rich farmers to enter into such enterprising activities.

To conclude, the introduction of new technology in agriculture has resulted in the weakening of ‘feudal’ elements in agriculture and capitalist orientation has become the dominant mode of production. Nevertheless, such change has hugely benefitted the top strata landholders brining in richness because of increased productivity in agriculture as well diversification of surplus income into other enterprising activities. The small and medium landholding farmers are able to stabilize their economic position. However, due to their limited size landholdings, they were not able to benefit by the new technology to its fullest capacity. The condition of agriculture labour has not improved much as they could not reap the benefits of agriculture growth due to their lack of access to major means of productions like land. Among these, the condition of female agriculture labour has further deteriorated due to the decline of labour opportunities in agriculture. The role of institutional support through the government policies has also contributed in this process of changing agrarian structure.

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PLATES

Plate 1: Canal in the Village

Plate 2: A tractor driver engaged in ploughing the agricultural land

Plate 3: An unused wooden plough

Plate 4: Female labour engaged in transplanting the paddy seedlings

PLATES

Plate 5: A small farmer returning from the agriculture field

Plate 6: An advertisement poster of a weedicide company

Plate 7: A farmer heading to spray pesticide in his agriculture field

Plate 8: Female labour engaged in harvesting work

PLATES

Plate 9: Harvester machine parked at owner's house in the village

Plate 10: Harvester driver engaged in harvesting the paddy crop

Plate 11: Hamali Labour engaged in loading of paddy grain

Plate 12: Harvester machine dumping the paddy grain in to a tractor

PLATES

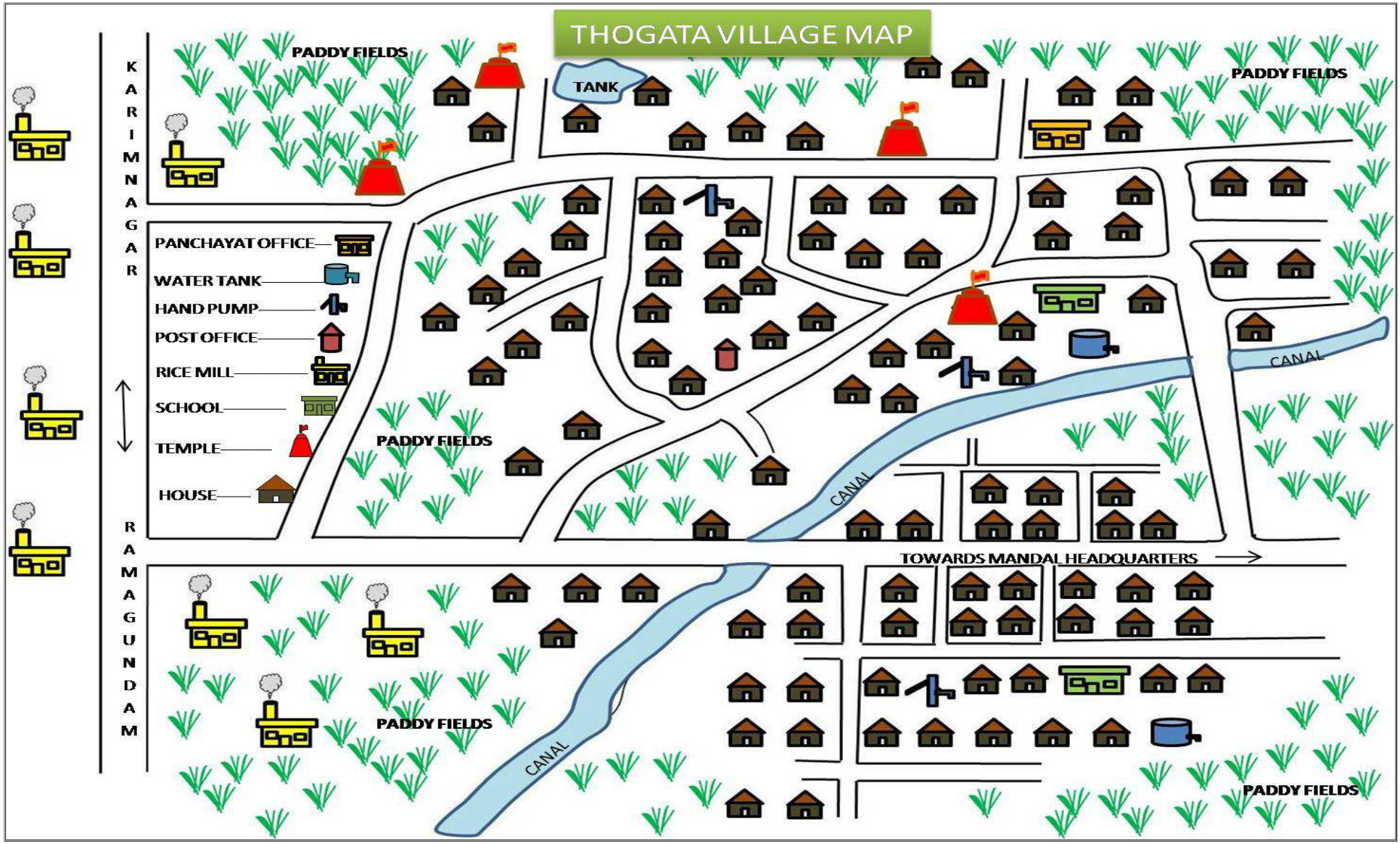
Plate 13: Rice mills located surrounded by the agriculture fields in the outskirts of the village

Plate 14: A farmer collecting the grass that is leftover by the harvesting machine

Plate 15: A *Chinna Paleru* on his way for grazing the cattle

Plate 16: Groups of labourers working under MGNREGA in the village


MAP OF
KARIMNAGAR DISTRICT
GODAVARI RIVER
TO LUXETTIPET
ADILABAD DISTRICT
TO BALHARSHA
MAHARASHTRA STATE
MADHYA PRADESH
N
Kakatiya canal
IBRAHIM PATNAM
MALLAPUR
RAIKAL
SARANGA PUR
DHARMA PURI
NIZAMABAD
KORUTLA
JAGTIAL
GOLLAPALLY
VELGA TOOR
RAMAGUNDAM
MET PALLY
KATHLA PUR
MALLIAL
PEGADAPALLY
DHARMARAM
NIZAMABAD DISTRICT
KODIMYAL
CHENDURTHI
RAMADUGU
CHOPPADANDI
JULA PALLY
PEDDAPALLY
KAMANPUR
MANTHANI
MAHADEVPUR
KATARAM
GANGA DHARA
VEMULAWADA
BOINPALLY
SULTANA BAD
KARIMNAGAR
ODELA
SRIRAM PUR
MUTHARAM
TADICHERLA
KONRAO PET
YELLAREDDY PET
MANAIR
MANA KONDUR
VEENA VANKA
KAMAREDDY
GAMBHI RAOPET
SIRICILLA
ILLANTHA KUNTA
BEJJENKI
THIMMAPUR
KESHAVA PATNAM
JAMMI KUNTA
MUSTABAD
HUZURA BAD
CHIGURU MAMIDI
TO PARKAL
TO HYDERABAD
TO MEDAK DISTRICT
SAI DAPUR
KAMALA PUR
KOHEDA
ELKA TURTHY
TO SIDDIPET
HUSNABAD
BHEEMA DEVARA PALLY
TO WARANGAL FROM KAZIPET
WARANGAL DISTRICT
INDEX
RIVER
DISTRICT BOUNDARY
MANDAL BOUNDARY
ROADS
RAILWAY LINE (BG)
DISTRICT H.Q.
MANDAL H.Q.
KAKATIYA CANAL


THOGATA VILLAGE MAP
PADDY FIELDS
TANK
PADDY FIELDS
KARIMNAGAR
PANCHAYAT OFFICE
WATER TANK
HAND PUMP
POST OFFICE
RICE MILL
SCHOOL
TEMPLE
HOUSE
PADDY FIELDS
CANAL
CANAL
TOWARDS MANDAL HEADQUARTERS
RAMAGUNDAM
PADDY FIELDS
CANAL
PADDY FIELDS

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SYNOPSIS

New Technology and Changing Agrarian Structure: *Case Study of a Telangana Village*

A Thesis submitted to the University of Hyderabad

for the Award of the Degree of

DOCTOR OF PHILOSOPHY

In

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Introduction:

India is an agrarian based society with majority of its population depending on land and residing in rural areas. This is true because even after five decades of economic planning, after independence, the bulk of the country's population continues to live in rural areas (Rao and Nair, 2003: 3349). However, (Beteille: 1980: 107-108) remarks that notwithstanding its demographic sense the village had a design in which basic values of Indian civilization were reflected. Hence, as described by Jodhka (2002), any study that looks in the understanding of changes at village level attracts the social scientists in India because of its 'microcosm' nature of Indian society. As observed by other scholars like Breman (1993), Jodhka (2012) agriculture and its allied activities have been the major source of income for majority of the population that live in villages in India.

However, the interest of sociologists and social anthropologists in the study of agrarian social structure and change is a very recent phenomenon. It was only from 1960s that the relationship between landownership, control and use of land and social structure has been increasingly brought into focus by some sociologists and social anthropologists. (Beteille, 1974; Breman, 1993; Jodhka, 2003). The study of agrarian systems is so far been little explored by the anthropologists in India. Broadly this research area looks into the issues like land and its utilization for productive purposes. There is no need to emphasize further on the requirement of such studies in a land based social economic system like India.

Beginning from the pre colonial rule of British, then during colonial rule and finally the post independence period has witnessed several changes that took place in the agrarian structure in India. During each of these historical phases the state had been intervening in the issues of organization of agriculture production in the rural India for various political and economic reasons. Among these, the introduction of new technology in terms of modern agriculture inputs like HYV seeds, fertilizers and pesticides along with surface canal irrigation system under the umbrella of 'green revolution' program has been the most crucial one. The new technology in agriculture in India has begun in the late 1960s and was being implemented in selective regions of India initially, and then later expanded to many other parts of India. The impact of this new technology upon the

local agrarian structures has been an interesting topic of investigation for the social scientists due to the diversity factor of among different regions in India.

This becomes the background for the present study and it tries to pose the following research questions through this study.

Statement of the Problem:

- Can we generalize the findings of these studies as an all India phenomena?
- Does the introduction of modern technologies such as 'green revolution' in Indian agriculture result a similar kind of impact or does it show variation for different regions?
- Can we ignore the historical understanding of such agrarian change which is evolving into different shapes at different periods of time?
- What is the impact this new technology in organizing different agricultural activities and the labour arrangements?
- What is the nature and level of impact of such technology among different socio-economic categories of agrarian population?
- What are 'old' practices of agrarian population that disappeared and what are the new practices that are emerging in the contemporary time?

The present study tries to analyze the process of introduction of 'new' technology in agriculture and consequent changes that took place in the local agrarian structure. In this study, the 'new' technology is referred to the introduction of modern inputs like HYV seeds, fertilizers, and pesticides along with the irrigation facility through canal water for agriculture. For this purpose, a micro level village study was taken up in Telangana region of Andhra Pradesh. The study region falls in the semi-arid dry region and historically is known for its stagnated agriculture and feudal type of cultivation practices even a few decades back. The few pockets of the region has started witnessing the 'new' technology in agriculture as part of government sponsored 'green revolution' program only till recently, unlike many other parts of India where such programs were implemented long before. Hence, the understanding the impact of 'new' technology in agriculture through this study will bring up the contemporary trends of agrarian change in

the region. For many years, village level empirical studies have been the testing ground, for the analysis of agrarian change in India among the social scientists. In this background, the present study brings up the historical analysis of changes that took place in a Telangana village as a result of introduction of 'new' technology in agriculture.

Objectives of the Study:

1. To understand the agrarian history of the study region/village before the introduction of new technology.
2. To examine the agrarian class structure in the village.
3. To describe the organization of agriculture production among different socio-economic categories of farmers.
4. To analyze the emerging trends of agrarian change in the village.
5. To delineate the rise of various non-farm occupations among the agriculture labour and farmer households.

Methodology:

The present study adapts case study method in trying to understand the changing agrarian structure. For this purpose, an intensive ethnographic village study was conducted. The selection of this village for the purpose of the study has gone through different stages of selection process before zeroing on the study village. Several parameters were considered in this process. In selecting the study village, initially census data was referred to collect the list of all the villages in the district. Among these, villages that fall in the command area (that come under canal irrigated cultivating area) are only shortlisted. Lists of villages that consist of 200-400 households were shortlisted from each mandal that falls in the command area. From this, a preliminary pilot study was conducted among two to three randomly selected villages from each mandal of the command area. During the personal visits of such villages details on cropping pattern, occupational structure, predominance of agriculture, caste composition are collected. The present study village was selected on the basis of availability of canal irrigation, predominance of agriculture; its allied occupations and multi-caste composition; and finally the medium size of the households in the village.

Study Area:

The study is conducted in Telangana region of Andhra Pradesh, which is one of the most underdeveloped regions in India. Telangana region has witnessed the strong oppressive rule of feudal landlords, which in turn resulted in a massive peasant armed struggle against this exploitation in the pre-independence period. The region was being neglected constantly in the post-independence period also by the rulers. Geographically the region belongs to a semi-arid and dry type where, agriculture is still dependent on traditional sources of irrigation like rain and private well irrigation with some exceptions where canal irrigation was introduced in few pockets. In the recent time, the dry parts of the region have witnessed the suicides of farmers, because of the crop failure, indebtedness and lack of irrigation facilities. On the other side of the coin, we have also witnessed huge growth in agriculture production among the canal irrigated areas in the same Telangana region. During 1985-2001 periods, growth rates in Telangana agriculture have been higher when compared with other non-Telangana districts, as well as entire Andhra Pradesh state. In particular, some of the northern Telangana districts (it covers Karimnagar District) were ahead in agriculture growth when compared with southern districts for this period. There has been a high growth in the use of HYV seeds, fertilizers and pesticides by the farmers during this period (Vakulabharanam, 2004: 1422-1423). It is very well recognized that Telangana has its own social, cultural, economic and political history and the study of changing agrarian structure in the wake of recent agriculture growth in the region appeals more for a social scientist.

One village has been selected from Karimnagar District of the Telangana region to conduct intensive fieldwork as part of the present study. Karimnagar is one of the ten districts of Telangana region located in the northern part of it. The district has witnessed an oppressive exploitation of feudal landlords in the history where acute disparities of income levels were present among the rural population along with the stagnant agriculture economy during the pre-independence period. This situation has not improved further even during the post independence period, which lead to the much noted radical peasant movements of Sircilla and Jagityal against the exploitation of feudal landlords in the district

Nevertheless, from the last couple of decades few areas of this district have been witnessing an enormous growth in terms of agriculture with the introduction of canal irrigation through Sri Ram Sagar Project popularly known as SRSP. In fact, in the recent statistics released by the government, the district has stood first in the production of paddy grain in the state of Andhra Pradesh. The agrarian social structure in the district has been undergoing several changes from the feudal set up to the recent capitalist oriented cultivation with the introduction of 'new technology' in agriculture in terms of providing canal irrigation along with the modern inputs of agriculture like HYV seeds, fertilizers and pesticides. The study village falls in the command area of the district which has received the above mentioned technology inputs as part of the 'green revolution' program in India.

Chapterization:

The first chapter 'Introduction' deals with the study and its introduction to the reader. It brings up the historical understanding of the emergence of village studies and later on agrarian studies in the Indian academia and its relevance in the contemporary times. The literature review in this chapter broadly explains the different perspectives of agrarian change that were analyzed by different set of scholars in the social science literature. The objectives of the study, methodology, study area and tools and methods of data collections are explained. A brief note on the organization of the thesis into various chapters is presented.

The second chapter 'agrarian history' brings up the history of agrarian social structure of Telangana region in general, and the study village in particular. The agrarian history of the study village is further divided into two periods of time namely pre-canal and post-canal period. It contains the details on the condition of people, cropping pattern, division of labour in agriculture, feudal structure, emergence of political factions, counter activities against the landlords and democratization of local electoral bodies during both the periods.

The third chapter ‘ethnographic profile of the village’, describes the socio-economic, cultural and political aspects of the village population. It begins with the introduction of the geographical location along with physical aspects of the region along with the village. It contains the description of the village population in terms of the size of households, caste, gender and age wise composition, occupational structure, literacy levels, religious aspects, economic organization, political organization and communication facilities within the village.

The fourth chapter ‘agrarian class structure’ explains the position of all households in the village in terms of local agrarian hierarchy. It explains the distribution of households in the village in terms of caste and size of ownership of land. Further it presents the details on type of land, sources of irrigation, ownership of agricultural instruments like tractor, harvester, pump sets and sprayers along with the ownership of livestock etc. across the households in the village. Data on credit details incurred by these households for different purposes are also included in this chapter.

The fifth chapter ‘organization of agriculture production’ in detail, gives an ethnographic account of the various activities that are involved in the process of cultivation by the farmers in the village. This chapter describes the performance of agricultural works like procurement of seeds, fertilizers and pesticides, preparation of soil, ploughing, transplantation, harvesting, transporting and finally marketing of the crop managed by the farmers in the village. The details on this are collected from various farmers belonging to different socio-economic categories in the village.

The sixth chapter ‘trends of agrarian change’ analyzes the changing agrarian scenario in the village in terms of cropping pattern, mechanization of agriculture, changes in the ‘attached labour’ system, labour relations and women.

The seventh chapter deals with the process of 'emergence of various non-farm occupations' for both farmers and agricultural labourers in the village. The agriculture growth in the village has started providing different venues of opportunities for both agriculture labour and enterprising farmers both inside and outside the village, details of which are explained in this chapter.

The eight chapter which is the final one, brings up the brief 'summary and conclusion' that are derived from the findings of the study. This chapter sums up the process of changing agrarian structure in the study village due to the impact of 'new' technology over a period of time through a historical understanding.

Findings of the Study:

The introduction of 'new' technology in terms of HYV seeds along with assured supply of canal water has resulted in intensive cultivation methods. The former subsistent oriented agrarian economy was transformed into a more dynamic and surplus producing market oriented agriculture production. The dominant landholding classes took this opportunity to accumulate more and more agriculture land under cultivation by buying it from others. Majority of the land purchases were made from the non-cultivating social groups whose primary occupation is other than agriculture. In the process, the Velamas have emerged as the rich class of farmers over a period of time. However, the new technology did not lead to the polarization of landowning classes in the agrarian structure. Many of the small and medium landholding farmers continue to hold their agriculture lands more over they also took part in the utilization of new technology in agriculture. However, due to their limited size of ownership of agriculture land they could not reap the benefits of the new technology to its fullest capacity. These findings are similar to the previous studies of Athreya et al (1989), Harriss (1992) and Anil Kumar (2006) in which the introduction of 'new' technology in agriculture has not resulted in the depeasantization among the landholding classes in India.

The new technology could not break down the correlation between landholding categories and caste categories that has been prevailing since ages. The Velamas, who belong to the upper caste, continue to be the dominant landholders with this most of the upper strata landholdings are owned by them. The majority of the small and medium landholdings are comprised of middle caste groups like Golla, Tenugu, Chakali etc. However, the new technology has resulted in the emergence of new rich peasant class among few OBC caste households. A similar trend has been observed in some other studies like Anil Kumar (1999), Alakh Sharma (2005) and many other village studies from Telangana region. The de-concentration of landholdings among the richest Velamas due to diversification of income and expenditure on social occasions of marriage has provided ample opportunity for such middle caste farmers to accumulate more agriculture land further to move upward in the local class structure. Nevertheless, Dalits, are still comprised of marginal landholdings along with huge presence of landless labour households.

The new technology has further augmented the process of development of forces of production in agriculture. This has further resulted in the accumulation of superior means of production like pump sets, tractors and harvesters by the upper strata landholding farmers. Most of the heavy machinery of tractors/harvesters is owned by Velamas along with few owners from rich Golla farmers. The institutional support provided by the government in terms of huge amounts of subsidies further encouraged many upward mobile farmers from these castes to buy such machinery. The wider social network that is ascribed by the Velamas due to their better position in the local social hierarchy always helped them in availing hassle free formal credit facilities for agriculture purpose. On the other hand, lack of such advantage among the lower strata of farmers is forcing them to depend on rich Velamas to avail credit for any agriculture purpose. The above findings further validate the conclusions that are derived in earlier studies of Berreman (1983), Omvedt (1980) and Chakravarti (2001) while analyzing the link between caste and class in rural India.

The introduction of new technology in agriculture has lead to the decline in the absente landlordism resulting in the reduction of tenancy contracts. This correlates with findings from other studies like Parthasarathy & Pothana (1983), Dasgupta (1984), Lerche (1998) and Ballabh & Pandey (1999). Along with the sub-division of landholdings, the new technology induced agriculture prosperity has encouraged the richest strata of landholders to opt for direct cultivation instead of leasing out to others for cultivation.

The introduction of new technology in agriculture over a period of time has lead to the shift in cropping pattern from the cultivation of multiple dry crops to mono cultivation of wet crop of paddy. The same trend is observed in many other studies that were previously conducted by Epstein (1962), Breman (1985), Anil Kumar (2006) Several reasons like assured canal irrigation, changing eating habits, local ecological conditions, improved market facilities and institutional support of MSP by the government have been the major factors for this shift in cropping pattern.

The introduction of HYV seeds has resulted in a new system where farmers started procuring seeds from the *dalaris* (all of them belonging to rich Velama farmers from the same area) who act as intermediaries on behalf of the seed companies. The *dalari* supplies the seeds without any cash payment (the price of seed will be deducted from the payment for the harvested crop) and in return the farmers are obliged to sell their harvest to the same *dalari*. This system in most of the cases works in favour of farmers in terms of assured quality of seed along with better price for the crop. However, sometimes, it could be disadvantageous for the small farmers where interest rates are charged for the seed bags as well as delay in payment for the harvest on behalf of the *dalari*.

The new technology has resulted in the increasing dependence of farmers over the market for procuring various other inputs for agriculture like fertilizers and pesticides. The rich Velama farmers are in an advantageous position in availing such inputs at cheap rate (due to their bulk purchase) and also in terms of buying these inputs on credit without

even paying interest from the market. On the other hand the small and marginal landholding farmers (most of them belonging to OBC and Dalit caste) do not enjoy such privilege and they usually have to pay cash while purchasing inputs and in case of purchase on credit they have to bear the interest charges upon the total cost of the inputs bought from the shops.

The new technology induced prosperity has resulted in the decline of family labour in agriculture among the rich Velama farmers. The intensive cultivation methods along with the increased cultivated area forced them to depend more on labour for various farm operations. On the other hand, majority of the farmers from the small and medium landholdings further intensified their own family members' participation in cultivation. Apart from this, they started depending more on reciprocity of labour services among their own caste members. This enabled them to reduce their expenditure on increasing labour charges in the changing agrarian scenario. The marginal landholding farmers, due to their small landholding size, continue to engage their own family members for various farm operations.

The 'new' technology in terms of canal irrigation and HYV seeds require an effective cultivation and timely operation of various works in cultivation. The increased competitiveness and capitalistic orientation among the rich farmers has resulted in the heavy mechanization of agriculture displacing human labour from most of the farm operations. The same is observed many other studies like Hanumantha Rao (1972), Joshi (1979), Jose (1984), Gorter (1989), Epstein et. al (1998) and Mohanty (1999) etc. This mechanization process has initially begun with motor wells; later, usage of tractor has increased and finally reached its peak level with harvester machines. On the other hand, those farmers who do not own such machinery have started hiring them from their owners on rent basis. This has further resulted in dependency relationships between these two categories of farmers while conducting various farm operations.

The new technology induced agriculture growth has resulted in the emergence of new rich class of Velama farmers whose interests clashed with feudal landlords' interests. The capitalist orientation of this new enterprising class along with the activities of naxalites has resulted in the decline of feudal elements in agriculture. The bargaining capacity of attached labour has increased in terms of better wages and treatment at work place along with the freedom in choosing their employer. These findings support the arguments put forwarded by previous studies of Dasgupta (1984), Ramachandran (1990), Breman (1993) Jodhka (1994) and Mohan Rao (1998) in terms of increasing freedom levels of attached labour. There is a clear downtrend in the number of people working as attached labour in the recent years. However, the debt dependency of the poor households on rich Velama farmers is the crucial factor for the presence of attached labourers even though in a limited number.

As observed in studies like Sudha Rao (1984), it is true that, in the beginning, new technology has resulted in the increased labour opportunities and demand for labour in agriculture. However, this could survive only for short period because of various tactics of rich farmers in cutting down their expenditure on wages. The rich farmers used the migrant labour to counter the increasing wage demands by the locally available labour. The new technology induced mechanization lead by the enterprising farmers has resulted in the huge loss of labour opportunities in agriculture. Studies of Bhalla (1988), Kalpana Bardhan (1989), Ahuja (1991) and Sri Vastava (1999) found similar trends of displacement of labour in agriculture.

On the other hand, the new technology in agriculture has lead to the emergence of new contractual arrangements of labour in the form of piece rate wage system while recruiting the labour for various farm operations. These observations from the present study are in line with many other studies like Epstein (1962), Athreya et. al (1990), Shankar (1993), Som (2005) and Revathi (2008). The technology induced agriculture growth has resulted in the increase in wage amounts for agriculture labour over a period of time. The same is found in the studies of Jose (1988), Reddy (1998) and Narayanamoorthy & Deshpande (2003). The tightening of labour market along with the availability of non-farm labour opportunities outside the village and government

sponsored wage employment schemes contributed for the increase wage amounts for agriculture labour. However as argued by scholars like Ramachandran et al (2002) in spite of agriculture growth in the village, the living conditions of the agriculture labourers have not improved much in all these years, as they lack ownership of major means of production like land.

The new technology had differential impact upon women because of the gendered division of labour in agriculture. Further, internal stratification of women in terms of caste and class lead to specific variation among them. The same is argued in the studies of Deipica Bagchi (1981) and Ursula Sharma (1982). The new technology induced agriculture growth has resulted in the staying away of upper caste women from engaging in farm operations among rich farmers. On the other hand, women from middle and lower caste farmers continued to work in their own farm lands. In fact, they started working more aggressively by reciprocating exchange of labour among themselves thus contributing for better income with their direct participation in agriculture.

Similar to the findings of Billings & Singh (1970), Bina Agarwal (1984), Sudha Pai (1987) and Bhalla (1989) the female agriculture labour has become the worst affected social group with the introduction of new technology in agriculture. The impact of new technology through mechanization and use of chemicals like weedicides has resulted in the displacement of female labour from most of the works in agriculture. As Athreaya et. al (1990) argued in their study it is found that the new labour arrangements of piece rate wage system proved disadvantageous for the old age and less capable female labour in availing wage labour opportunities in agriculture. On the other hand, due to the social obligations and restrictions, most of the female agriculture labourers are not able to take advantage of newly emerging non-farm opportunities outside the village. However, the recently introduced wage employment opportunities through MGNREGA have provided some relief for the female agriculture labour in terms alternate source of employment within the village.All these recent positive changes could not provide sufficient wage earning opportunities for majority of the female agriculture labour who as described by

Sudha Pai (1987) have become the 'seasonal labour force' due to the introduction of new technology in agriculture.

It is true that there has been a considerable increase in the wage for female agriculture labour due to the new technology induced agriculture growth. However, the loss of labour opportunities in agriculture has nullified this positive impact among the female agriculture labour. Moreover, the new technology in agriculture could not bridge the gap in earnings of male and female agriculture labour by reducing the differences in terms of wage payment. The present study supports the findings of other studies of Ram Singh (1996) and Sunanda (1988) in this regard where the new technology in the long run has further deteriorated the condition of female agriculture labour.

The 'new' technology induced agriculture growth has lead to the emergence of new non-farm occupations for different categories of landholdings both inside and outside the village. In case of agriculture labour, construction work has emerged as one of the prominent source of non-farm employment with the establishment several agro-processing industries in the recent years. The same is observed in the studies of Parthasarathy & Anand (1995), Srivastava (1998) and Lanjouw & Shariff (2004) on the availability of labour opportunities in construction work. However, only poor Dalit households have entered into this construction work. The agro-processing industries further created some other casual labour works inside the rice mill that attracted few agriculture labours from non-Dalit castes also. The aggressive participation of Dalits in the non-farm labour opportunities is also reported in the studies of Reddy & Rao (2008) and Ranjan (2009).

The new technology induced mechanization of agriculture has generated new jobs of driver for the tractor/ harvester machines for good number of young men from the OBC castes. The increased production levels in agriculture has also created wage earning opportunities for the *hamali* labour and good number of OBC and Dalit young men regularly are engaged in this work during the post harvesting period. It is observed that while Dalits are more aggressive in capturing most of the unskilled non-farm labour

opportunities whereas OBCs are keen in gaining more income from the skilled non-farm employment.

The new technology induced high levels of productivity and increased profit levels have encouraged many capitalist oriented rich farmers to enter into several enterprising activities. These farmers started diversifying their income in agriculture in establishing several other avenues which is also supported in the study of Upadhya (1988). In this process dairy business, motor mechanic services, seed and agriculture pipe manufacturing plants have come up as a result of this. The rich farmers have entered in to big enterprises like establishing seed factory and manufacturing units of agriculture pipe and some others are investing their money into real estate business also. The leasing out of heavy machinery like tractor/ harvester has emerged as one of the prominent enterprising activity for their owners. In fact, harvester owners have spread their business to different parts of the state and have been earning good additional income for all of them. Further, the richest strata of farmers have started establishing huge agro processing industries locally known as rice mills. The establishment of a rice mill requires huge amount of investment. However, by foreseeing the rate of profits in this business good numbers of rich farmers are entering into this business even at the cost of disposing their agriculture lands. Apart from the capitalistic orientation of rich farmers, the institutional support given by the government in terms of providing huge subsidies, cheap credit facilities for the purchase of heavy machinery and in establishing rice mill industries have been the major pushing factors for the positive attitude of rich farmers to enter into such enterprising activities.

To conclude, the introduction of new technology in agriculture has resulted in the weakening of ‘feudal’ elements in agriculture and capitalist orientation has become the dominant mode of production. Nevertheless, such change has hugely benefitted the top strata landholders brining in richness because of increased productivity in agriculture as well diversification of surplus income into other enterprising activities. The small and medium landholding farmers are able to stabilize their economic position. However, due to their limited size landholdings, they were not able to benefit by the new technology to its fullest capacity. The condition of agriculture labour has not improved much as they

could not reap the benefits of agriculture growth due to their lack of access to major means of productions like land. Among these, the condition of female agriculture labour has further deteriorated due to the decline of labour opportunities in agriculture. The role of institutional support through the government policies has also contributed in this process of changing agrarian structure.