

**LABOUR MARKET IN KERALA: CHOICE, COMPOSITION AND
MOBILITY OF OCCUPATION AMONG SCHEDULED TRIBES**

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I, **PRASHOBA.P**, do hereby affirm that the project entitled '**LABOUR MARKET IN KERALA: CHOICE, COMPOSITION AND MOBILITY OF OCCUPATION AMONG SCHEDULED TRIBES**' submitted to the University of Calicut for the award of the degree of Doctor of Philosophy in Economics is a bona fide record of research work carried out by me under the guidance and supervision of Dr. Chacko Jose. P Associate Professor of Economics, Sacred Heart College, Chalakudy and Dr. Shyjan. D Associate Professor and Head, Department of Economics, Dr. John Matthai Centre, University of Calicut. I also declare that no part of this thesis has been presented for the award of any degree, diploma, fellowship, or other similar title or recognition of any University/Institution before.

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Dedicated to My Parents and Daughter

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LIST OF ABBREVIATIONS

ABBREVIATIONS	DESCRIPTION
EUS	Employment and Unemployment Survey
GVA	Gross Value Added
GSVA	Gross State Value Added
PS	Principal Status
SS	Subsidiary Status
US	Usual Status
ILO	International Labour Organisation
NIC	National Industrial Classification
NCO	National Classification of Occupation
LFPR	Labour Force Participation Rate
WPR	Worker Population Ratio/ Work Participation Rate
PU	Persons Unemployed
ST	Scheduled Tribes
SC	Scheduled Castes
OBC	Other Backward Classes
SG	Social Group
HH	Household Type
NSSO	National Sample Survey Organisation
NGO	Non- Governmental Organization
NA	Not Applicable
SSB	Social Security Benefits

ABSTRACT

LABOUR MARKET IN KERALA: CHOICE, COMPOSITION AND MOBILITY OF OCCUPATION AMONG SCHEDULED TRIBES

Structural transformation is explained as the process by which the relative importance of different sectors changes overtime, as resources (capital and workers) are moved from low to high-productivity sectors. As the economy develops, there will a shift in the economic activities from primary sector to secondary sector and tertiary sectors. The vast empirical studies of Clark (1940), Fisher (1952), Kuznets (1966, 1969) supported the same. Although this has been a characteristic feature of the development processes of other parts of East and Southeast Asia, in India (and South Asia in general) the shift from agriculture to manufacturing has not yet taken place to the same extent (ILO 2017).

Compared to other Indian states, Kerala has well developed employment structure with lower percentage of workforce dependent on primary sector compared to the national average (Eapen 1994). At current prices, the primary, secondary and tertiary sectors contributed 13.20 per cent, 24.24 per cent, and 62.56 per cent respectively to the Gross State Value Added 2017-18 period (Source: Department of Economics and Statistics).

The benefits of the development that the Kerala economy experienced so far has not reached in the same way to the tribal communities of Kerala (Kunhaman 1986). Around 80 percent of tribal population is still stuck with primary sector for their subsistence (Shyjan and Sunitha, 2009). A higher proportion of the general population excluding SC and ST is engaged in tertiary sector over the period. That is, change to some extent by passed the poorest section of the Indian economy especially the scheduled castes and scheduled tribes compared to the upper caste and other backward classes. The situation of the tribal communities in not better off even in a state like Kerala which is well prominent for its high social indicators and is well known as Kerala model of development. All these social indicators became the hurdle for the betterment of tribals in the state of Kerala as the government is providing everything freely for their social development in the belief that it will be helpful for economic development but in effect they are still the most vulnerable among different social groups.

The existing body of literature discusses the issues related to labour market. There is extensive studies on tribal communities in Kerala in various aspects like health, education and financial inclusion. Only few studies concentrated on the employment aspects of the

tribal communities and none of the studies explored the sectorial and occupational composition and transformation among the tribal communities and the factors influencing the occupational selection of the tribal workers in Kerala. In this backdrop, it is pertinent to look into the socio-economic and labour market developments of the scheduled tribes in Kerala.

The objectives of the present study are to understand the labour market participation of the tribals in the state of Kerala, to analyse the sectorial and occupational distribution among tribals in Kerala, to analyse the occupational transformation among selected tribal communities in the study area and to examine the major factors that determines the choice of occupation among selected tribal communities. The present study is based on both primary and secondary data. The secondary data were collected from the unit level data on Employment and Unemployment Survey of National Sample Survey Organization 68th round and Census data 1981-2011. Primary data were collected from 616 sample households consisting of 193 Paniyan, 85 Kurichchan, 63 Kurumans, 45 Kattunayaka, 67 Irular, 97 Malai Arayan, and 64 Muthuvan households, spread across Wayanad, Idukki and Palakkad. A detailed analysis is made labour market participation of tribal communities in Kerala, sectorial and occupational composition and transformation among the major tribal communities in Kerala and the factors that influence the occupational selection of major tribal communities in tribal concentrated districts.

The study brought out the fact that the tribal communities are leftovers in the labour market of Kerala. They are largely engaged in those works where the other social groups are reluctant to work. Lack of education, land holdings, accessibility to workplace in terms of distance and road connectivity and attitude plays hindrances in their economic development thereby social development. There is also inter-tribal variations in the labour market participation of tribal communities. Malai Arayan, Kuruman and Kurichchan, the forward tribes, have shown better condition in the labour market compared to the backward tribes, Paniyan, Kattunayakan, Irular and Muthuvan. Regardless of the huge programmes initiated by various governments to bring up the excluders among the excluded, its implementation remains poor. Among the outliers also, the rich is becoming richer and the poor remains poor. This backwardness is because of the lack of proper implementation of land reforms, educational policies and programmes and social development programmes and lack of accessibility to the opportunities which other social groups enjoyed in the mid- 80's like migration and employment opportunities along with their attitude to move away from their

native place in the belief that it will ruin their culture, beliefs and ethnicity. Along with this, the skills they achieved did not seem to have any marketable value, which have to rectify soon. They also rejected high paid works and other opportunities because of misbeliefs and proper education. The study reiterates the urgent need for overhauling the existing labour market mechanism most marginalised communities like tribal folks.

Chapter I

INTRODUCTION

- *An Over view*
 - *Review of Literature*
 - *Research Gap and statement*
 - *Objectives of the study*
 - *Hypothesis*
 - *Data Sources and Methodology*
 - *Tools for Analysis*
 - *Limitations*
 - *Chapter Scheme*
-

1.1 An Overview

Structural transformation is explained as the process by which the relative importance of different sectors changes overtime, as resources (capital and workers) are moved from low to high-productivity sectors. As the economy develops, there will a shift in the economic activities from primary sector to secondary sector and tertiary sectors. The vast empirical studies of Clark (1940), Kuznets (1966, 1969) supported the same. Although this has been a characteristic feature of the development processes of other parts of East and Southeast Asia, in India (and South Asia in general) the shift from agriculture to manufacturing has not yet taken place to the same extent (ILO 2017). In developing economies, the pattern of development is not same (Bhalla 1997) especially in rural areas. The employment structure moves slowly and gradually. This is true in the case of India. In India even though the contribution of service sector to Gross Value Added is high, its contribution to employment is low compared to primary sector. According to the latest report of ministry of statistics and programme implementation (MOSPI 2018-19) Agriculture and allied sector shares 15.87 percent, industry sector contributes 29.73 percent and service sector accounts for 54.40 per cent of Gross Value Added (GVA) at current prices while employability of different sectors gives a different picture. In 2018, 43.86 percent of the work forces are dependent on agriculture, 24.69 percent on industry, and 31.45 percent on services.

Compared to other Indian states, Kerala has well developed employment structure with lower percentage of workforce dependent on primary sector compared to the national average (Eapen 1994). At current prices, the primary, secondary and tertiary sectors contributed 13.20 per cent, 24.24 per cent, and 62.56 per cent respectively to the Gross State Value Added 2017-18 period¹. Likewise service sector is the largest employment provider in Kerala. According to Labour Bureau GOI, report 2015-16, 50.2 percent workers are engaged in service sector 27.5 in secondary and 22.3 percent in primary sector respectively. Along with that there is statistical evidence of progressive shift in employment from primary to tertiary, often neglecting the secondary sector. The benefits of the development that the Kerala economy experienced so far has not reached in the same way to the tribal communities of Kerala (Kunhaman 1986). Around 80 percent of tribal population is still stuck with primary

¹Department of Economics and Statistics, Kerala Economic Review Government of Kerala, 2018.

sector for their subsistence (Shyjan and Sunitha, 2009). A higher proportion of the general population excluding SC and ST is engaged in tertiary sector over the period. That is, change to some extent by passed the poorest section of the Indian economy especially the scheduled castes and scheduled tribes compared to the upper caste and other backward classes.

The situation of the tribal communities is not better off even in a state like Kerala which is well prominent for its high social indicators and is well known as Kerala model of development. All these social indicators became the hurdle for the betterment of tribals in the state of Kerala as the government is providing everything freely for their social development in the belief that it will be helpful for economic development but in effect they are still the most vulnerable among different social groups. But when compared to tribals of other states, we can see that the tribals in Kerala are better off next to the Scheduled tribes of Tamil Nadu (Kerala economic review, 2016). But here the fact is for a state well-known for its “Kerala model of development” which is comparable to the developed countries, created disproportionate development. That is, Compared to the status of general population, the status of outlier communities is pathetic.

The land reforms in Kerala during 1960’s and other reforms deteriorated the situation of the tribals. First, they were forced out of forest. Second, the land distribution which was not implemented properly, made them landless. They could not find any other source of income for subsistence as they could not cop up with the changing requirements of the modern labour market. Lack of education and skills required for modern jobs and the non- usage of modern techniques in agriculture became the root cause for trapping them in utter poverty. The vicious circle of poverty continues through the generations.

When we go deep into the labour market of Kerala, we can see a paradox in the labour market that though this is the state with higher wage rate and highest number of out migrants it employs migrant workers on a large scale in agriculture and construction sectors. This shows the preference of the Keralites towards a white collar job. It can be considered one of the major reasons for the deterioration of the agricultural sector of Kerala. The ST communities in the state are mostly engaged in agriculture and related activities in most of the tribal dominant districts of Wayanad, Idukki and Kasaragod. But the tribal communities

in Palakkad are engaged in secondary and related activities. That is, they are engaged highly in unorganised sector which is neither secured nor profitable.

The following review shows the labour market of India and Kerala and the situation of tribals in the labour market. A brief discussion is given for separately analysing the conditions of women in the labour market as they are also considered as excluded, though genderly.

1.2 Review of Literature

Labour market in India and Kerala by different authors is detailed in this section. A clear picture of the tribals in the state is also detailed here. The review part is further divided into 3 sections. First section details Labour market of India and Kerala. Second sections give a detailed picture of the tribals in the state of Kerala and the third section briefs on the role of women in the labour market.

1.2.1 Labour market of India and Kerala

Development experience, especially since the mid-1950s, gives a clear picture of the transformation of the Indian economy from the traditional agriculture sector to the modern non- agriculture sectors. So many theories like Lewis, Fei-ranis, and Kuznets support the theme. As economy grows, the economy will experience a movement in their labour market from the traditional economy to a modern one. There are so many literatures which supports the same and the factors that influence this movement which is studied in detail in this section. Apart from this, readings are made on the pattern of employment of various social groups and the factors influencing their participation are analysed in detail from the reviews.

Lewis (1954) modelled that in the world as a whole, there is a movement of “surplus labour” from the traditional (also agricultural or informal) sectors to the modern (also industrial or formal) sectors. Kuznets (1966), Galenson (1963) and Udall (1976) also found out that there is a movement towards tertiary/ service sector in the long run as a part of economic growth. In addition to this, Nagaraj (2007) argued in his study that acceleration of economic growth has been accompanied by the structural transformation of the workforce. Over the years, the

agriculture share has declined along with the decline in the domestic output. They also argued that the workers who have withdrawn from agriculture have found employment in the services, not in the industry- which is different from the developed economies in their comparable stage of development. Kuznets in his work modern economic growth further noted that the increase in labour productivity which facilitates the production of same amount of agricultural output (mainly food) by smaller number of people is the factor behind the transition of economies. Those who are not required for agricultural production can shift to manufacturing and consume same amount of food and this is possible only if jobs are available in the manufacturing sector and give extra income per worker. Manufacturing itself does not directly pull workers out of agriculture; rather it pushes workers back into it. But it pulls workers out from agriculture indirectly by generating demand from the residual sectors. Further the structural transition of the workforce involves a movement of workers from agriculture to manufacturing sector and from manufacturing sector to residual sectors, Rastogi (2009). As a support to the above said Vaidyanathan (1986) argue that the non-agricultural activities act as residual activities and the residual workers, not absorbed fully in agriculture spill over into non- agricultural activities. Thus, the latter act as a sponge for excess labour. He also argues that the share of non- agriculture employment varies differently in different states. Fei and Ranis (1975) note that the east Asian tiger economies, Taiwan and South Korea, had reached such a turning point in development by the mid-1960s. Some observers point out that China too is now moving to a stage in which it has little surplus labour left in agriculture Zhang (2011). Fields (2004) supported the argument by documenting that, with the exhaustion of surplus labour reserves in agriculture, the share and absolute size of the agricultural labour force fall and real wages begin to rise in the economy. Venkatanarayana and Naik (2013); Dasgupta and Kar (2018) argue that by 2012 there was indeed a significant (almost 15 percentage point) transfer of labour away from the agricultural sector. But this transfer was insufficient to compensate for the relative stagnation of agricultural output since post- 1991 period, leading to a sharp relative immiserization of those trapped in that sector.

On globalisation and labour market changes, Palo (2006) mentioned that LPG has both positive like increasing education, labour productivity and earnings and negative sides includes are declining rate of employment growth, increasing casualization, growing wage

inequality. The skilled workers are positively influenced and unskilled on the negative side. Behera and Murthy (2013) in their paper mentioned that the occupational transformation in India began to occur since 1983. According to them in the post independent India the growth rate runs faster during the post reform period. Using NSSO, NAS and time series data they argued that the share of agriculture to GDP has declined from 1983 to 2010-11, while that of industry and services increased during the same period. According to the author the transformation taking place in India is comparable to developed countries and the corresponding employment and GDP growth is asymmetrical. Their study also noted that the workers shifted from the informal agriculture to the informal non- agriculture, which leads to the deterioration of the quality of employment. Likewise, Chand, Bhaumik and Srivastava (2014) in their article opined that the labour market is undergoing significant changes mainly due to rising employment opportunity outside agriculture. NSSO data also revealed that the total workforce in rural India has increased annually as against an annual increase of total rural population. The number of male workers increased where as that of female workers remained the same. And the big push came from construction, whereas the share of industries remains the same. Along with this, Tiwari (2015) opined that the structural transformation process in India to have begun since post-Reforms period, which is led by a growth of tertiary-sector employment, not industry-led. And this structural transformation had a negative impact on organised sector whereas, is significant only in agriculture and unorganized non-agricultural sectors. By supporting the above said realities about tribals of India. Again Bahera (2015) argued that the reform has caused structural occupational transformation in the economy, which is service led and not industry led. This has continuously deteriorating the agricultural sector.

Before this study Rao (1979) analysed the structural changes in Indian economy during the period 1950-51 to 1976-77 using National account data. He found that the structural change in Indian economy failed to coincide occupational structure with the Net domestic product structure. The structural change in the Indian economy is in the direction of modernisation and increasing role of the secondary and tertiary sectors in terms of their contribution to Net domestic product while, the employment structure of the Indian economy continues to be dominated by primary sector and by unorganised enterprises. According to Mohanty (2006) “It is worth noting that the bulk of India’s employed labour force is still employed in

agriculture. Services are a distant second in terms of shares followed even further behind by industry. The story is different in terms of its GDP share, as service sector contributes more in terms of output". Which is clear from the studies of Bhalla (2005), Papola (2010, 2012), Mitra and Battacahrya (1997).

It is also noted by Mohanty (2006) that if one has no education or very low levels of education the likelihood is that one will end up either in self-employment or as a casual labourer. He argued a positive relation between years of schooling and type of job one is engaged in. Clearly the pay-offs \from education in terms of job quality and consumption levels are immense. Alongside this trend towards casualization is one of polarisation between high end and low end jobs. The decline in the share of self-employment was compensated by an increase in the share of regular jobs (it more than doubled) and that of casual labour. In effect then in the 1990s net new job creation got polarised between the high and the low end of the employment spectrum. After 1950's the modernisation of India's labour market has two features one is the movement of the surplus labour from traditional agriculture to the modern industrial/ informal sector and the improvement in education and skills needed to the industrial sectors. He also observed that there is a much delay in the movement of workforce from agriculture. Even though there is an improvement in the educational levels of the workforce, most of the women workforce is withdrawing from the labour market which is a problem for India's progressive transformation. Previous studies have pointed out that the 1980s were a period of relatively fast growth of non-agricultural employment opportunities in India's rural areas. Along with this, Bhirdikar, Bino and Venkatesha (2011) finds evidence for contraction of formal employment in India, with a vast informal sector and increased casualisation of employment in the Indian labour market. It is true for both organized manufacturing and tertiary sector.

Verma and Shah (2012) argued that the employment programmes especially MGNREGA has created labour shortages and pushed up wage rates in the residual market which created huge dynamism in the labour market. Abraham (2017) argues that it is clear from the multiple from multiple sources of data that since 2011–12 the growth is stagnant in all sectors thereby creating severe crisis with employment. The period since mid-2014, these indicators seem to have got worse. There is an absolute decline in employment during the period 2013–14 to

2015–16, due to the slowdown in economic growth thereby employment growth. Further the loss of growth dynamism of highly employment elastic sectors, such as construction and finance, and business services that have aggravated the stagnation in employment creation. Make in India programme has positively impacted the manufacturing sector but the demonetisation and goods and services tax subdued the employment growth. The „Make-in-India“ and the proposed labour reforms are unlikely to succeed given the unequal structure of the Indian labour market, with the large majority of the Indian labour force remaining in the unorganized sector and unprotected by the labour laws. It is further argued that the introduction of some of the proposed labour reforms are likely to create further imbalance in the bargaining power in favour of management, which may not help to develop a balanced labour market, and may further increase the social and economic inequality Mamkoottam (2017); Venkatanarayana and Naik (2013) on the basis of census data argue that there is a decline in growth of overall workforce, especially among females in the economy between 2001 and 2011. It is also found about the occupational distribution that cultivators are declining such decline in agriculture is replaced by increasing agricultural labour. He also argue that informalisation is increasing in the economy.

Samal (2000) pointed out there is a movement in the Indian economy and this movement from agriculture to non- agriculture is the result of the adverse in rural areas such as decline in handicrafts, inadequate income, poverty, unemployment, underemployment, seasonal employment, loss of property and loss of income due to natural calamities etc. this pushed the landless agricultural labourers, small marginal farmers and artisans out of rural areas and moved mainly to urban centres. Along with these factors, Rajan (2006) opined that consumption and production linkages have an influence on rural non-farm sector (RNFS). He also explores the theoretical linkages between agricultural sector and the rural non-farm sector and found out in detail the factors that may cause diversification towards the rural non-farm sector. Singh (2003) come to the conclusion in his study that the percentage change in one sector, mainly in agriculture is largely neutralised by an addition in terms of absolute numbers and other subsidiary activities like agriculture support service but does not have any substantial gain in manufacturing and other sectors. According to him there is no structural transformation due to the changes in agriculture sector, but there is an increase in the percentage of casual labourers in Indian work force. The non- working population enter the

labour market, when income falls below sustenance. Along with this, the decline in agricultural sector, created forced sectoral and regional mobility and the rural employment scenario is distress driven. The increased participation of female population and aged population in work point to “forced participation” in the labour market, owing to the declining earning capacity of the normal income earners Abraham (2009).

According to Bhaumik (2013) in the article “the changing employment scenarios in rural India in the era of Economic growth” found that the LFPR during the post reform period has been declining sharply for both males and females. Another important point noted by the author is that the LFPR and the WFPR changed cyclically during the same period. Regarding the sectoral composition of rural workforce he noted that a process of occupational diversification has been in operation in rural India over the years. He also noted that the percentage of rural workers engaged in agriculture and allied activities declined over the years. It is high among the males than the females. After the post reform period, the new entrants were attracted towards the non- agricultural sector. Among them the most important is construction followed by manufacturing, trade services, transport and storage and communication. Apart from this, Thomas (2012) argued that the employment growth in all sectors declined except for construction. The jobless growth after the second was partly the result of the reduction of “distress employment” in agriculture, and the positive expansion in the educational levels of population of students. Rural wages also showed a positive trend. Along with this, the Mahatma Gandhi National Rural Employment Guarantee Act, have aided these positive transformations. In continuation with the above said observations Rangarajan, Seema and Vibeesh (2014) using NSSO data 68th round found out that after a huge decline in the employment between 2004-05 and 2009-10, the Indian labour market showed a comfortable improvement between 2009-10 and 2011-12. They also found sharp decasualisation of employment, especially of females, and a significant improvement in the creation of regular wage employment as compared to previous rounds of the National Sample Survey Both rural and urban India. Manufacturing and services sector had a tremendous growth and a decline in farm sector is witnessed during the same period. According to the authors, the period 2011-12 is marked in the history of Indian labour market; the share of employment in the farm sector fell to below 50% and the share of industry and services increased continuously and reached 24.3% and 26.9% respectively in 2011-12 The

manufacturing sector which marked a negative decline during the period from 2004-05 and 2009-10 showed a tremendous increase in employment whereas, the growth rate of employment in the construction sector showed a declining trend. Except trade and public administration, the service sector also showed an increase in the growth rate of employment. Among the Asian countries services led growth with growing manufacturing sector whereas in India service led growth is followed by declining manufacturing sector.

As an explanation to the change in the economy, Samal (2000) pointed out that this movement from agriculture to non- agriculture is the result of the adverse in rural areas such as decline in handicrafts, inadequate income, poverty, unemployment, underemployment, seasonal employment, loss of property and loss of income due to natural calamities etc. this pushed the landless agricultural labourers, small marginal farmers and artisans out of rural areas and moved mainly to urban centers. On the other hand Unni (2001) observed that increasing women's participation in labour force is one of the factors behind the shift in employment from the agricultural sector to non- agricultural sector. Along with this factor, Rajan (2006) opined that consumption and production linkages have an influence on rural non-farm sector (RNFS). He also explores the theoretical linkages between agricultural sector and the rural non-farm sector and found out in detail the factors that may cause diversification towards the rural non-farm sector. Mitra (2006) argued that in over urbanisation thesis it is mentioned that the deterioration in the land- man ratio is the major cause for movements of the migrants from agriculture to the low productive informal sector as the employment opportunities are low in the high productive industrial sector. According to the thesis, they are not moving back as they found upward income mobility in the urban informal sector.

Apart from this While Mahesh (2002) in his working paper explained that the spread of school education and longer time in the educational system shifted the younger people who worked for wages in agriculture to non- agricultural sector. It is said that even though they start working in agricultural sector as labourers they will soon switch over to non-agricultural sector; mainly for construction work. He also mentioned that youngsters who have passed high school education are hesitant to take up manual work, even if it is gainful. Another fact found out is that their parents also hardly prefer such jobs for their children. The hard work

and uncertainty and the decrease in farm employment also inhibit the young people in to the agricultural work force. The peculiarity of the workers the author found is that, they prefer to switch to those employments whose future return is maximum and the risk is minimum. But Verma and Shah (2012) argued that the employment programmes especially MGNREGA has created labour shortages and pushed up wage rates in the residual market which created huge dynamism in the labour market.

Paul, Datta and Krishnan (2018) also provides an overview of emerging dynamics in Indian labour market on the basis of dependency ratios, labour force participation rates and labour market related variables like employment status, employment by economic activities, average wage rates and formal and informal decomposition of wage and employment. On the basis of their analysis they argued that by 2050 India is going to face some critical problems emanating from low education attainment, lower labour female participation rates, growth in indecent work due to expanding work and lack of effective coverage of social security. It is also opined by Thomas (2014) that MGNREGA has played a major role in the growth of agricultural incomes during the second half of the 2000s. , MGNREGA has produced a substantial impact on rural employment and rural wages. It is also clear from the NSSO data that the number of casual workers engaged in public works increased in between 2004-05 and 2009-10, it is due to the influence of such public employment programmes. As against this Chand and Srivastava (2014) argued that this programme has a negative impact on the rural employment and agricultural wage rate. Between 1993-94 and 2009-10, the share of farm sector in rural employment declined whereas, agricultural wage rate has an increase of 2.69% per year in real terms compared to a 1.75% increase in wage rate of non-agriculture labour in rural India. According to the author “Across the country farmers are complaining about scarcity, and even non availability, of hired labour for various farm operations Gulati et al (2013). The Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) is often blamed for this situation.”

Singh (2003) come to the conclusion in his study that the percentage change in one sector, mainly in agriculture is largely neutralised by an addition in terms of absolute numbers and other subsidiary activities like agriculture support service but does not have any substantial gain in manufacturing and other sectors. According to him there is no structural

transformation due to the changes in agriculture sector, but there is an increase in the percentage of casual labourers in Indian work force. Abraham and Sharma (2005) in their work on IT sectors in India found out wide inter-firm wage variations and inter-firm movement of workers due to the variations in benefits, salary, skill training facility, onsite work possibility etc. Arup (2006) argued that in over urbanisation thesis it is mentioned that the deterioration in the land- man ratio is the major cause for movements of the migrants from agriculture to the low productive informal sector as the employment opportunities are low in the high productive industrial sector. According to the thesis, they are not moving back as they found upward income mobility in the urban informal sector. According to Narayanan and Paul (2011) “dependency ratio, labour force participation, participation in employment, educational attainment, unemployment and net migration rate are the factors influencing the supply of labour whereas, the demand side covers macroeconomic changes – structural transformation, share of service sector, capital formation rate and export-, share of service in employment, employment elasticity, type of employment, wage and social security.

Patil (2012) argues that the sectoral composition in Indian economy which pushed out agricultural workers lead to the informalisation of Indian labour market. As the employment opportunities is not growing with the labour force. Thus, the country is faced with the challenge of not absorbing new entrants to the job and of clearing the backlog. According to Unni and Naik (2011) found that the most dynamic sector and a large share of the export growth in the country was fuelled by the services sector. Within the service sector, they identified communications, banking, and insurance as the most dynamic segments. But, the share of both income and employment in these new sectors was restricted to urban areas. Thus, much of this high-productivity, high-income growth of the service sector has not created structural transformation in rural India. Further, the rural workforce has not gained much from the labour market deepening in the IT sector. As against their view Aggarwal (2012) argue that the rise in the share of services sector to GDP is accompanied by a steady decline in the share of agriculture and constancy in the share manufacturing in the recent years. She further opined that even today the bulk of the workforce still dominant on agriculture, especially in rural areas. In the urban areas, service sector jobs are highly informal with low wages and negligible labour protection. Mkhize, (2013) the employment

generated by the new form of structural transformation is informal and/or insecure. The new employment created is weak especially in urban manufacturing sector.

Meier (1970) on the other hand also had the argument that the decline in the workforce in agriculture and manufacturing sectors is due to the introduction of labour saving technological change, factor market imperfections and rapid increases in the labour force. Papola (1994) reveals that that employment in rural-non-agricultural activities has been growing much more rapidly than overall employment, agricultural employment and also urban employment. The occupational shift is accompanied by structure of workers according to their employment status. The same has also detailed by Battacharya and Mitra (1997), According to them the changing composition of employment in any sector can influence and change the employment structure. I.e. the changing composition of employment in tertiary sector affected not only the overall share of the tertiary sector in total employment but will also change the employment structure. As a support to this Bhatt (2003) found out that the share of workforce in agriculture and allied activities has fallen whereas the share of the workforce in manufacturing has increased during the period 1993-94 to 1999-2000. This shift is favourable to males than their female counterparts. The urban economy can be considered as the major driver of net new jobs in India (Mritiunjoy, 2006) Bhalla, 2005, Papola, 2010, 2012).

According to Pillai and Santa (2005) the tertiary sector has dominated in terms of growth and SDP and this has been due to the growth of the producer's services which is Income elastic. It is also noted that there are some inter-sectoral linkages with the consumer services and between banking and insurance and transport by other means. On the other hand Manufacturing, Construction and Public Administration is in trouble. While there is a vast growth in transport trade, hotels, restaurants banking and insurance which shows that structural transformation in the economy is moderate. Bahera (2017) analyses the changing pattern of employment and unemployment situation of rural India by using NSS employment and unemployment quinquennial rounds from the year 1993-94 to 2011-12 and found out that slow progress of labour movement from farm to non-farm sector across selected states is partially due to more concentration of female in the farm sector, more participation of households and persons in MGNREGA programme. Further, inverse relationships between

female labour participation and output growth were found, which as mostly due to economic situation of the households. Usami and Rawal (2018) in their study looks into the relationship between education and employment pattern and argued that educated persons with higher secondary prefer to be employed primarily in agriculture, working on their household landholdings because of the lack of non-agricultural employment according to their educational attainment. In contrast to this diploma holders prefer manufacturing and services. In addition the study also shows the preference of degree holders, in household landholdings and in various service sectors. The study shows that the low educated are pushed into construction sector.

Along with the above said Arup and Battacharya (1997) argued tertiary sector employment is huge not only in developed countries but also in urban areas of developing countries. They also argued that this increase in service sector is accompanied by a decline in the manufacturing sector workforce. It is also argued that the contribution of tertiary sector to national income tends to stabilize at higher stages of development. There is huge change in Indian labour market with an increase in service in service sector employment and some increase in the percentage of highly skilled occupation Srivastava (2008). According to Guha (2009) these flexibility has leaded to higher output and employment in Indian labour market, which is not true for manufacturing industries. He further argued that increasing labour market flexibility increases permanent / casual workers but not output and employment to the same level instead, it just redistributes income in favour of capitalist class. While Szirmai (2012) in his paper presents that manufacturing has functioned as an engine of growth in developing countries in the past 50 years, , especially in the period 1950–1973. But in developed countries service sector is the engine of growth. Bhalla (2008) opined that in the post economic reform period, the rate of growth of the economy and the rate of growth of employment have accelerated, in a manner that both the interpersonal and inter-regional income inequalities remain high and increased over the years. Another factor is the deterioration in the quality of employment, which remains very poor for a major portion of workers. Behera, Murthy, Chand, Bhaumik and Srivastava (2014) in their respective articles opined that the labour market is undergoing significant changes mainly due to rising employment opportunity outside agriculture. Using NSSO data and found out that the total workforce in rural India has increased annually as against an annual increase of total rural

population. The number of male workers increased whereas that of female workers remained the same. As a result the WPR of females declined. There was huge change in employment. The big push came from construction, whereas the share of industries remains the same.

Sudhamasingh and Yaminijoshi (1989) analysed structural changes in the state economy of UP during the period 1970-1-71 to 1977-78. They observed that there is a structural transformation in the economy whereas, the pattern of development of different sectors i.e., agriculture, industry and all other sectors is not uniform. Using input-output analysis they showed that the input coefficients in the case of industry have marginally gone down whereas agriculture has markedly increased. This can create severe sectoral imbalances. Ghosal (2003) in his paper examines the dynamics of the transformation of the rural workforce structure in West Bengal at the aggregate level (i.e., inter district level) on the basis of the census data and NSSO data. The study found out that the study area experienced a rapid transformation of workforce from farm to non-farm activities. The WFPR in West Bengal of sex was much lower than national average over the period between 1961 and 2001 but there has been a tremendous increase in the female WFPR in the state. He further found out that the diversification is partly be agricultural growth led and partly be distress driven. The fall in the rural workforce has been accompanied by almost equivalent gain in the non-agricultural/ non-farm industries like construction, transport, storage, communication, trade, hoteling etc. Bagchi and Das (2005) in their paper try to explore different aspects of employment in West Bengal and Gujarat in the post reform period. They found out that in Gujarat a significantly higher percentage of workers (both males and females) than in west Bengal are in agriculture. In the industrially advanced state of Gujarat, agricultural output changes are highly volatile and display a negative trend whereas in west Bengal in spite of the adoption of land reform measures, the share of agricultural labourers in the workforce has risen and that of the self-employed. Biradar and Rajashekhar (2006) in their article analyses the agrarian changes led occupational diversification within and outside agriculture in the state of Karnataka. According to them the agrarian structure has profound impact on compositional changes of rural workforce in crop cultivation. There are a rapid number of small and marginal landholdings, associated with a greater increase in the share of male workers in the AWE (Agricultural Wage Employment) and RNFAs (Rural-Non-farm Activities) and marginal decline in AAs (Agricultural Allied activities) during 1981 to 1999. In respect of females, a

greater increase took place in the proportion of workers in crop cultivation followed by AWE and corresponding decline in RNFA and AAs during the same period. Among all the RNFA the share of male employment is found to be more in services; Non- household manufacturing activities followed by services have emerged as important sources of non-farm employment generation. Seema and Sharma (2009) using the NSS data, attempts to examine the inter-state trends and regional disparities in rural unorganized labour markets during the post reform era. In their study they found out that only Own Account Manufacturing Enterprises (OAMEs) have experienced a decline in the workforce and continue to be caught in a low productivity trap. The growth performance in rural unorganized manufacturing thus is attributable primarily to Directory Manufacturing Establishments (DMEs) and at best, to Non- directory manufacturing Establishments (NDMEs). The empirical data also proved that there was a shift away from primary sector and a rise in the share of casual labour and a decrease in self-employment in rural areas.

Kannan (1995) argued that employment opportunities in Kerala tend to be concentrated largely in agriculture. While in various non- agricultural activities, men were evenly distributed than women. Again the former gained exclusively with the expansion of employment in construction, trade, commerce, transport and communication. Chanda (1997) also supported the same by justifying that the women's lack education and skill training to compete for the limited, but remunerative, non - farm jobs compared to men especially in manufacturing activities. He also observed that women's prefer on-farm employment which is available closer to their living abodes. While, (George, 2011) argue that the economy started slowing down almost coinciding with the first decade of the formation of Kerala. There was slackening of growth in all sectors of the economy during 1970s and 1980s. Thomas and Thomas (1999) taking Kuttanad as example pointed out that a transformation has taken place in the status of labour in Kerala. It has undergone a change from agrestic slaves to casual labour and finally to labour with multiple status, consequently there had been a remarkable shift toward non- farm activities.

Sasikumar and Raju (2000) further noted that dynamics of labour market in Kerala takes up the relation between the social development and employment/ unemployment in Kerala and found out that high unemployment coupled with shortage of labour poses problems in the economy. According to them the labour issue is resolved by Tamil migrant labourers or by

short cut of employing child labour. As an outcome of this Sumitha and Duraisamy (2009) observed that the average annual employment growth in Kerala is lower than that in India. The share of regular wage or salaried has a sharp growth and that of regular casual labour had a sharp decline. They also found that employment elasticity for all persons declined in Kerala, especially for female workers. Again Nair (1999) examined that there is mismatch between demand and supply in Kerala labour market. He found that the reasons for the mismatch between supply and demand for labour are market imperfections, information asymmetric, adverse selection in the labour market, operation of backward sloping supply curve, market fragmentation, increasing transaction and supervision costs, social and economic upliftment of labour households, leisure preference of workers, cultivators preference for skilled workers, fragmentation and multiplication of the existing jobs in agriculture, positive asset effect of labour supply because of ownership of few cents of land by the labourers, decline in the size of the labour household etc. With the structural changes the most adversely affected are the most deprived social group, especially STs. So it is very much needed to go through the situation of tribal communities with special focus in their labour market.

Studies on Intergenerational occupational mobility shows that Azam (2013) Intergenerational occupational mobility studied by shows that the probability of getting white collar job for a person who is son of white collar jobbed father is more compared to the person who is the son of a non- white collar job. They also show that there is improvement in mobility in SC/STs over time and compared with the higher castes. Reddy and Swaminathan (2014) argues that migration to urban or semi-urban areas is the main vehicle for intergenerational occupational mobility for people in rural areas. The main finding of the paper is of low intergenerational occupational mobility among big farmers and rural manual workers and was higher among manual workers from Scheduled Castes than manual workers from Other Castes. It is also observed by the authors that downward mobility from any occupation to that of manual worker was higher for Scheduled Caste men than men of Other Castes. Iversen, Krishna and Sen (2016) argue that that there is vast differences in the upward mobility prospects of urban versus rural occupants and upper-caste Hindus versus SC and ST. At the same time, the prospect for downward mobility is high in India and among rural residents and among Scheduled Castes and Scheduled Tribes.

1.2.2 Tribals in the labour market

The labour market restructuring with wage and employment flexibility would favour the owners of capital, the bureaucrats and technocrats largely discriminate against the working class, the SC and ST and other vulnerable sections of the society Nath (1997). Kannan (1998a) further observed that whenever technological changes take place the new job opportunities are appropriated by non-SC/ST workers. For that he pointed out the situation of Kuttanad as example. Likewise, Mahesh (2002) observed that the upper caste owns land and the lower castes performed muddy operations. The upper castes will not prefer the works such as transplantation and weeding even if it offers high wage rate. Himanshu (2003) also made a detailed analysis on work force by social groups for males and females separately and found out that STs are engaged more as self-employed and as casual labours while SCs are more engaged as casual labours. On the other hand other groups found employment mainly as self-employment in agriculture. Mohanty (2006) further detailed Himanshu and observed that upper caste Hindu households are significantly better off in terms of education, employment and relative income. He also established the privileged position of upper caste households in the labour market. Matheswaran and Attewell (2007) studied the same on urban labour market using NSSO data and concluded that even though there is discrimination in both public and private sector, discrimination is high in private sector and the wages are 15 percent less for equally qualified SC/ST compared to upper castes, occupational discrimination, unequal access to job and the endowment is also larger in urban labour market. Chakravathy and Somanathan (2008) with the evidence of data collected from IIM -Ahmedabad's 2006 batch of MBA graduates, found out that among the graduates those who belong to SC/ST get significantly lower wages compared to others because of the low academic performance of these social group and point out that the reservation policy is insufficient especially in elite institutions to equal opportunity in their careers.

Thorat, Attewell and Rizvi (2009) as a continuation to the earlier study found out that low levels of education, or to their concentration in economically backward sectors forms the major reason for the backwardness of certain social groups despite the legal safeguards. The authors using the data from the applicants of jobs from highly-educated Indians from different castes and religious backgrounds in the modern urban private sector, encompassing

multinational corporations (MNCs) as well as prominent Indian companies and found out that the decision making of these companies advantage job applicants from higher caste backgrounds and disadvantages low-caste and Muslim job applicants with equal qualifications which shows an untold story of discrimination in various multi-national companies in India even though they shows that caste and communal discrimination are supposedly things of the past. Thorat (2008) also found out that the upper caste households access the best job in urban economy. Banerjee et al (2009) make the above said arguments more clearly by substantiating that there is discrimination in labour market on the basis of social classes. They are discriminated in high skilled jobs, but this disadvantage disappears when the jobs being applied for require harder skills, for which acquiring credible certifications may be easier and more straightforward. On supporting this, Mohanty (2006) argued that compared to rural areas the social groups in urban India is significantly more literate, has significantly lower dropout rates and higher completion rates across all social groups. Among the social groups in both rural and urban sectors, upper castes Hindu (UCHs) are more literate followed by OBC, SC and ST. according to the author, In urban India OBCs and STs come after UCHs and both have a dropout rate of just under twice that of UCHs. The same trend gets repeated in higher (tertiary) education. He also points out that the upper caste Hindus are in better off condition in major indicators like education and employment compared to OBC, SC and ST. There inequality is huge in urban areas than in rural areas. The inequalities in distribution of capabilities get repeated in higher education also which can have a negative impact on the employment. Graduates are more among UCHs and Sikhs, this is what is opined by Desphande and Yadav (2006).

Jodhka and Newman (2007) research on the recruiting process in the private sector shows that exposure and good communication skills imposed obstacles for SC and other marginalised groups to find jobs in the private sector. Further, the family background along with lack the social and cultural capital of a person tends to play an important role in the recruiting process. It has resulted in discriminating people from marginalised communities, and that these groups to lesser extent are involved in the private sector. The same can be found in Siddique's (2008) research, where marginalised groups are to larger extent engaged in blue collar jobs, while higher castes are more represented in white collar jobs. Abraham (2012) showed that social discrimination in labour markets is in the form of Earnings inequality, which exists

across social groups within religious communities. According to them “Discrimination in the labour market occurs through three important modes, one is through barriers to entry into particular labour markets, the other is through restrictive occupational mobility within the internal labour markets and third is by way of discriminating on returns to work for same occupation”. Haseena (2014) argued that Globalisation with its unprecedented effects further worsened these communities and the new laws after globalisation displaced tribal communities from the forest, violation of rights with the forest and its resources are threatening their existence, the example of the central Indian tribal belt where the states like Orissa, Jharkhand and Chhattisgarh have had enough displacement of the tribal people and alienation from their livelihoods. Babar (2016); Akhup (2014), the policy of Globalization on tribal communities is multi- dimensional. It has disadvantaged the livelihood, employment, socio-cultural life including their cultural and religious practices, health, education and the women. Market unfriendliness has adversely affected them. The lack of education in the competitive scenario further deteriorated their livelihood. As against these Manojan (2018) argue that the schools are the best example for social exclusion in the name of caste, colour and language. He also argued that the tribals are still in agriculture because have a good interest in their traditional occupation like farming and agriculture.

Hall et al (2012) opined that wage differences between the indigenous and non-indigenous is evident in all countries due to lower human capital endowment of the indigenous community with the example of Vietnam. He argued education and skills are the factors that cause such differences rather discriminatory labour market practices. Black et al (2013) argue that wage in the labour market is also influenced by race along with education and experience. On the other hand ray (2016) argued that the difference in labour market participation is due to the presence of wage differential among the community. Vaisakh and Sood (2017) argued that within the tribes, the de notified nomadic and semi nomadic tribes are the worst victims of neglect and oppression, who are far away from receiving the benefit of freedom and social justice. As a solution to this suppression, Sen (2007) argued that a sustained and high level of economic growth has created opportunity for social sector development and the investment in education will result in inclusive growth. Pradhan (2004) also opined the same and further argued that this will liberate the marginalized sections from illiteracy, ignorance and superstitions and thereby enable the tribal people to fight against injustice, exploitation and

oppression, which will be a great achievement. Alex (2014) also gave emphasis on academic need to mainstream tribes in the perspective of inclusive policies and programmes.

Contemporary researches showed that the tribal children are not really attracted to the processes of formal schooling which became an obstacle to reduce educational gap and inequality between the tribes and other weaker sections in Indian society Sachidanandha (1999); Singh (1994); Sujatha (1999). Pacha (2012); Joy and Sreehari (2014) argued that it is because of the superstitions and addictions to blind beliefs, they are far behind other social groups in education. Negative attitude towards education, peer influence, alcoholism of parents, early responsibility, and caste related issues and health issues leads to not understanding the value of education especially in the remote areas. On this basis, Malyadri (2012) studied the education among the tribals in Khammam District of Andhra Pradesh state in India. The author found that the tribals in this district in particular and the state as a whole is backward in education and the reasons found out behind this phenomenon are that the tribals are superstitions blind beliefs, health issues resulting from poverty, teacher related issues like the language problems, lack of literacy of parents and most important that the lack of understanding the importance of education for upliftment. Chandran (2012) also opined that there is a huge gap between the tribals and non- tribals in various socio economic indicators compared to the rest of the country which creates paradox within a paradox. Among the reasons pointed out by the author, the negligence in policy making is low about 1.14 percent compared to other communities forms the major reason for this and at the same time increasing political mobilization has showed an improvement for the same. Of the studies, Thangadurai (2015) clearly indicates that majority of the tribal students face inadequate facility in family and agree that counselling is very helpful for their studies by developing self-esteem and self-confidence. Further, inequalities of economic outcome cause inequality of opportunity. Children of high income family lives in the areas with better access to high quality education. Whereas, children of low income family lives in the areas with low quality public school and face obstacles to attaining post- secondary degrees and interfere with labour market success later in life, leading to a perpetuation of inequality of economic outcomes across generations Bradbury and Triest (2016).

On behalf of all these studies Joy and Sreehari (2014) education is the determinant behind vibrant democracy, growth of productivity and income and employment opportunities. Brinda and Vikas (2014) opined that most sections of the rural poor in India are engaged in multiple occupations and income- generation activities for family survival. This is acute for adivasi communities. The livelihoods of these communities are adversely affected by land loss or the non-viability of cultivation of their small plots of land. There is large scale casualization has occurred among these communities because of the uncertainties linked to land loss, the unviability of cultivation, decreasing work-days in agriculture. Majumdar (2015) observed among Tiwa tribe of Assam that rural infrastructure is the most determining factor for the Work Force Participation for both married and unmarried women. Ray (2016) observed that the tribal people participate in economically productive activity and derive income from multiple sources. The author also revealed that unequal earning differential is the factor behind unequal labour market outcomes. This inequality sharpens further disparity in labour market participation decision of these communities. The study further noted that the opportunity of irrigated agriculture has been rendering economic security and thereafter nurturing the tribal mind set for aspiring and attaining welfare objectives. This keenness, aptitude and capability has been lacking among agriculturally disadvantaged rest of the community. It is these inequalities which are shaping up further disparity in tribal mind set, their attitude and keenness for development. The findings of the study also indicate that the differences in local ecological factors are also influencing the labour market participation decision of the tribal communities. Xaxa (2016) further observed that the tribal workers are engaged in agricultural activities where the non-tribal labour force either did not have the skill for or were not forthcoming. Because of the lack of work in the fields, they suffer from poverty which is compelling them to migrate to urban areas. This trend is seen mostly among the tribal youth. Where the preference is for non- tribes indicating labour market discrimination. Which is to some extent over comes through reservation policies.

Ray (2016) observed that the labour market participation of the tribal communities is comparatively high especially among the females and most of them are engaged in agricultural sector. The study also examined the factors determining labour market participation of the tribal community using Tobit model and found out that the differences in local ecological factors and the earning differentials have been influencing the labour market

participation decision of the community. Access to education, basic amenities, distribution of development schemes are reducing employment gap among the tribal households. It also observed that the government programmes and the need of the tribal community has a vital gap which creates problems in their real development. The study also revealed that the inequalities in the labour market have been brought about by historically unequal endowments and this crafting further disparity in tribal mind set, their attitude and Keeness for development. Likewise, Vemer Elwin (1943), Patel (1998) also found that the root cause of poverty among the ST communities lies with the root cause of poverty among the ST communities lies with the problem of land alienation. Pankaj and Pandey (2014) and Walter (1992) also found out the same and added that land and caste are the two major determinants of social exclusion in rural society.

According to Louis (2013) “the present social structure due to the structural nature and dynamics various social groups are excluded on the basis of caste, class, gender, disabilities, ethnicity, age, location etc. The exclusion is from opportunities, outcome of development, freedom of mobility, resources, and citizenship in polity and membership in society. The excluded social groups in turn internalise such principles and practices and the institutions that legitimise and enforce them. Hence, change is resisted both by the excluding social groups and the excluded communities”. Jaysawal and Sah (2014) and Ghosh (2016) argued that the LPG policies has adversely affected the excluded communities especially the tribes with the post- colonial and with the LPG policies the tribal communities had to flee from their original inhabited land which affected tribal communities positively and sometimes negatively. The initial new economic policies without inclusiveness had put the tribal communities into poverty as they lack the access to their land and unable to find new jobs with the changing developments and skills in the labour market. . According to Munda (2005), in the name vanavasi, the Scheduled tribes were denied of identity rights, human rights and political rights and their language was non- recognised till recently. They were displaced by large development projects and no resettlement and rehabilitation so far. The root cause which the study argued is the attitude of internal/neo-colonialism which results in expropriation of natural and cultural resources without caring for or safeguarding tribal interests making those poor people in a rich area. Halder and Abram (2015) showed this to be true by taking the case study of Jharkhand and showed that the displacement due to the new

economic policy has pushed these groups to the bottom of the occupational and wage hierarchy, working under adverse conditions of work, destined to live on the fringes of the modern society as peripheral appendages servicing the modern ways of life. They also opined that only a few from the ST communities are engaged in socially elite occupations whereas majority are still engaged in occupations like farming, mining and quarrying industry at low-grade and laborious jobs, traditional manufacturing industries and as domestic servants.

In addition to this, Paltasingh and Paliwal (2014) opined that the level of socio-economic development varies considerably between tribal and non-tribal population, between one region to another region; between one tribe to another tribe; and even among different tribal sub-groups. and these tribal communities are confronted with problems like forced migration, exploitation, along with Issues like literacy, work participation and livelihood, changes in occupation pattern, poverty, displacement, migration and health issues displacement due to industrialization, debt traps and poverty. Supporting the above authors, Nithya (2014) argues that the most affected social group due to liberalisation and globalisation are the indigenous communities as there areas are prone to massive attacks of development projects. The paper also argues that the 47.1 percent as against the national average of 36.4 percent of the tribals are engaged as agricultural labourers, which shows their economic backwardness of Scheduled tribes. The tribal communities were unable to enjoy the fruits of new economic policies as the other social groups enjoyed. Further it adversely affected them by increasing discrimination among the rural and urban people, between have and have not family. Land and forest which are the habitat of most of the tribe and also the source of income were taken away from them exploited in the name of industrialization and urbanization processes for which they have to loose tenancy and put them in poverty, which is evident from the case of West Bengal, Ghosh (2015). Along with this, Devidas (2014) “Development of Tribal Population is a key issue in our country for up-lift of socio-economically backward classes in India. Major problems of tribal community are illiteracy, low level of education, poor health conditions, poverty and unemployment, lack of development opportunities and above all, in sensitivity towards development.” It is already supported to this issue by Revathy and Geetha (2012) education is lack of education is the major reason for the above said issues. Even though the development planning and policy initiatives tried to incorporate the complexities of tribal life, especially for education, the

study admit that the achievement levels of tribals and non- tribals are different, the tribals are far behind the later. According to the authors the socio-cultural and economic environment in which the tribals live and the defects in the policy of various governments and its administration are the major reasons behind this issue. As against these, Papola (2012) argued that even though the discrimination on the basis of race, creed, colour and caste has been practised in most societies has declined over the years, there is still a large degree of disadvantage faced by certain social groups in employment and wages. According to the author there is higher participation of the SC/ST in the labour market mostly a result of the greater need for participation in some remunerative activity by the members (including women and children) of their households on account of poverty and low earning per worker. Bharti (2011) with the same opinion and opined that this caused segmentation in the labour market especially in informal labour market. Supporting the same Alvi (2016) again argued that the Hindu-SC/ST gap has been steadily narrowing over time, while the Hindu-Muslim gap has remained high. Muslim women's concentration in areas of low economic activity seems to be the main driver of their low labour force participation rate.

Compared to other Indian states tribals of Kerala is far better in terms of social and economic indicators, but still have problems and issues and facing discrimination. This is briefed below.

Thrustone (1909) in his work „Castes and Tribes of South India“ gives descriptions of the tribes and lower caste sections of the Kerala society and about the customs, religious beliefs , slavery system and general way of life of tribal communities in Kerala especially on the communities like Paniyan, Kurichchan, Adiyar, Kurumans and Kattunayakan. One of the first studies that brought out the social factors that constrict tribal education is made by Ayyappan (1968) studied about the social factors that constrict tribal education, which is one of the first study on the same. The study focus on the problems of Paniyan and kurichchan tribes in Malabar region and gives information on the structures and stig mas that prevented these communities from getting educated. According to the study kurichchan girl is restricted from being educated by gender driven practices. Whereas, Paniyan by their general attitude towards limits the means for social advancement and economic progress. Mathur (1977) in his study gives a detailed description on the socio economic and linguistic features of tribal communities in Kerala. Bonded labour system and lack of infrastructural facilities in tribal

dominated areas is detailed in the study. Ha also argue that socio cultural practices of the tribal communities act as barriers to be involved with the mainstream society and that the development policies for tribal communities.

On the labour market participation of these communities, Kunhaman (1986), Chathukulam and John (2006) rightly argues that the benefits of the development that the Kerala economy experienced so far has not reached in the similar way to the tribal communities of Kerala. A major share of tribal population around 80 percent is still stuck with primary sector for their subsistence. The study of Sivanandan (1979) also shows that high caste enjoy the freedom of remunerative employment and occupational choice. The upper and middle castes also enjoy the jobs in government sector while the share of Dalits in these sectors was very weak. The inequalities between upper and lower castes declined only immediately after the land reform. As an addition to this, Sengupta (1990) argued that the rapid industrialisation after the post-independence period also adversely affected them. Rapid industrialisation put them in a dilemma as they are displaced from their areas, which are enriched with natural sources. While, Eapen (2001) pointed out that the low paid occupation for low class people is aggravated by gender. Chathukulam, Reddy and Rao (2012) opined that a higher proportion of the general population excluding SC, and ST is engaged in tertiary sector over the period. Shyjan and Sunitha (2009), based on a 9-fold classification of the Census data from 1971 to 2001, they showed that the structural transformation that occurred in Kerala does not have much impact in the employment pattern of the ST population in Kerala. Only 6 percent of the STs are engaged in tertiary sector the same is four times double for general population. According to the authors this indicates a near stagnation in the sectoral change in employment towards the tertiary sector. They also noted that the percentage of working population engage in the tertiary sector is higher than that of the secondary sector invariably across all the social groups.

Parayil and Sreekumar (2003) criticised the development experience of Kerala and argued that after the second round of liberalisation policies there is a huge divergence in dominant and the dependent actors. He argue that the tribal communities are the dependent These groups have very limited capability to act as strong pressure groups in Kerala politics, because of the poor organizational strength; and bargaining power. Suma (2014) also

observed that they are still in primary sector itself and the major reason behind this is the educational backwardness and limited access to urban centres. While As against this view Baiju (2011) argued that ICT and service delivery management has a major role in improving their living conditions. Local self - governments and Oorukootams can improve the efficiency provided by the ICT. But Shyjan and Sunitha (2009) argue that the tribal communities are deprived in comparison with general population in terms of literacy rates, average years of schooling, retention rate and availability of basic amenities. Sector wise composition also showed that that a higher proportion of general population is engaged in tertiary sector over the years while, employed tribals are still stuck with the already congested primary sector showing exclusion of tribal communities both in the lopsided as well as in the virtuous phases of development. They argue that the land reform package, social reform movements and role of Missionaries in spreading basic Education and foreign remittances are the reasons which helped the state in attaining an internationally appreciable development experience which itself is the reason for the deprivation of scheduled tribes.

Nithya (2013) as a support to the above argue that despite government initiatives and developmental projects the existing socio-economic profile of the tribal communities in Kerala is low compared to the mainstream population. The tribal in the well-known state faces all forms of social exclusion and a high degree of deprivation. Chandran (2012) also opined that there is a huge gap between the tribals and non- tribals in various socio economic indicators compared to the rest of the country which creates paradox within a paradox. Among the reasons pointed out by the author the negligence in policy making as the population is low about 1.14 percent compared to other communities forms the major reason for this and at the same time increasing political mobilization has showed an improvement for the same of the studies. While Jalaja and Kala (2015) and Manikandan (2017), Haseena (2014) was of the opinion that non- tribal intervention along with the provision of non-cultivable dry lands and desertification of the area due to the non- sustainable land use pattern withered away the agricultural base of these communities. According to the study conducted by Aparna (2018) on ST households in Kerala found that about 71.98 percent of STs of Kerala depends on agriculture. The majority of them are faced with the problem of land alienation which compels them to work as casual labourers. Chacko (2018) observed that developments in the agrarian system are the major reason for rapid transformation or

agricultural mobility of tribes. Whereas, Nithya (2013) argue that despite government initiatives and developmental projects the existing socio-economic profile of the tribal communities is low compared to the mainstream population. All forms of social exclusion and a high degree of deprivation are the major problems faced by the tribal community in Kerala.

Alex (2016) observed improvement in education and access to new employment opportunities resulted in both livelihood mobility and structural changes of agricultural activities. Sincymol (2016) on the other hand argue that more than 60 percent of the tribals are aware about the Government welfare programmes but unable to get these provisions and services. It is observed from the survey by the author that the tribals who already received are getting it and not to the needy one. The author argues that the authorities are responsible for the same. As against this Ambily (2008) argue that the tribals are aware of government programmes for them and there is a huge difference in the living status of tribes in Kannur District after the implementation of Jananidhi, IAY, ICDS and VKY. Sachana (2009) argued that apart from above mentioned factors alcoholism, wild animal menace in agricultural lands, land alienation, addiction to narcotics, depletion of natural resources like forest and water bodies, inadequate transport, medical facilities, poverty, social exclusion and discrimination etc. are the major livelihood issues of tribal.

It is also noted by Ramachandran (1996); Ratcliff (1978) that the land reform could go a long way in improving the social outcomes like education and health in the state resulting in greater social mobility to the people on the whole. According to Kunhaman (2002) “the implementation of land reforms in Kerala never recognised the legitimate claim of the Dalits. Among the few states that have achieved Land Reforms in India Kerala has been rated very high. However, it is equally true that Kerala did not achieve complete success in land reforms. Land alienation started in the 1950s. In the meantime, the tribals acknowledge the fact that mobilization without any individual interest and ideological aspect can successfully address their real unrest in front of others. Therefore, when analysing the recent history of tribal unrest in the last 100 years, over one million acres of land are believed to have been grabbed from Kerala's tribal population. Their long agitation to regain the forests and lands where their ancestors have lived for generations was intensified after the starvation deaths of

32 tribals last year. And the struggle is just about beginning to pay off in a scheme that could benefit hundreds of tribal families; the Kerala government is giving away surplus land to landless tribals. Four hundred tribals in Idukki, Kerala's largest district, have been promised between one and five acres of land per family. But that is just a beginning. For in the last 100 years, over a million acres of land are believed to have been grabbed from Kerala's tribal population. The government believes the free land will enable the tribals to sustain themselves instead of relying on state support. However, to benefit its nearly 50,000 landless tribal families, Kerala needs over 100,000 acres of surplus land -- which it says it doesn't have”.

According to Santhosh (2008) over the years, the living contexts and surroundings of tribal communities has changed due to the influence of migrants who being planters and cultivators established their dwellings in the district as settlers. The settlers especially the Christians and Muslims from the southern part of the state extracted labour from the Paniyas at very low wages and made them a wage labourer from bonded labourer. This shuffled the socio-economic condition of tribes in these regions. Land reform of 1970 has been criticised on the ground that cultivable land was denied to the Dalits, who were the actual tillers of the soil, in the land reforms Devika (2010); Krishnaji (2007); Raman (2002); Mohan (2008). Raman (2003, 2005)). Oomen (2014) in the article argues “how the liberalization reforms of the 1990s and beyond, while ushering in an era of unprecedented growth shows signs of widening inequalities and marginalization of the poor, in particular the historically deprived communities. The widely known land reforms virtually bypassed the poor and the state now has a highly skewed land distribution. The service-led growth of Kerala with a dual structure of earnings has a built-in bias towards inequality. The state budget has not been an instrument of equity and the policy choices of the state and the union need strategic reorientation. The service-led growth underway in the state has a dual channelization of earnings that considerably accentuates inequality. The land reforms of the state have turned out to be highly in egalitarian with land becoming an instrument of accumulation rather than a means of production. By the way, upward social mobility barriers for these groups remain high and are on the rise with Kerala’s well- known Gulf connections benefitting the relatively better off. As inequality grows, the state continues to roll back public expenditure on social services like basic health and education”. Yadu (2017) further argues that Dalits comes lowest in the

land ownership status in the state indicating the fact that land reforms did not broken the land–caste nexus completely. It is because of the contemporary land relations in Kerala which increased concentration of land in the hands of the rich. On the other hand, Nair and Menon (2007) argue that though the average size of land ownership is higher among the STs, but the proportion of households holding more than one hectare of land has been declining. And given the historical experiences of land encroachment, acquisition of forest land by the Government and tribal displacement, the STs remain vulnerable.

Kunhaman (1980); Paul (2013) explores reasons the major reasons for the intra-regional variation in the living standards of tribal communities in Kerala.; the north south divide in terms of development status of tribal communities. The differences are contrasted against the support received by the tribal communities in the regions of Travancore and Cochin and Malabar. The study echoes view that the attitude of the state towards the downtrodden determines the progress achieved by them. In the case of tribal communities in Travancore and Cochin areas the benevolence of the rulers helped to give a congenial shape to the socioeconomic setting in which the tribal communities could progress; whereas, the author notes, the British rulers in Malabar region were not concerned about the tribal communities, which kept them in a state of underdevelopment. The policy implications of Kunhaman’s analysis are relevant even today. The tribal communities in those areas where the local rulers were able to create protective measures to safeguard the interest of tribal communities by being sensitive to the needs of the tribal communities had better chances in the society. In the present case also the progress of tribal communities through affirmative actions critically depend on how sensitive the State is to the requirements of the communities.

Rajasenan, Abraham and Rajeev (2013) studied about the major indicators like education, health and employment among various tribal communities in Kerala and found out that Malai arayan, Kuruman and Kurichchan have a better living standard and hence they can generally be termed as forward tribes whereas Paniyan, Adiyar, Urally, Kattunayakan, Muthuvan and Irular are categorized as backward tribes as they have a poorer living standard. This shows a disproportionate nature of socio- economic indicators. The authors“ points out that the reason behind this is the failure of government schemes and assistances with the intention of empowering the tribes in Kerala are not reaching the needy ones. Surjith (2014) reveals that the communities Kurichchan, Karimpalan, and Kuruman captured inordinate representation

in the name of tribal reservation. It is also observed by the author that there is a wide disparity between the Kurichchan and the Paniyan Communities, in the participation of decision-making bodies in the rural Kerala, so the new opportunities created by the local democratic institutions are utilised by the least powerful sections like the Paniyan. Kumar (2014) study on Inter- community differences in Wayanad by traditional occupation shows that Paniyan and Adiyar communities are bonded labourers and Kattunayaka depend upon forest as forest labourers or as collectors of forest produce for their livelihood. Among the communities, kattunayakan community, typically the landless community is one of the most vulnerable sections of the tribal communities of Wayanad who suffer from social exclusion and live in severely deprived circumstances. The study brings out that development activities promoted by the State/Central governments and other development agencies proved to have marginal effect because of their incorrect perception regarding different development activities.

Aswathy, Darsana and Vijayan (2018) revealed that even though exposure to non-tribal domain at different period has earmarked numerous changes in their tribal cultural component, but the Adiyar tribal community remains as an excluded group. The major reasons found out by the author for the phenomenon is the Lack of adequate support, inappropriate implementation of developmental plans, pilferage of funds and exploitation. Haseena (2015) argue that it is the Poverty, Illiteracy and Ignorance are the factors behind their deprivation, which can be overcome through education gradually for the next generation. Rajasenan (2009) in his study with 10 different indicators on living standards such as type of housing, availability of toilets, drinking water, possession of different types of durable assets, fuel used for cooking, energy used for lighting, etc., has constructed The Standard of Living Index (SLI) among nine major tribal communities in Kerala and found out that Malaya Arayan tribal community has the high standard of living index. On the other hand, the Paniyan, Adiyar, Uraly, Kattunayakan, Muthuvan and Irular tribal communities with low standard of living index. Kuruman and Kurichchan tribes are classified as having a medium standard of living index. Thus, a division has emerged among the communities – between backward tribal communities and forward tribal communities. Other social indicators such as the asset position, employment, representation in Government and private sector jobs, level of indebtedness, livelihoods option, health care, food consumption, etc.

makes the division more evident. Baviskar and Mathew (2009) further argue that The Kurichchan and Kurumans – two landed tribals in Wayanad district – claim a different social status in the district. It is reported that they used to practice some kind of „untouchability“ with other tribal communities. Also, the Adiyans and Paniyans occupy a lower position in the hierarchical structure of the caste system. Rajasenani (2009) also noticed a patron-client relationship within the tribal community: the patron position is with the Kurichchan and Kuruman tribes whereas client status is with the Adiyans and Paniyan tribes.

1.2.3 Women in Labour market

Growing feminisation is one of the major outcome of post reform structural reforms in India. Das and Gupta (2014). Substantially low labour force participation coupled with employed in low wage employment in informal sector doubled the inequality in the wages of men and women in both rural and urban areas (GOI, 2010). Madheswaran and Attewell (2007) argued that the occupational and wage discrimination among the men and women is huge among the vulnerable sections of the community like SC and ST than other social groups. Agreeing with Madheswaran and Attewell das and Sengupta (2014), Srija (2014) with the help of wage equations by applying Heckman’s selection model with two-step estimation techniques with pooled data of two independent samples taken from the two rounds argued that the difference is huge among the religious group than the social group in the Indian labour market. Even though there is increasing opportunities for females after post reform period, the wage difference has widen after the post reform period compared to pre reform period, as the increased opportunities are mostly in low paid and unskilled works. The discrimination is not limited to wage employment but also to salaried jobs. It is also observed by the authors in their study that the discrimination in wages for men and women in Hindu religious group is low compared to Muslims, partly because of religious customs and partly due to religious discrimination. Rangarajan et al. (2014, 2011) supported the same by emphasising that there is a sharp decline in the LFPR of females in India. Historically, this is due to certain traditional and cultural reasons, which is comparable to other developing countries like Brazil and China. The decline in female LFPR is sharp and continuous in rural India than in urban India. The reasons for this can be “education effect” and “income effect”. Kannan and Raveendran (2012) do not support the hypothesis and they questioned Rangarajan et al (2011) for the same. Whereas, Abraham (2013) also opined that as income of the household

increases the females withdraw from low paid works. So many other factors like consumption, insurance motives, education of the spouse, household wealth, landownership, rural location and the presence of young children are also other factors which influence the LFPR of females Marcela Umana-Aponte (2010) and Tilly and Scott (1978).

Hirway (2012) “argued that the missing labour force is not really missing or moving out of the labour market, it has merely moved to sectors like low- productivity and subsistence-employment sectors that are difficult to measure through NSSO surveys. It is also suspected that the NSSO may have missed a part of employment in the rural areas due to some response errors following the introduction of questions related to MGNREGA in schedule 10 of NSSO’s 66th and 68th round surveys” The researchers on this hypothesis found that the LFPR of women is u- shaped. Mazumdar & Guruswamy (2006) argue that the structural change in labour market thereby, cropping pattern had displaced large volume of the women workforce from agriculture, especially in the rural areas. Their participation in tertiary sector has increased but in low paid works. Goldin (1994); already observed the as the female LFPR declined in non- farm sector but with the increase in white collar jobs, women’s participation started increasing. Lack of interest of rural males to farm employment, especially among the members of farm family. This is also considered a major reason for feminisation in farm sector (Chand and Srivastava). They also opined that the heavy decline of the female WPR together with marginal decline in male WPR during 1993-94 and 2009-10 pulled down the total WPR in rural India. According to the authors “Decline in WPR for the male workers, though very small, was due to a comparatively higher rate of growth in the male population as compared to the workforce. The withdrawal of female labour from agriculture could result from two sets of reasons – one related to distress and the other to development.” On the other hand the Work participation rate is high among rural women and they are mostly engaged in agricultural sector (Reddy 1975).

With reference to north-eastern region, Nath and Goswami (1991) stressed that the WFPR for tribal women is more compared to non-tribal dominated states of Assam and Tripura and it is also opined that the WFPR of women is closely related to their social status. Bornali (2015) comes out with the same conclusion in his study. He observed that “the gap between the males and females is considerably narrowed down in the case of the tribal dominated states.

It is again the performance of these states that narrows down the differences between the sexes for the NER in terms of employment. Mahanta & Nayak (2013) also found out that the differences between the sexes in terms of employment and education are relatively lesser in the tribal-dominated states, than the rest of India. Along with the above said facts, Bornali also argued that this cannot be treated as better work opportunities for rural women as most of them are engaged in agricultural casual works. Agrawal (2008) further argued that this inequality in the labour market is high among indigenous women. Bino and Narayanan (2011) argue that the low participation of women in the labour market is not really participation in work instead lack of participation in paid work. Sebastian (2008) argues that a rise in higher education has led to an increase in unemployment among women along with an increase in their work participation. They prefer teaching and clerical works which aggravate the labour market segregation. Sebastian and Navaneetham (2008) against general hypothesis opined that with economic growth and increases in education, female work force participation rates increases. But in Kerala, where economic growth is higher than all India experience the lowest female work participation and highest unemployment among the major States in India, especially among the educated. The factors that influence female work participation are education (diploma and professional education), age (higher age group), marital status (single women), place of residence, economic status (low economic status) and husband's employment (medium or low status of work) turned out to be significant in determining women's entry into the work force.

1.3 Research Gap and Statement of the Problem

It is clear from the literature that the growth process is more inclusive in Kerala compared to other states of India. There were a number of programs for education and health to lessen the profound historic inequalities. But still scheduled tribes are far behind the other social groups. Perhaps, they are the true victims of various government policies. Kerala Development Report (2008) states that... rural poverty among adivasis in Kerala persists and comes to more than two-and-half times that of the rural population of Kerala in general. Adivasis constitute only around one per cent of the state's population, nearly one-fourth of them still live below the official poverty line; the actual incidence of poverty among them could even be higher, this high incidence of poverty among adivasis points to the various dimensions of

social inequalities prevalent in the state. Poverty is a complex phenomenon that can be addressed through better employment and income. Their over dependence on agriculture and lower income generated could be one of the major reasons for their poverty situation. So it is necessary to look into the labour market participation of tribal communities in general and inter community differences in particular in the state with the help of indicators such as labour force participation, work participation and the sectoral and occupational compositions. In Kerala, the degree of participation and sectoral composition of different tribal communities in the labour market has not received deserving attention. Most of the previous studies have focused on the tribals in the labour market of other states. The studies that focused on the tribals in the Kerala focused mainly on their health, education and land aspects, which do not give in-depth focus in to the employment aspects of the different tribal communities, the factors responsible for their employment in elementary occupations and the inter-generational changes. There are a number of questions that emerged to be examined in this context with respect to the tribal labour market. They are the current occupational and industrial status of tribal workers, structural pattern of transformation across tribal communities like other social classes, inter- generation transformation, factors influencing such transformation and how it varies across communities and the factors that determine the occupational choice of the communities. So the present study is an attempt to fulfil that gap.

1.4 Objectives of the study

1. To assess the labour market participation among the tribals in the state of Kerala;
2. To examine the sectoral and occupational distribution among tribals in Kerala;
3. To analyse the inter-generational occupational transformation among selected tribal communities in the study area, and
4. To identify the determinants of choice of occupation among selected tribal communities.

1.5 Hypothesis

The tribal communities in Kerala are different from other social groups in the state who manifest multi dimensions of exclusions within the acclaimed Kerala development experience, an important dimension being the labour market. It can be hypothesised that Inter- generational occupational transformation has significantly taken place among the tribal communities in Kerala triggered by many factors including inter- generational characteristics, but the pattern of transformation and determinants may be different across different tribal communities. Second, it is hypothesised that compensation and education are the determinants that significantly influence the choice of occupation of tribal communities.

1.6 Data Sources and Methodology

The study on occupational choice, inter- generation mobility focuses on the tribal communities of Kerala. Anthropologists, Sociologists, economists and administrators also define tribes in their own way. For the present study we uses the definition of tribes as given by the constitution of India. Article 366 (25) of the Constitution of India refers to Scheduled Tribes as those communities, who are scheduled in accordance with Article 342 of the Constitution. As per the article only those communities who have been declared as such by the President through an initial public notification or through a subsequent amending Act of Parliament will be considered to be Scheduled Tribes. Article 342 defines ‘tribal folk’ as “people living in a particular place, who enter into marriage relationship among themselves, who have no specific skills in any work, traditionally or ethnically ruled by adivasis leaders, who speak any special language, have own beliefs, customs and tradition”

The present study is based on both primary and secondary data. First two objectives are analysed using secondary data and the third and fourth objective with the help of primary data. The primary data at the individual and household level were collected through a face- to face –interview method using a well- structured interview schedule. Secondary data have been obtained from the unit record data of NSSO, the Employment and Unemployment

Survey (EUS) 2011-2012 and NSSO reports (1999-2000 to 2011-12) according to the Usual status activity (UPA+USA) approach, Census reports 1981-2011 published by the registrar general and census commissioner of India, and reports of labour bureau by ministry of labour and employment, reports of tribal department, ministry of tribal affairs and Economic Review of Government of Kerala. The data on Labour Force Participation Rate (LFPR), Worker Population Ratio (WPR), Proportion Unemployed (PU), sectoral and occupational distribution among Scheduled Tribes (ST), Scheduled Castes (SC), Other Backward Classes (OBC) and others are collected using Employment and Unemployment survey.

The methodology followed for collecting primary data was as follows. There are 36 tribal communities in Kerala spreading across all the districts in Kerala. But the concentration of tribal communities (i.e. about 51.58 percentage) is found to be in 3 districts namely Wayanad, Idukki and Palakkad. So for the betterment of the present study the three districts namely Wayanad, Idukki and Palakkad are chosen purposively. The districts for data collection were decided on the criterion of “maximum percentage of the tribal community as a percentage of the total population of the district”. The major communities found in Wayanad district are “Paniyan”, “kurichchan”, “kuruman” and “kattunayakan”. The major communities of Idukki are “Malai Arayan” and “Muthuvan” and the major community of Palakkad district is “Irular” community.

The total number of tribal households in Wayanad, Idukki and Palakkad districts comes around 61800 and the total tribal population is approximately 256230. For the present study, 7 tribal communities are selected from these districts by fixing a benchmark of 4500 households. That means, the communities having less than 4500 households are not considered for the convenience of the study. From Wayanad district 4 communities were chosen. They are “Paniyan”, “Kurichchan”, “Kuruman” and “Kattunayakan”. The number of households in these communities respectively is 19331, 8583, 6330 and 4500. Two communities called “Malai Arayan” and “Muthuvan” are selected from Idukki district, there are 9749 and 6404 households respectively. From Palakkad district only one community called “Irular” is selected, where there are only 6710 households. Thus the proportionate size of the population is about 61607. The settlement of the tribal was selected randomly. For a meaningful study with regard to the objectives highlighted and by considering the size of the population, the number of households for each community in the sample was fixed as a proportion of the total population. I.e. 616 households as sample. From the 7 clusters of tribal

Communities, 1 percentage of the households are chosen. Thus the sample for the study consists 616 households consisting of 193 Paniyan, 85 Kurichchan, 63 Kuruman, 45 Kattunayakan, 67 Irular, 97 Malai Arayan, and 64 Muthuvan households.

1.6.1 Profile of Sample Communities

1.6.1.1 Paniyan

The largest tribal community in Kerala is the Paniyan community, which constitutes 18.24 percent of the total tribal population of the state. They are the oldest inhabitants of Wayanad district. They are believed to be a Dravidian tribe. They were treated as bonded labourers and with the abolition of bonded labour in 1976, they started working as agricultural labourers. But with the decline of paddy cultivation in Wayanad push them into utter poverty. Lack of education and skills required to the modern labour market and increasing population forced them to work as agricultural labourers and wage workers. The misuse of land alienated to them and the drinking habits also paved way for their poverty as they were highly misused by the other tribal communities and the non-tribals. The total population of Paniyan tribal community is 88450 with 42775 are males and 45675 females. The sex ratio is 1068 and mean family size is 4.29 and literacy rate is 63.19 percent as per the Census 2011.

1.6.1.2 Kurichchan

Kurichchan community forms 7.25 percent of the tribal population. The term kurichchan derived from two words kuri (target) and chiyan (people). This etymology was given by Kottayam raja, as they were adepts in archery. The descendants of those warriors are still expert archers. This is the second largest tribal community of the state. They were said to be the first settlers in Wayanad district as farmers and maintains a class hierarchy. They consider them as hill Brahmins or malai Brahmins and allow only namboodiris and nairs to enter their house. Majority of this community are land owners and couple of them are engaged in government service. Agriculture is still the major source of livelihood for majority of the community. Kurichchan live in Wayanad. Kurichchan community have a sizable population on Thavinjal, Thondernad, Kottathara, Panamaram, Vellamunda, Ma nanthavady, Edavaka and Tirunelly panchayaths in Wayanad district (Government of Kerala, 2011). According to census 2011, total population of kurichchan community is 35175. Among them, 17643 are

males and 17528 are females. The family size of the community is 4.10 and the sex ratio is only 993 females for 1000 males which is low to the state average.

1.6.1.3 Kuruman

Kurumans are considered as one of the dominant tribal communities in Wayanad with principal occupation being wood cutting and collection of minor forest produces (Thurstone, 1909). The Mullu kurumbas are traditionally bowmen and hunters, the Kuruman community is well known for the formation of an army to fight against British power in early 19th century (Tribal revolt in 1812) along with kurichchan community. Kuruman community stands next to Kurichchan in terms of literacy and employment in the district of Wayanad. They are the bowmen's and believed to be the descendants of Veda dynasty, who were initial rulers of the district. Kuruman community is mainly concentrated in Noolpuzha, Nenmeni, Poothadi, Ambalavayal, Pulpally, Kaniambetta and Sulthanbathery panchayaths in Wayanad. Total population of the community is about 24505 in which 12148 are males and 12357 are females with 5.05 percent of the total tribal population in the state. Their mean household size is 4.10 and the sex ratio is 1012 and literacy rate is 84.14 per cent as per census 2011.

1.6.1.4 Kattunayakan

They are considered as one of the primitive tribes of Kerala. The etymology of the word kattunayakan is the king of jungle, as the name indicates they prefer to live in forest and are considered as the true heir of musky forest. Kattunayakan are also known as Thenkurumer. They have the expertise in honey collection, wax and gathering of forest produces. Restriction on hunting is most adversely affected this community. This is one of the community who is too introvert in mingling with the outsiders of the community, they are comfortable with only those who talk their language. Females are more introvert than their male counterparts. They are found in deep forests of kidangad, purakadi, pulpalli, noolpuzha, maruthenkara, tharuvana and nallornad, poothady of kattikulam of Wayanad district. It forms 3.75 percent of the population. Out of total population of 18199, 9039 are males and 9160 are females. Sex ratio is 1013 and average household size is 4.04. The literacy rate is 57.47 percent as per census 2011.

1.6.1.5 Malai Arayan

Mala Arayan, also known as Malai Arayan and Malai Arayan, are the third largest tribal community in Kerala in terms of population and are the second community among scheduled tribes which has representatives in largest number of local bodies. The etymology of the term is “monarch of hills or lord of hills”. According to 2011, the total population of the community is 33216 with 17643 males and 17528 females with having 6.85 percent of the total tribal population of the state. Among the tribal communities of Kerala, they have the highest literacy rate i.e. 96.32 percent. Their household size is 3.41 and has a low female to male proportion (998 females per thousand males). This is also the tribal community with highest followers of Christianity (about 30 percent) or converted Christians especially to church of south India. After the conversion of the Malai Arayan to Christianity during 1853, the missionaries founded vernacular schools especially for this community, which made the progress of the community fast and steady. They are the beneficiaries of both reservation policies and missionary activities.

1.6.1.6 Muthuvan

The etymology of the word is “muthu” means back and “van” means one that carries weight on back).it is believed that they got this name when they carry their children and other belongings and idol of god Madura meenakshi in their back, during their migration from Madurai. They lives near the Western Ghats. They speak a language which is closely related to Tamil. They are the migrants from Madurai district of Tamil nadu and still believe that their roots are in Madurai. They are settled in the outer parts of forest. Muthuvans are the ancient tribes and are still reluctant to communicate with outside people (general population). The Muthuvan’s main source of livelihood is agriculture and known for their organic cultivation of paddy and ragi. They also grows mainly cardamom, pepper, ginger, coffee, lemon grass, tapioca and banana. They are basically hunters and collects honey from deep forest a portion as medicine and the remaining to sale in the market. They have strong culture and rituals which is practised even today. They are still unwilling to send their children outside the district in the belief that the children will get bad habits. Early marriage is also practised among the tribes.

They are also one of the lands owning community, who knows the proper utilisation of the land through their hard working. Total population of the community is 23746. Out of which, 11931 are males and 11815 are females. Their sex ratio is low with 979 and literacy rate is 56.90 which are the lowest among the tribal communities of Kerala. And the mean family size of Muthuvan community is 3.71. Out of this About 64 per cent of the community is concentrated in Idukki district. Majority of Muthuvan settlements are found in chinnakanal, munnar, Adimaly, Marayur, Mankulam, Edamalakkudi of Idukki district and Kuttampuzha in Eranakulam district.

1.6.1.7 Irular

Etymology of the term is “dark people” they speak Dravidian language closely related to Tamil. In Kerala they are settled mainly in attapady and walayar. According to the district tribal department they are mainly settled in interior regions of pudussery and malampuzha panchayat. The Irular tribe forms 4.89 per cent of the tribal population of the state. The total population of this tribe is 23791, with 11766 males and 11955 females. Their sex ratio is 1016 comparatively better off to some tribal communities like Muthuvan, Malai Arayan and Kurichchan community. Their literacy rate is 62.80 and household size is 3.54. Irular tribal community is the highest populous tribal community of Palakkad. They follow joint family till recently. They also own land, but only few tribals have fertile land in pudussery panchayat. Most of them have barren land with huge stones where cultivation is not at all possible. And those with fertile land cultivate paddy, red gram, maize, millets, groundnuts and vegetables. Few of community members are also employed in government and private services. Animal husbandry, basket making, mat weaving and collection of minor forest produce are their subsidiary sources of income. Apart from Pudussery and Malampuzha panchayats, the community is located in three panchayats of Attappady namely Agali, Sholayur and Pudussery.

1.7 Tools for Analysis

Along with descriptive analysis, cross tabs, growth rate and percentages the following tools of inferential statistics were used in the study.

- a) Pearson's Chi Square Test: The Pearson's Chi Square test is a non-parametric test used to analyse the degree of association between two categorical variables.
- b) Co-efficient of correlation: It is a measure of relationship between two variables and expresses the extent of variation between two variables. In this study correlation between income and landholdings are measured. Correlation between Land holdings and Monthly income of tribal households is studied in the present work.
- c) Simple linear regression: It indicates to what extent the dependent variable is associated with the independent variable. Regression analysis with only one independent variable is a simple linear regression, which is specified as

$$Y = \beta_0 + \beta_1 X_1$$

In the study the extent of change in monthly income with change in land holdings for sample households is analysed.

- d) Binary Logistic Regression: A binary logistic regression helps to predict the probability of occurrence of the dichotomous dependent variable given the values of independent variables (continuous or categorical). This is used in the present study to analyse the factors that determine the occupational choice of tribal workers. The logistic model is defined as:

$$\text{Prob (event)} = 1 / (1 + e^{-Z})$$

In the logit model, odds ratio is important which is the ratio of probability of occurrence to the probability of non- occurrence of an event and is given by

$$\text{Odds Ratio} = P / (1 - P)$$

- e) One-Way Analysis of Variance (ANOVA): The One Way Analysis of Variance is used to test whether the means of more than two groups are significantly differ from each other or not, when the distribution is normally or approximately normally distributed. F statistic is used to check group means differences. To analyse the community wise difference in land holdings one- way ANOVA was conducted across seven tribal communities such as Malai Arayan, Muthuvan, Irular, Paniyan, Kurichchan, Kuruman and Kattunayakan.
- f) Kruskal- Wallis test: This is a non- parametric test for comparing three or more independent samples when the distribution is equal or with different sample sizes. It helps in comparing the medians of two or more independent groups. The χ^2 statistic and the associated significance are used to measure its significance. The present study

uses this test to examine inter- community differences in monthly income for 7 tribal communities.

- g) Transformation Matrix: is used to analyse inter - generational occupation mobility.

1.8 Limitations

Like all the studies on tribes, the present study is also subject to some inherent flaws and limitations. The present study focused mainly on the major tribal communities on the basis of population. It would have been more fruitful if the study had focused on the tribal communities with least population. But the problems in getting permission from the tribal department and the difficulty in reaching the tribal settlements in the interior regions of the forest areas were the major limitation for the study in focusing tribes with small population. The geographical terrain and the communication barrier posed problems in the execution of survey. The over reporting by some communities and the under reporting by some communities is also a limitation of the study. The study also faces with the problem of recalling especially about their grandparents and their previous occupations.

1.9 Chapter Scheme

The whole study is presented in seven chapters. After the introductory part of the study, the second chapter reviews the relevant theoretical background of labour and labour market with special emphasis on structural change theories. Third chapter brings out the labour market participation of different social groups in India and Kerala. Sectoral and occupational composition of different social groups is also examined in this chapter. Fourth chapter brings out the labour market of major tribal communities in Kerala. The chapter also details the sectoral distribution of different tribal communities in the state. An analysis of the tribal communities in Kerala with special emphasis on the seven major selected communities is presented in the fifth chapter. The chapter also examines inter- generational occupational mobility among the selected tribal communities. The detailed analysis of the major determinants influencing occupational choice of sample tribal communities is included in the sixth chapter. The last chapter summarises the major findings and provides suggestions.

Chapter II

THEORETICAL REVIEW OF LABOUR MARKET

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- *Introduction*
 - *Theoretical Review of Labour*
 - *Theoretical review of labour market*
 - *Structural Change Theories*
 - *Conclusion*
-

2.1 Introduction

Labour and labour market is always a concern for the policy makers and planners. Labour Market is the place where Labour is allocated and rewarded (Papola, 1968). All markets are imperfect and the labour market is more imperfect due to the peculiarities of the participants of the labour market. The imperfections in the labour market vary from country to country, region to region and society to society because of the various social, historical and cultural phenomenon. Lack of mobility is also a reason for imperfections in the labour market. The study of labour and labour market gain importance in the sphere that it is an important factor for the overall development of the economy. The betterment of the labour force is an important indicator for the economic development. Along with this increasing employability is also an important indicator of the economic development. Most of the economists argue that the growth of the economy can be measured with the changing structure of the economy from the pre dominant agriculture to a well flourished modern sectors like industry and there to services. Most of the developed countries followed the same pattern. Whereas, the developing country like India has shown a deviating structure. The initiatives taken by the government now a days is for the development of the modern sectors. In this context the present chapter focusses more on the structural theories to get a clear and evident picture for the same.

2.2 Theoretical Review of Labour

The theoretical review of labour is better understood with the history of labour. And the history of labour is primarily about the expansions in labour movements and the working class. The labour movements began in west Europe and U.S.A during the 18th century with industrial revolution, when agricultural jobs declined and employment moved to more industrial areas. This became active in the early to the mid-19th century, which caused for the formation of various labour parties and trade unions. The labour movements gained major impetus in the late 19th and early 20th century. Throughout the world, the action by these labour movements in the European and American countries has led to the reforms and worker's rights, such as the two- day weekend, minimum wage, paid holidays and the achievement of the eight-hour per day for the workers. The major effect of these movements is on the theories on value of labour. There are a number of theories which draws attention of

the value of labour. And the labour theories of value dates back to the works of Sir William Petty to Karl Marx.

Presently, the concept of labour theory of value is most often associated with the works of Marx and Marxian economics, even though he never used the phrase labour theory of value, but instead made reference to a law of value. Whereas, the history of labour theory begins with Adam Smith followed by the writers Ricardo, Malthus, James Mill, Torrens, Senior, John Staurt Mill and Cairnes. Here, this study is limited to the studies of Adam Smith, Ricardo and Marx, the best known advocates of labour theory. Before them, Petty opined that land and labour are the original source of all commodities. For him, “Labour is the father and active principle of wealth, as lands are the mother”. He stressed the role of labour in production without ignoring land. Improved upon Petty, Locke in his political philosophy argued that labour is the private property of labourers and the labour produces most of the value of useful things. His theory and he directly influenced the philosophical and analytical foundation of classical economics.

The classical economist, Adam Smith, began the wealth of Nations with the bold assertion that national wealth is due to labour. According to Smith annual labour produces annual consumption of the nation and he defined wealth or welfare of a nation in terms of consumption. While Ricardo corrected Smith and applied the labour theory of value to civil society. Ricardo stated that the value of labour is proportional to how much labour was required to produce it, not excluding the raw materials and machinery used in the process. Both Smith and Ricardo began by imagining hypothetical rule and early state of humanity consisting of simple commodity production. Contrary to this Marx argued that labour is not the source of all wealth and opposed ascribing a super natural creative power to labour. He never used the term Labour theory of value; instead he used the concept socially necessary labour time to explain the theory. And for him the value of a product is determined more by societal standards than by living conditions. i.e. “labour is the sole value creating substance”.

From all the above mentioned theories, labour plays an important role in both wealth and welfare of a nation. So understanding the views of various economist on labour is important practice, before studying labour market. Now we have to understand the theoretical background of labour market to understand what actually a labour market is before going in detail to the structural change theories, which is more important for the present study.

2.3 Theoretical review of labour market

Labour market is an area of economic exchange with three main groups of actors: individuals who seek jobs, firms who seek workers and the government who set various policies, many of which have direct effect on the decisions of the individuals and firms and wholly the operation of the labour market. As we know that the main components of labour market are the demand for and supply of labour and wage determination. Since the main function of labour market is the equilibrium of demand for and supply of labour. The performance of the labour market depends upon the efficiency with which labour allocation of labour among industries, regions and occupations takes place. This can be analysed through the nature of occupation, industrial and wage differences existing in the labour market and the nature and patterns of mobility and migrations. In economic theory, labour market functioning have been viewed differently in different theoretical frameworks.

In the history of economic theory, three theoretical approaches have evolved through time which outlines the principal variables and relationships that characterise the marketing processes. They are: Classical, Neo-classical and institutional. The classical model merely deals with the price determination analysis of demand and wage analysis as the special case of wage determination. They argued that in the short run, the wage fund constitute demand for labour and the supply of labour to be constant. Whereas, in the long run they believed that factor substitution is possible in response to changes in factor prices. This means that the supply of labour was assumed to be determined by the subsistence theory and there is no unemployment, and the possibilities of unemployment can be overcome with cut in money wages. The classical economists considered economic and non- economic factors affecting the behaviour of workers in a perfectly competitive market.

Classical system has been criticised for their unrealistic assumptions and this gave rise to neo- classical approach whose main focus of attention is on the labour market process including the action of individual employers and firms and individual workers and their unions. This approach has its root in the 1870s which is known as the “marginal revolution” in the history of economic thought forwarded by Jevons, Menger and Walras. However, Marshall and Hicks are prominent among them. They replaced the classical approach by the concept of general equilibrium in an essentially static framework. According to them the demand for labour is determined where the Marginal Productivity of Labour equals its price,

i.e., wage. The neo- classical theories made an easy way in explaining the rising wage trend as the new natural resources and supply of capital has increased productivity. But this phenomenon along with inter-firm and inter- industry wage differentials, revealed that there was a case for bargaining for higher wages by the unions which gave rise to new theories in the economic history i.e. the “bargaining theories” and so called “institutionalist” theories. The institutionalist theories focus on the factors other than purely economics that affects the working of the labour market. According to the institutionalist, the social, political, and psychological factors along with customs and anthropology determine the decision of the workers regarding labour supply rather than economic rationality. On this basis they assumed a backward bending supply curve. According to them the wages are neither determined by the forces of demand and supply alone, nor there is a tendency of equalising occupational and relational wages. The claim on the existence of multiple labour market. But the institutionalist approach failed to give a testable proposition on the labour market.

Against all the theories mentioned above there emerged radical school based on the hypothesis that the workers are exploited by the capital owners. Their view on exploitation, inequality and discrimination is more applicable in underdeveloped countries, where unemployment is prevalent. According to Marx, in the long run, capital accumulation and labour saving techniques will lead to the growth of reserve army of unemployed labour which helps to keep the supply of commodity abundant. This enables the capitalists to drive down the wages to subsistence level. He concluded by arguing that the trade unions could exert countervailing bargaining power against the exploitation of labour. The main drawback of this approach is that the theories are not applicable to agricultural labour markets in developing countries rather dealt with the industrial sector of the advanced countries.

2.4 Structural Change Theories

Structural change clearly means the changes in the industrial and occupational structure of the economy along with the changes in its output. Here the prime concern is about the changes in the employment structure where the working population moves from the traditional primary employment to the secondary and there by the modern tertiary sectors of the economy. After going through in detail the theories of labour and labour market, it is worthwhile to go in detail the theories on structural change, which is the prime concern in the present study. The structural change theories begins its origin from the works of Fisher

(1952) where he invented the term “tertiary production”. The term tertiary industries was originated by Professor Fisher in New Zealand, and became widely known through the publication of his book, *The Clash of Progress and Security*, in 1935. It took its origin from the titles current in Australia and New Zealand of 'primary industry' for agriculture, grazing, trapping, forestry, fishing and mining, and 'secondary industry' for manufacture. In Australia and New Zealand these terms are not only used in statistical reference books but are widely current in popular discussion. The phrase 'tertiary industries' therefore immediately carries, in these countries, a suggestion of those excluded by the official definition of 'secondary industries'. Clark (1957) originated the term for answering for the crucial question of the time that “in what direction is it desirable at this stage of our history to accelerate the rate of economic development? According to him “tertiary production is concerned with every new or relatively new type of consumers’ demand, the production and distribution of which is made possible by improvements in technical efficiency, which release resources hitherto required for primary or secondary production. He also includes the whole of transport and communication, and commerce and finance groups, as well as professional workers, and those engaged in public administration, entertainment and sport, or personal or domestic service”.

Fisher in this theory stated that in a progressive economy there is a steady shift of both employment and investment from primary activities to secondary activities of all kinds and to a still greater extent into tertiary activities. According to him it is the inescapable reflection of economic progress. According to Fisher (1933) in his work “*Capital, and the Growth of Knowledge*,” world economic history might be roughly sketched into three stages. After the primary and secondary stages, the economies emerged into tertiary stage. Followed by this Clark (1940) in his study on economic progress in relation to economic structure of different countries found out that for a single period of time there is widest discrepancy in the comparative levels of economic advancement among different countries of the world. The movement of working population from agriculture to manufacturing and from manufacturing to commerce and services are the most important outcome of economic progress. He comes to the firmly established conclusion that the countries with high average level of real income per head like U.S.A, Canada, Great Britain, Australia and New Zealand followed by Argentina and other European Industrial countries. Whereas, the countries with low real income per head is engaged more on primary industries and less on tertiary industries, china

was considered as the best example for the same. Clark further observed that the reason for such an increase in the tertiary production is the increase in the demand for the services which are non- transportable. His analysis on the trend through time ends up with the same conclusion and added that the proportion engaged in secondary industry in every country rise to a maximum and then started declining, which is an indication of maximum industrialisation.

For him “occupation refers to the type of work on which a man or woman is actually engaged, while industry refers to the trade or service performed by his employer”. He also gives a clear picture of the works which are included in primary, secondary and tertiary sectors. i. e. primary includes pastoral production, forestry, fishing and hunting. Secondary includes mining covering manufacture, building construction and public works, gas and electricity supply. Whereas, tertiary sector includes distribution, transport, public administration, domestic service and all other activities producing a non- material output. (Later this definition was considered best definition by fisher, 1952). These industrial changes are accompanied by a gradual elimination of unskilled manual workers, whereas, clerical and professional workers showed a rapid growth during the study period. His study also reveals that the decline in agriculture reduced the relative proportion of self- employed and independent workers, while the growth in tertiary industries restored their relative importance. With these notions he concluded the chapter on “the flow of labour to tertiary production” in his book “the conditions of economic progress”.

In contrast to what Clark and fisher opined about the shift in production process during the economic progress, Bauer and Yamey (1951) studied about the production in backward economies, especially in colonies like Africa found out that bulk of the population is engaged in agriculture. He used the same terminologies given by Clark. He argues that the works of Clark and fisher which is partly analytical and partly statistical appear to be defective. According to them, even if the statistics shows that with economic progress the proportion of tertiary activities has increased, but it is not a necessary or predictable condition. For them the tertiary production is an aggregation of so many dissimilar activities and the demand for all these activities will not follow a same trend. The activities in the tertiary sector include domestic service, government service, transport, wholesale and retail distribution, entertainment, education and others. And the only feature followed by all these activities is that the out- put is non- material. Bauer and Yamey also argue that the supply of labour in

tertiary production also depends on various factors and not solely by national income. So the conclusions made by Clark and Fisher that the correlation between economic progress and occupational distribution is more of a statistical accident and not a significant economic law. The occupational trends seen in underdeveloped countries are due to the fact that clear-cut occupational distributions are inappropriate, where specialisation is imperfect. They also opined that “there may have been a declining proportion of labour in tertiary activity in the early part of the industrial revolution with a rapid growth in factory production, particularly when allowance is made for paid domestic service performed by dependent members of agricultural households”. He argued that the trading activities in West Africa have declined with economic progress. After the above mentioned criticism offered by Bauer and Yamey, Fisher re-examined the concept of tertiary production in his article “a note on tertiary production” in 1952.

According to Fisher (1952) “Even in the most primitive communities with the lowest standards of living, some fraction of the available working time has always been devoted to tertiary production, and even in the first sketchy analyses of tertiary production, the point was made that in the early stages of economic progress in communities with very low income levels, the relative importance of tertiary production was often likely for some time to decline. Even in these communities, however, after income levels have reached a quite modest level- which, moreover, may not be the same in all economies- this tendency is almost certain to be reversed”. With this Fisher argued that then it is reasonable to predict that a substantial increase in the average income level of British West Africa would mean a contraction of some of the trading activities which means that if the increase went far enough, tertiary activities of other kinds would probably be more extensively practised. Professor Jean Fourastie (1949) has criticised the concepts discussed by Fisher and argued that the definitions of primary, secondary and tertiary production are enumerative and purely formal. Further, he adopted another definition on the basis of technical progress according to him, the primary or agricultural sector is usually characterised by only moderate technical progress, and industrial progress is more rapid in secondary activities. Whereas, all those employments where technical progress is negligible or non-existent are placed in tertiary sector. Fisher also argued that in two hypothetical economies with identical average income levels, if average income levels rose, the general trend will be the same but the relative importance of different activities of tertiary production may not be the same even though its importance

risers. This is the answer to Bauer and Yamey's criticism on the generalisation of correlation between economic progress and tertiary activities, which they considered as analytically and statistically defective. Different from this Kuznets (1959) in his work six lectures on economic growth argued that economic growth means structural change as new industries appear and old industries recede in importance. It implies major structural changes and corresponding large modifications in social and institutional conditions under which the greatly increased product per capita is attained. In the second lecture he examined the changing structure of resource allocation and output between agriculture, manufacturing and services as economic growth proceeds and shows the mutual interactions of the technical revolutions in agriculture and industry.

Apart from the above mentioned theories, there are theories which also explain the transformation in the economic system which is the part of economic development in different manner. This is more prominent as structural change theories. These theories are mentioned below.

It was Lewis (1954) who gave a clear cut frame work for studying economic development in an under developed economy. His theory is marked in the economic history as the heart and soul of structural theories in economics. His model consists of two distinct sectors, the subsistence sector with small- scale family agriculture and various other types of economic activity. And the capitalist sector with manufacturing industry and estate agriculture. The latter may be private or state owned. The former is stagnant with low investment where the average productivity of labour is probably zero or negative. According to Lewis capitalist sector emerges as a condition of economic progress which alone generated the required savings and investment whereas, the subsistence agriculture sector saves less and not enough for capital formation. The reservoir in the subsistence sector provides an elastic supply of labour to the capitalist sector, the rate at which this transformation occurs depends on the rate of capitalist accumulation by the capitalist sector. The development is initiated by the increase in the number of capitalists in national income at the expense of the subsistence sector.

In short, he argues that with the expansion of output in the modern sector, there will be transfer of labour from subsistence agricultural sector to the modern industrial sector. This movement will continue until all the surplus rural labour from the subsistence agriculture

sector is fully absorbed in the new industrial sector. Thereafter, the transformation is possible only at a higher cost of lost food production, which will not be allowed by the industrialists. In this way the economy will face a structural transformation, with the balance of economic activity shifting from traditional unorganized rural agriculture to modern organized urban industrial sector.

Fei and Ranis (1963) in their well-known work “A theory of Economic Development” which is considered as an improvement in Lewis “Economic Development with Unlimited Supplies of Labour” is a surplus labour model. Like the Lewis theory, this theory also argues the presence of dual sector, the primitive sector is the agricultural sector and the modern sector is emerging small industrial sector. The classical theory of production is formulated under static assumptions they believed that only those variables will change which are most relevant to the process of economic growth. The modern economists merged classical and Keynesian theory and introduced dynamic variables but with some rigidity. Rostow (1990) explained it in a different manner In order to overcome this demerit; he introduced a pure dynamic theory on economic growth. He identified the sequence of development of all societies, in their economic dimensions into five categories: the traditional society, the pre-conditions for take-off, the take – off, the drive to maturity, and the age of high mass consumption. It is a dynamic theory of production. According to the author there always occurs transition in all economies, but the sequence varies from society to society. Here the society moved from the traditional pre- Newtonian science and technology to a transitional period due to modernization from exogenous factors like intrusion of foreign power, converging with certain domestic forces. These forces together move the economy to take –off stage which itself will sweep into maturity generally taking up the life of about two further generations; and then finally, if the rise in income matched with technical virtuosity, the last stage begins. In short, Rostow argued that the economy will move from a traditional agriculture economy to a manufacturing oriented economy then to a service led economy in a different perspective (with different phase and manner and in a different framework). As Lewis failed to give a satisfactory explanation for the subsistence or agricultural sector, Fei Ranis in their work tries to give a compact picture of what Lewis has given. In this work they clearly depicts how the transition process through which an under developed economy hopes to move from a condition of stagnation to one of self- sustaining growth. Their analysis begins with the economy’s departure from quasi-stagnation or the initiation of the take-off process

mentioned by Rostow. He departed from the Rostow's process of economic growth and draw heavily on the work of Arthur Lewis. Fei and Ranis emphasized strongly on the industry-agriculture interdependency and said that a robust connectivity between the two would encourage and speedup development. If agricultural labourers look for industrial employment, and industrialists employ more workers by use of larger capital good stock and labour-intensive technology, this connectivity can work between the industrial and agricultural sector. According to Fei and ranis, in the initial stage the total labour force will be in the agricultural sector then the real wage will be equal to the output produced by the total labour force. There will be disguisedly unemployed when MPP is less than the institutional wage. Later on, commercialization of agriculture will lead to total agricultural surplus. This TAS may be viewed as the agricultural resources released to the market through the re-allocation of agricultural workers. Such resources can be siphoned off by means of the investment activities of the landlord class / or government tax policy and can be utilized in support of the new arrivals. Since the MPP in agriculture of the now allocated workers was positive there will not be sufficient agricultural output to feed all the new industrial arrivals at the institutional wage level. With the relative shortage of the agricultural commodities seeking exchange for industrial commodities, the terms of trade in industrial sector has worsened. He argue that the disappearance of the redundant labour force in the agricultural sector is a cause of the Lewis turning point. According to them the exhaustion of labour surplus must be interpreted primarily as a market phenomenon rather than as a physical storage of man power. In short, labour is re allocated from the agriculture sector to the industrial sector which causes the disappearance of the redundant agricultural labour force. But, later the increase in the agricultural wage influenced by the industrial wage increases which results in complete disappearance of disguisedly unemployed labour force and the commercialization of the agricultural sector.

Apart from these, the best-known model of structural change is the one based largely on the empirical works, both cross-sectional (among countries at a given point in time) and time series (over long periods of time) of Chenery and Syrquin (1975), who examined the patterns of development for numerous Third World countries at different levels of per capita income led to the identification of several characteristic features of the development process during the post war period. Their analysis found out that in these countries, there is a shift from agricultural to industrial production, the steady accumulation of physical and human

capital, the change in consumer demands from emphasis on food and basic necessities to desires for diverse manufactured goods and services, the growth of cities and urban industries as people migrate from farms and small towns, and the decline in family size and overall population growth as children lose their economic value and parents substitute child quality (education) for quantity. According to Chenery and Syrquin (a) The normal effect of universal factors that relate to the levels of income; (b) the effect of other general factors such as market size or natural resources over which the government has little or no control; (c) the effects of the country's individual history, its political and social objectives, and the particular policies the government has a major effect on the country's structural change. Moreover, as per capita income rises the production in which labour, capital, and skills can be combined varies from sector to sector. They also argue that as country's size varies, the economies of scale, resource endowments, and scale of domestic demand varies which has a significant effect on the patterns of structural change of a country.

Other economists who mentioned about structural transformation are Sherman Robinson (1972) explained that with economic development in the past involved changes in the structure of the economy. The change in the occupational composition of active population is one of the factors that influenced trend towards manufactured or highly processed goods. According to the author, changes in these factor cause economic growth and tension in the economy. Whereas, Reich, Gordon, Edwards (1973) opined that the political and economic forces encourage the division of the labour market into separate submarkets, or segments, distinguished by different labour market characteristics and behavioural rules. Labour market is segmented into two, primary and secondary. Primary labour market is a high paid job with stable working conditions, skills are acquired and job ladder exists whereas in the secondary sector there is no stable working habit, wages are low; turnover is high; and job ladders are few. Secondary jobs are mainly (though not exclusively) filled by minority workers, women, and youth. Within the primary sector there is segmentation between subordinate and independent primary sector and the latter is superior. It is seen that minority workers are seen in secondary jobs. Certain jobs are "race-typed," segregated by prejudice and by labour market institutions. Geographic separation plays an important role in maintaining divisions between race segments. As against these Samir Amin (1974) argued that there is an important role played by the social groups and their political struggles in the development process. The developments in the backward areas are blocked

by the world capitalist system. As an extension of the theory of feudalism to capitalism Amin explained this as transition from pre-capitalist social formations to the social formations of peripheral capitalism. With development resulting from the influx of foreign capital may take dualism in its crudest form, the juxtaposition of two independent sectors may appear. Amin recognizes that even though capital accumulation occurs, the rate of development is in a slower manner, because the craftsmen return to agriculture and the tertiary sector which offers substantial resistance to subsequent development; the specific direction taken by foreign investment; and finally, the limited possibilities for the newly formed native capital to be invested. He also argues that industrial development is at the expense of agriculture and the industries aiming at the home market. Along with that the predominance of agrarian capitalism, a large number of agricultural labourers are thrown out of employment, and the proportion of landless peasants increases. Amin further mentioned that in the peripheral economies there will be enlargement of the tertiary sector.

From the above theories the study came to a theoretical framework that there is a structural transformation in all the economies, this was found in their early stages of the present developed countries, as a result of economic growth. I.e. when the per capita income of an economy increases, then the economy face with a shift of workers from the agriculture to an industrial and then further increase in per capita income to a service oriented economy (Clark-Fisher hypothesis) or the economic development of a country will enhance its tertiary sector after passing through primary and secondary sectors. The increase in the sub sectors of the tertiary sector may not be in same pattern there may be variations. In the study the pattern is found applicable not only to a country but to different social groups. The present study gives more emphasis to Clark- fisher hypothesis and Lewis theory of Economic development with unlimited supplies of labour. That most of the workers shift from primary sector as their marginal productivity is low but they are accumulated in the low paid service sector. Practically it is not fully possible to accumulate all those in modern sectors whose marginal productivity is zero or negative in agricultural sectors. Their accumulation depends on the education, skills and other particulars they acquired needed for the modern sector. We also focus on Fisher (1952) approach that “Even in the most primitive communities with the lowest standards of living, some fraction of the available working time has always been devoted to tertiary production, and even in the first sketchy analyses of tertiary production, the point was made that in the early stages of economic progress in communities with very

low income levels, the relative importance of tertiary production was often likely for some time to decline. Even in these communities, however, after income levels have reached a quite modest level- which, moreover, may not be the same in all economies- this tendency is almost certain to be reversed". Which is evident from the reviews that the communities like Malai arayan, Kuruman and to some extent Kurichchan are engaged more in tertiary activities.

2.5. Conclusion

Theoretical review of labour and labour markets shows a clear picture of the changing labour market situations. In this chapter we conclude that there is a structural transformation in all the economies, this was found in their early stages of the present developed countries, as a result of economic growth. That is, when the per capita income of an economy increases, then the economy face with a shift of workers from the agriculture to an industrial and then further increase in per capita income to a service oriented economy. The study gives more emphasis to Clark- fisher hypothesis and Lewis theory of Economic development with unlimited supplies of labour which argues that most of the workers shift from primary sector as their marginal productivity is low but they are accumulated in the low paid service sector.

Chapter III

LABOUR MARKET PARTICIPATION OF SOCIAL GROUPS IN INDIA

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- *Introduction*
 - *Social groups by Household Type*
 - *LFPR, WPR across Social Groups*
 - *National Industrial Classification*
 - *Occupational Distribution*
 - *Persons Unemployed*
 - *Conclusion*
-

3.1 Introduction

An analysis on the occupational composition of tribal workers in Kerala requires a detailed examination of the labour market at the national, state and district level. Thus, this chapter takes an analytical look into the labour market in India and Kerala with special emphasis on various social groups. In this chapter a comparative analysis is made on the labour market indicators and sectorial and occupational distribution between Scheduled Tribes (ST), Scheduled Castes (SC), other backward Classes (OBC) and others. The present chapter is organised into seven sections. Second section explores the Household type for various social groups in rural and urban India and Kerala. Third section examines the labour market participation different social groups with the indicators Labour Force Participation Rate (LFPR), Worker Population Ratio (WPR). Fourth section of the chapter deals with the Industrial classification of social groups in India and Kerala. Occupational distribution of social groups in general and Scheduled tribes in detail are explored in the fifth section of the chapter. Sixth section of the chapter looks into the unemployment aspects of different social groups followed by conclusion.

NSSO have been conducting household survey on employment and unemployment to find out the various estimates of employment and unemployment at the national and state level from 27th Round (October 1972-September 1973) to 68th Round (July 2011-June 2012). For the study, data have been drawn from various employment and unemployment survey reports of NSSO ranging over the period from 1993-94 to 2011-12 based on Usual Status (PS+SS) approach. Besides examining the occupational classification of the Scheduled tribes in India unit level data for the 68th round have been taken, which is the latest round of NSSO. NSSO has also published separate report on social groups from 50th round (july1993-june1994) onwards. Social groups include Scheduled Tribes, Scheduled caste, OBC and Others. Before 55th round OBC category is included in others category. While, from 55th round onwards separate category of social group OBC was surveyed and analysed. This chapter is progressed with NSSO data based on Usual Status (PS+SS) approach.

3.2 Distribution of Social groups by Household Type

NSSO has separated the surveyed households on the basis of the major source of income earned by the members of the household during 365 days preceding to the survey. They

categorised six such household types in rural areas and four in urban areas for each social group separately which is detailed below.

Table 3.1: Social Groups by Household Type in Rural Areas (in Percentage)

SOCIAL GROUPS	Household Type	NSSO Rounds							
		1999-'00		2004-05		2009-10		2011-12	
India/Kerala		India	Kerala	India	Kerala	India	Kerala	India	Kerala
ST	Self - employed in Agriculture	36.2	25.1	39.3	11.8	37.0	1.6	41.4	13.2
	Self - employed in Non-agriculture	5.2	10.9	6.4	4.1	7.0	8.5	8.1	8.9
	Casual labour in Agriculture	39.7	34.1	34.0	57.5	33.4	45.3	24.5	41.5
	Casual labour in non- agriculture	8.9	16.9	11.3	9.3	13.1	11.0	13.9	21.2
	Regular wage/ Salary earning		-		-		-	6.3	13.2
	Others	10.1	13.0	8.9	17.3	9.5	33.5	5.9	2.0
SC	Self - employed in Agriculture	16.4	4.7	20.2	5.0	17.1	12	19.5	5.6
	Self - employed in Non-agriculture	12.0	4.1	14.1	9.0	13.7	10.1	14.2	11.4
	Casual labour in Agriculture	51.4	57.4	40.5	39.8	36.9	33.0	31.4	24.7
	Casual labour in non- agriculture	10.0	26.4	15.4	34.6	22.1	42.1	21.3	41.4
	Regular wage/ Salary earning							8.5	8.6
	Others	10.2	7.3	9.8	11.5	10.3	13.6	5.1	8.3
OBC	Self - employed in Agriculture	34.7	14.1	38.7	17.6	34.1	11.2	36.6	10.9
	Self - employed in Non-agriculture	15.5	20.8	17.6	21.9	17.2	21.3	16.3	22.1
	Casual labour in	29.2	19.4	22.4	10.8	23.3	10.5	19.6	8.5

	Agriculture								
	Casual labour in non- agriculture	7.9	30.0	10.4	31.4	14.0	33.1	12.6	29.1
	Regular wage/ Salary earning							9.0	14.3
	Other s	12.7	15.4	11.0	18.3	11.4	23.9	5.9	15.1
OTHER	Self - employed in Agriculture	41.1	26.9	43.3	34.3	39.4	25.4	39.8	25.4
	Self - employed in Non- agriculture	14.8	14.8	18.1	17.3	18.1	15.7	18.6	19.0
	Casual labour in Agriculture	19.0	14.6	15.6	12.7	15.9	11.5	12.8	8.8
	Casual labour in non- agriculture	6.3	18.1	7.7	17.5	10.3	18.4	8.3	16.0
	Regular wage/ Salary earning							13.3	18.9
	Other s	18.7	25.5	15.3	18.2	16.3	29.1	7.3	11.9
	Self - employed in Agriculture	32.7	18.3	35.9	20.7	31.9	14.2	34.3	14.3
	Self - employed in Non- agriculture	13.4	16.5	15.8	18.5	15.5	18.0	15.5	20.0
ALL	Casual labour in Agriculture	32.2	21.8	25.8	16.1	25.6	14.1	21.0	10.7
	Casual labour in non- agriculture	8.0	24.7	10.9	27.3	14.8	29.2	13.5	26.5
	Regular wage/ Salary earning							9.6	15.0
	Others	13.7	18.4	11.6	17.4	12.2	24.5	6.1	13.4

Source: NSS Reports on Employment and Unemployment Situation in India.

Note: Data on Regular wage/ Salary earning available only for 2011-12 (68thNSSO round)

Table 3.1 shows the distribution of households by household type for various social groups in India and Kerala. It is clear from the table that 33 percent households in India earn their income from self-employed in agriculture, 13 percent from Self-employed in Non-agriculture, 32 percent households depend on Casual labour in Agriculture, 8 percent on Casual labour in non- agriculture , 14 percent in others during 1993-94 while the same decreased to 34 percent for self-employed in agriculture, increased to 16 percent Self -employed in Non-agriculture,

declined to 21 percent on Casual labour in Agriculture, increased to 14 percent for Casual labour in non- agriculture, declined to 6 percent for others respectively during 2011-12. Whereas, in rural Kerala most households are depending more on casual labour in non-agriculture followed by self- employed in non- agriculture and least in casual labour in agriculture during 2011-12. Compared to 1999-2000 the overall dependence on various social groups on agriculture has declined hugely and dependence on non- agricultural works for major source of income has increased over the period. While in rural India most of the households depends on self-employment in agriculture. Only 9.6 percent Indians are depending on regular wage/ salaried works while 15 percent of households of Kerala earn their livelihood from regular wage/ salaried works.

During 1999-2000, SC households in India and Kerala are employed more as casual labours in agriculture and non-agriculture and less on self- employment in agriculture and non-agriculture. While during 2011-12 their participation in self -employment in both agriculture and non- agriculture increased whereas casual labour in agriculture declined. Their employment in non- agricultural casual works and other works also increased during 2011-12. Only 8 percent SC in India and Kerala depends on regular wage/ salaried works. In India the main source of India main source of income for OBCs are self- employment in agriculture followed by casual labour in agriculture and self- employment, casual labour in non- agriculture respectively, but in Kerala, their main source of income during 1999-2000 was casual labour in non - agriculture followed by self-employment in non- agriculture. They were less employed in self - employment in agriculture during 1999-2000. The same trend can be seen during 2011-12 in both India and Kerala.

During 1999-2000,households of other than SC,ST and OBC social group were engaged more self- employment in agriculture and other works and less on self- employment in non-agriculture and casual –labour in agriculture. Apart from this during 2011-12, NSSO taken into account the households engaged as regular wage/ salaried separately and found out that, Other than SC, ST and OBC households are engaged more in regular wage and salaried works followed by OBC. SC households are least employed in such works preceded by STs. This shows the dominance of others in such secured jobs. The same trend can be seen in the Indian labour market also, others are more engaged in regular wage / salaried works followed by OBC, SC and ST.

Table 3.2: Social Group by Household Type in Urban Areas (in Percentage)

SOCIAL GROUPS	Household Type	NSSO Rounds							
		1999-'00		2004-05		2009-10		2011-12	
India/Kerala		India	Kerala	India	Kerala	India	Kerala	India	Kerala
ST	Self-employed	21.6	26.2	26.3	18.8	23.3	7.4	19.5	9.6
	Wage/salaried	38.0	26.3	41.8	9.5	38.4	35.5	46.5	62.2
	Casual Labour	25.6	41.7	17.3	4.2	21.1	8.7	10.8	14.1
	Others	14.7	5.8	14.5	67.5	16.9	48.4	16.0	14.1
SC	Self-employed	27.3	14.2	29.4	23.7	26.2	18.0	26.8	17.7
	Wage/salaried	37.6	34.1	41.1	18.4	39.4	24.1	44.0	28.6
	Casual Labour	26.5	44.5	21.8	48.2	25.1	54.1	20.5	37.4
	Others	8.5	7.3	7.7	9.8	9.2	3.9	8.6	16.3
OBC	Self-employed	37.6	35.9	40.3	33.4	36.8	31.0	37.8	31.9
	Wage/salaried	36.3	25.4	36.7	22.2	35.0	22.8	37.6	26.5
	casual	17.4	26.7	14.5	29.2	17.1	29.1	14.3	26.0
	Others	8.5	11.8	8.4	15.2	11.1	17.1	10.4	15.5
OTHERS	Self-employed	35.5	29.9	38.6	36.5	36.2	25.6	36.9	31.4
	Wage/salaried	46.5	36.7	44.8	36.1	44.1	39.9	44.5	37.3
	Casual Labour	7.4	18.7	6.2	11.2	6.0	10.5	5.9	11.3
	Others	10.5	14.5	10.3	16.1	13.6	24.0	12.6	19.9
ALL	Self-employed	34.4	32.0	37.5	33.7	34.7	28.3	35.3	30.8
	Wage/salaried	41.7	30.6	41.3	26.3	39.7	28.1	41.7	29.9
	Casual Labour	14.0	24.7	11.8	24.7	13.4	25.3	11.8	22.3
	Others	9.7	12.6	9.4	15.3	12.1	18.3	11.2	16.9

Source: NSS Reports on Employment and Unemployment Situation in India.

The table 3.2 shows the distribution of urban households by household type in India and Kerala. Highest percent of urban households in India are regular wage / salaried households i.e. about 42 percentage. 35 percent of urban households in India earned their major source of income from self-employment. Only 12 percent of urban households are depending on casual employment and 11 percent households on other employment during the survey period of July 2011-to June 2012. While in Kerala, 31 percent of Households are engaged in self-employment, 30 percent are employed as regular wage or salaried, 22 percent as casual labours and 17 percent had their livelihood from other works during 2011-12. During 1999-2000, 33 percent households are employed as self-employed, 31 percent in wage or salaried, 25 percent in casual labour and 13 percent earn their income from other sources.

Social group wise analysis shows that in urban areas of India and the state of Kerala All social groups earn their income from wage/ salaried works followed by self- employment and casual labour, except OBC, they had their main source of income from Self- employment followed by wage/ salaried works and casual works.

3.3: Distribution of Social Groups on the basis of LFPR, WPR

For the purpose of the study three different indicators of employment and unemployment like LFPR, WPR and PU based on usual status have been studied in detail in the following section. “Labour force, or, in other words, the ‘economically active’ population refers to the population which supplies or seeks to supply labour for production of goods and services and therefore, includes both the ‘employed’ and the ‘unemployed’” (NSSO July 2011 – June 2012). “The work force according to the *usual status* (pass) includes persons who (a) either worked for a relatively long part of the 365 days preceding the date of survey and (b) also those persons from among the remaining population who had worked at least for 30 days during the reference period of 365 days preceding the date of survey” (NSSO July 2011 – June 2012). “The estimate of unemployed according to the *usual status* (PS) gives the number of persons who sought or was available for work for a relatively long period during a reference period of 365 days and approximates to an indicator of the chronically unemployed”(NSSO July 2011 – June 2012).

Table 3.3: LFPR of Males and Females in Rural Areas (in Percentage)

LFPR RURAL MALE										
NSSO Rounds	SOCIAL GROUPS									
	ST		SC		OBC		OTHER		ALL	
India/ Kerala	India	Kerala	India	Kerala	India	Kerala	India	Kerala	India	Kerala
1999-2000	56.4	74.9	54.1	62.1	54	56.7	53.2	60.5	54	58.7
2004-05	56.8 (0.71)	64.0 (-14.55)	55.4 (2.40)	62.3 (0.32)	54.5 (0.93)	57.3 (1.06)	56.8 (6.77)	60.5 (0.00)	55.5 (2.78)	58.9 (0.34)
2009-10	56.9 (0.18)	50.6 (-20.94)	55.8 (0.72)	62.0 (-0.48)	54.8 (0.55)	56.9 (-0.70)	56.3 (-0.88)	60.2 (-0.50)	55.6 (0.18)	58.3 (-1.02)
2011-12	56.5 (-0.70)	68.7 (35.77)	55 (-1.43)	67.7 (9.19)	54.7 (-0.18)	56.7 (-0.35)	56.2 (-0.18)	56.3 (-6.48)	55.3 (-0.54)	58.3 (0.00)
LFPR RURAL FEMALE										
NSSO Rounds	ST		SC		OBC		OTHER		ALL	
	India	Kerala	India	Kerala	India	Kerala	India	Kerala	India	Kerala
1999-2000	43.9	43.0	32.7	37.1	30.5	25.8	22.8	25.8	30.2	27.3
2004-05	46.6 (6.15)	43.8 (1.86)	33.8 (3.36)	41.9 (12.94)	33.7 (10.49)	28.1 (8.91)	27 (18.42)	28.1 (8.91)	33.3 (10.26)	32.1 (17.58)
2009-10	36.2 (-22.32)	28.6 (-34.70)	27.3 (-19.23)	38.6 (-7.88)	27.1 (-19.58)	21.7 (-22.78)	20.4 (-24.44)	21.7 (-22.78)	26.5 (-20.42)	26.0 (-19.00)
2011-12	36.9 (1.93)	44.9 (56.99)	26.5 (-2.93)	35.9 (-6.99)	24.3 (-10.33)	23.5 (8.29)	20.6 (0.98)	23.5 (8.29)	25.3 (-4.53)	25.8 (-0.77)

Source: NSS Reports on Employment and Unemployment Situation in India.

*Figures in the parentheses shows growth rates

The table shows the LFPR for rural males and females in India and Kerala from 1993-94 to 2011-12. From the table it is clear that 55.3 percent of males and 25.3 percent of the rural females are in the Labour force of India. The participation of rural males is twice greater than the participation of females in India. From the table it is observed that, the LFPR of males in India has declined from 54 percent during 1999-2000 increased to 56 percent during 2009-10, which declined meagrely during 2011-12. More or less same trend is followed among the rural females in India. The LFPR among the female in India is 30 percent in 1999-00, whereas increased to 33 percent during 2004-05 which once again declined to 27 percent in 2009-10 and further to 25 percent during 2011-12. Whereas in Kerala, The LFPR among the rural males remained more or less same over the years from 1999-00 to 2011-12. Marginal increase is shown only during 2004-05. It is also found out that the LFPR is highest for males than females in the rural areas of Kerala. Among the social groups, the LFPR is highest among STs followed by ST, others and OBC males and females. The LFPR has declined for OBC and others males during 2011-12 whereas increased for ST and SC males. The highest decline is among others males and highest increase is among ST males. The LFPR has declined for SC and others females and increased for ST and OBC females. The highest increase is for ST females and highest decline is for SC females. Which means the labour supply is increasing for ST males and females while declining for others males and females.

Among the social groups, it is clear that LFPR is high among ST social group followed by SC. LFPR for OBC is higher than others in India while LFPR is higher for Others than others males. The LFPR for males among all social groups remained more or less same, except others (increased), while declined for ST and Others, remained same for OBC and increased for SC males in Kerala. On the other hand LFPR for rural females is higher for ST females followed by SC, OBC and Others females. Over the years it has declined for all social groups.

Table 3.4: LFPR in Urban India and Kerala (in Percentage)

LFPR for Urban Male										
NSSO Rounds	Social Group									
	ST		SC		OBC		OTHER		ALL	
India/ Kerala	India	Kerala	India	Kerala	India	Kerala	India	Kerala	India	Kerala
1999-2000	50.2	55.3	53	60.2	55.2	58.6	54.4	58.9	54.2	59.1
2004-05	53.8	70.4	56.8	65.5	57.3	56.7	57.1	60	57	58.3
2009-10	53.4	38.4	56.7	67.5	55.9	55.6	55.8	55.5	55.9	56.4
2011-12	53.8	50.3	56.3	67.8	56.1	55.8	56.8	56.3	56.3	56.7
LFPR for Urban Female										
NSSO Rounds	ST		SC		OBC		OTHER		ALL	
India/ Kerala	India	Kerala	India	Kerala	India	Kerala	India	Kerala	India	Kerala
1999-2000	21.1	52.4	19.1	37.6	16.7	25.2	11.7	24.4	14.7	25.4
2004-05	25.4	94.7	21	36.7	19.9	26.8	14.7	35.7	17.8	30.1
2009-10	21.2	20	18.6	29	15.5	21.4	12.1	26.6	14.6	23.3
2011-12	20.2	58.9	18.1	29.2	15.9	19	13.8	28.3	15.5	22.2

Source: NSS Reports on Employment and Unemployment Situation in India.

Table 3.4 gives a detailed picture of gender wise LFPR in urban India from 1999-2000 to 2011-12. During 2011-12 the LFPR for males in India is 56.3 percent whereas the same for females in India is 15.5 percent. That is, less than half of the LFPR of males in India. The LFPR of males is 57 Percent and then declined to 56 percent during 1999-2000, 2003-04, 2009-10 and 2011-12 respectively. Whereas, the same for females increased from 15 percent to 18 percent and decline again to 16 percent during the years 1993-94 ,1999-2000,2003-04, 2009-10 and 2011-12 respectively. The LFPR of males is more or less same in some periods, a major increase is seen only during 2009-10, whereas the LFPR for females continuously declined except the period 2009-10, and a meagre increase in the last period of NSSO survey. The LFPR of urban areas in Kerala has declined over the years from 1993-94 to 2011-12. The LFPR is comparatively better only during 2004-05 i.e. 44 percent whereas, it declined from 42 percent to 39 percent during 1993-94 to 2011-12. The LFPR for both males and females also declined during the same period. The LFPR for males declined continuously from 60 percent in 1993-94 to 58 percent during 2011-12. This shows the declining competency in

urban areas. The LFPR for females declined from 25 percent during 1993-94 to 22 percent during 2011-12. But the period 2004-05 earmarked a change by improving the condition of women labour supply by 30 percentage.

Social group wise analysis on LFPR for males shows that, it has increased for all social groups in India in 2011-12, compared to 1999-2000. While the same declined in Kerala except for SC males. For SC males it has increased by 8 percent points in 2011-12 compared to 1999-2000. While the LFPR for females across social group shows that, the LFPR for females has declined over the study periods for all social group except others females increased in India, whereas, increased for ST and Others females and declined for SC and OBC females in Kerala.

The table clearly shows the dominance of SC, OBC and others except ST males in the Labour force of urban Kerala during 1999-2000. The participation of ST males further declined vastly during the period 1999-2000 to 2011-12. Likewise, the participation of OBCs and others are also declined during the same period but only in a slightly. The participation of SC males in the urban labour force increased vastly. During 2011-12 also the SC males are more predominant in the labour force of urban Kerala. The change in the labour market structure can be considered as the major reason for this trend. When we look into the labour force participation of urban females in Kerala labour market, we can see that the ST females as more predominant in the labour force as against their male counterpart during the period 1999-2000 to 2011-12 followed by SC, others and OBC females. Another notable factor clear from the table is that, the LFPR of urban females varied rigorously over the same period. All these facts are clear from the table.

In this section we can understand that the LFPR for males is twice higher than females in all years in both rural and urban areas of India. When we compare the sector wise LFPR we can see that the LFPR of females is better in rural areas than urban areas, i.e. rural areas gives more platform for female labourers during the 90's than in urban areas. Whereas, the female LFPR is declining both in rural and urban areas and the decline is greater in the rural areas during 00's. This may be the impact of modernisation after the NEP.

Table 3.5: WPR for Various Social Groups in Rural India and Kerala (in Percentage)

NSSO Rounds	WPR for Rural Males									
	SOCIAL GROUPS									
	ST		SC		OBC		OTHER		ALL	
Kerala/India	India	Kerala	India	Kerala	India	Kerala	India	Kerala	India	Kerala
1999-2000	55.8	72.1	53.1	58	53.2	52.8	52	56.6	53.1	55.3
2004-05	56.2 (0.72)	62.8 (-12.90)	54.5 (2.64)	59.3 (2.24)	53.7 (0.94)	54.0 (2.27)	55.7 (7.12)	58.0 (1.40)	54.6 (2.82)	55.9 (1.08)
2009-10	55.9 (-0.53)	50.6 (-19.43)	54.8 (0.55)	59.4 (0.17)	54 (0.56)	55.1 (2.04)	55.2 (-0.90)	58.4 (0.69)	54.7 (0.18)	56.4 (0.89)
2011-12	55.7 (-0.35)	68.7 (35.77)	53.9 (-1.64)	65.3 (9.93)	53.8 (-0.37)	54.7 (-0.73)	55.2 (0.00)	54.8 (-6.16)	54.3 (-0.73)	56.5 (0.18)
NSSO Rounds	WPR for Rural Females									
	ST		SC		OBC		OTHER		ALL	
	Kerala/India	India	Kerala	India	Kerala	India	Kerala	India	Kerala	India
1999-2000	43.8	40.8	32.5	32.7	30.2	22.6	22.3	22.1	29.9	23.8
2004-05	46.4 (5.94)	38.9 (-4.66)	33.3 (2.46)	34.6 (5.81)	33 (9.27)	21.6 (-4.42)	26.2 (17.49)	30.3 (37.10)	32.7 (9.36)	25.6 (7.56)
2009-10	35.9 (-22.63)	24.3 (-37.53)	26.9 (-19.22)	30.3 (-12.43)	26.7 (-19.09)	18.4 (-14.81)	19.9 (-24.05)	25.2 (-16.83)	26.1 (-20.18)	21.8 (-14.84)
2011-12	36.4 (1.40)	44.1 (81.48)	26.2 (-2.60)	32.5 (7.26)	23.9 (-10.49)	19.5 (5.98)	20.1 (1.01)	25.9 (2.78)	24.8 (-4.98)	22.1 (1.38)

Source: NSS Reports on Employment and Unemployment Situation in India.

The WPR for males and females according to usual status in rural areas of India and Kerala for various social groups are mentioned in the table (3.5). From the table we can see that the WPR has declined by 1 percent points for rural males and females in India during 1999-2000 to 2011-12 in India. It is observed from the table that the worker population ratio for rural population has increased over the years for both males and females in Kerala.

It is found in the table that the WPR for males and females in India is just below 50 percent for all social groups. We can also understand from the table that even though the WPR for rural males and females among ST is high, the decline in the WPR is also high among this social group especially for females. The WPR for males in all other social group has declined for SC and ST as against OBC and others, which remained more or less same. Also, the WPR for males in 'other' SG is better compared to SC, ST and OBC. In short, the WPR has

declined for both males and females between the study periods, but the WPR for males remained more or less same after 1999-00, whereas the WPR for females has declined after 1999-00. A slight improvement is seen only during 2011-12. On the other hand in Kerala Across the social group, ST males and females has highest WPR followed by SC, others and OBC males and females. The WPR for others males has declined during 2011-12 compared to previous years while increased for ST followed by SC and OBC males. On the other hand the WPR for all social groups has increased during 2011-12 compared to previous years. The highest increase in WPR is among the ST females followed by SC, OBC, and others. That is, the demand for labour is high for both ST males and females compared to other SGs as WPR is considered as an indicator of demand for labour.

Table 3.6: WPR for various Social Groups in Urban Areas (in Percentage)

NSSO Rounds	WPR for Urban Males									
	Social Groups									
	ST		SC		OBC		Others		ALL	
Kerala/India	India	Kerala	India	Kerala	India	Kerala	India	Kerala	India	Kerala
1999-2000	48	54.8	50.3	56.6	53	54.9	51.8	56.1	51.8	55.8
2004-05	52.3	70.4	53.7	64.3	55.4	53.1	55	55.6	54.9	54.7
2009-10	51	38.4	55	66.8	54.3	53.8	54.2	53.9	54.3	54.7
2011-12	52	50.3	54.5	63.5	54.6	54.5	54.9	54.8	54.6	55.2
NSSO Rounds	WPR for Urban Females									
	ST		SC		OBC		OTHER		ALL	
	Kerala/India	India	Kerala	India	Kerala	India	Kerala	India	Kerala	India
1999-2000	20.4	47.1	18.5	30.1	15.9	19.8	10.8	19.8	13.9	20.3
2004-05	24.5	21.3	20	26.6	18.5	17.5	13.4	24.3	16.6	20
2009-10	20.3	26.7	17.8	26.7	14.5	17.3	11.3	22.6	13.8	19.4
2011-12	19.2	50	17.2	25.4	15.1	15.7	12.9	25.9	14.7	19.1

Source: NSS Reports on Employment and Unemployment Situation in India.

Table 3.6 depicts the WPR of males and females of different social groups in urban India. From the table it is clear that the WPR of urban males and females in India during 2011 is 54.6 percent and 14.7 percent respectively. During 2011-12, the WPR has increased by 2 percent points for urban males and declined by 1 percent points for urban females. The WPR for urban males and females is high during 2004-05. Between 61st (2004-05) and 68th (2011-12) rounds, the WPR for urban males declined by 1 percent points and for urban females the same has declined by 3 percent points. Between 2009-10 and 2011-12, the WPR remained more or less same for urban males and increased by 1 percent points for urban females in India. The table presents the WPR of urban males and females according to usual status from 1993-94 to 2011-12. From the table it is clear that the WPR in urban areas has marginally declined from 38 percent to 36 percent over the years. Among the urban males the WPR has declined from 60 percent to 55 percent and urban females declined from 20 percent to 19 percent during 1993-94 to 2011-12 respectively. The reason for this decline may be the low education, lack of skills and lack of awareness of opportunities compared non in the state of Kerala.

We can conclude that the WPR for males has increased whereas declined for females over the years in India. But another important fact noted from the table is that after 1999-2000, the WPR for urban males and females has increased for urban males and declined for urban females, but the WPR for females slightly improved during the period 2011-12. Sector wise classification of males and females came to the conclusion that during 90's the WPR for rural males was higher than urban males but now it remains more or less same. The WPR for rural females is still higher than urban females in India. But still the alarming issue is that the WPR for rural females is declining highly over the years when compared to 1993-94, which may be due to the increasing participation in higher education. Whereas in Kerala, Sector wise comparison of WPR shows that for rural males WPR increased whereas for urban males it has declined marginally during 1993-94 to 2011-12. This shows that rural areas gives more opportunities for persons with low education and less skilled which urban areas cannot provide. The WPR for females in both rural and urban areas has declined during 1993-94 to 2011-12. This makes the above said fact more clear as rural labour market can absorb only limited unskilled and low educated workers, which made demand for rural females decline.

It is also evident from the table that the WPR for SC and other males is highest compared to ST and OBC males during 1999-2000 in urban areas of Kerala. The WPR for SC males

increased from 57 percent to 64 percent during 1999-2000 to 2011-12, and the WPR for OBC and other social group males has not much changed during the study periods, whereas, the WPR for ST males has declined by 5 percent points during the same period. It is also evident from the table that the WPR fluctuates vigorously for urban ST males from 1999-2000 to 2011-12, such as in the case of LFPR for urban areas. It is observed from the table that the WPR is highest for urban ST females in Kerala as against the WPR for SC, OBC and other females during 1999-2000 and 2011-12. . During 2004-05 and 2011-12 the WPR for ST females was very low. The WPR for other urban females also increased during the period from 1999-2000 to 2011-12. While, declined seriously for SC and OBC females in urban Kerala. The table also makes it clear that the WPR for urban females like urban also changed dynamically during 61st and 66th rounds of NSSO survey.

From the above session we can see that the supply of labour (LFPR) and demand for labour (WPR) is high among STs. Now we have to look into the sector and type of occupation in which the different social group are engaged in especially the ST males and females.

3.4 Distribution of Social Groups on the basis of National Industrial Classification

Next section of the chapter examines National Industrial Classification (NIC) for the periods July 2009- June 2010 and July 2011- June 2012, NSSO sample Survey data. The NIC in India is bringing out by the Central Statistical Organisation (CSO) in the Ministry of Statistics and Programme. The first national Industrial classification was NIC-62 followed by NIC-70, NIC-87 and NIC-98 and NIC-2004. The latest and sixth Industrial Classification namely NIC-2008 has been developed and released by CSO. Till NIC-1998 4-digits ISIC-3 codes were followed and were extended up to 5-digits based on national needs. And the present study confines to NIC-2004 and NIC-2008. The broad industry groups taken for 66th round are primary (NIC-2004 divisions 01 – 05), secondary (NIC-2004 divisions code 10 – 45) tertiary (NIC-2004 divisions code 50 – 99) as per NIC-2004. And the Broad industry groups taken for 68th round are primary (NIC-2008 divisions: 01 – 03), secondary (NIC-2008 divisions: 05 – 43) and tertiary (NIC-2008 divisions: 45 – 99) respectively. Here sectorial composition of only 66th and 68th rounds are analysed as available from NSSO reports. Here Broad Industry of Work in rural areas and urban areas are examined separately

Table 3.7: NIC (2008) Classification of Social Groups for India and Kerala (in Percentage) (Rural + Urban)

Total Persons (rural + urban)						
Social Groups	National Industrial Classification (2008)					
	India			Kerala		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
ST	70.37	19.94	11.68	46.72	24.03	29.25
SC	48.95	29.45	21.59	31.29	42.19	26.51
OBC	50.58	23.81	25.6	21.64	34.17	44.19
Others	38.11	23.64	38.25	31.04	22.71	46.25
Total	48.9	24.26	26.84	25.53	31.81	42.66
Total Male						
Social Groups	India			Kerala		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
	ST	65.68	20	14.32	43.6	25.04
SC	42.71	33.21	24.08	26.63	47.41	25.97
OBC	45.5	25.04	29.45	18.6	34.3	47.1
Others	34.64	24.19	41.17	30.86	22.37	46.76
Total	43.61	25.87	30.52	22.8	32.42	44.78
Total Females						
Social Groups	India			Kerala		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
	ST	63.61	20.64	15.75	39.91	32.56
SC	63.9	20.59	15.51	29.59	33.82	36.59
Others	50.08	21.75	28.17	31.39	23.41	45.2
Total	62.77	20.02	17.21	31.87	30.4	37.73

Source: NSS unit level data, 68th round on Employment and Unemployment Situation in India

From the table 3.7 it is evident that most deprived social groups like ST and SC follow the same pattern of structural change mentioned by the well-known economists like Lewis, fei ranis, fisher, Kuznets and the like whereas, the social groups OBC and Others are engaged more in primary itself but followed by tertiary sector work. Another noticeable factor is that the participation of others in primary and tertiary sectors are more or less the same (about 38 percent).

STs are engaged more in Primary sector followed by OBC, secondary sector works are dominated by SC while tertiary sector works by others. This is true for both males and females of various social groups. The sectoral composition of OBC females and SC female's moves in the same pattern. While ST and SC are engaged more in primary sector followed by secondary and tertiary sector whereas, OBC and Others are employed more in primary

followed by tertiary and secondary sector. These are evident from the NSSO unit level data 68th round.

From the table we can see that workers in Kerala is engaged more in tertiary sector followed by secondary and least in primary sector. Social group wise analysis for the same shows that ST workers are engaged more in Primary sector (46.72 percent) followed by SC (31.29 percent), others (31.04 per cent) and OBC (21.64 percent). Secondary sector is occupied more with OBCs followed by SC, ST and Others. SCs are engaged more in the secondary sector and OBC and others in the tertiary sector. Tertiary sector provides more employment to others followed by OBC, ST and SC. As other SG have engaged in other sectors also, while STs are still engaged in primary activities i.e. we get a clear picture from the table that most above 45 percent of the STs are still dependent on agriculture and allied activities in Kerala, with the fact that the contribution of the same to the GSDP is declining over the years, showing a disguised unemployment among the ST workers in Kerala. STs are more in primary sector followed by tertiary sector which is the opposite of the picture which we see in the national level.

The same pattern of distribution is seen among the males of Kerala, whereas, their female counterparts shows a different picture. The ST females are engaged more in primary employment and others in tertiary and related works. SC females are more engaged in agriculture and related activities and the OBC females in secondary and allied activities. In order to get a more detailed picture of the SGs s in Kerala, we have to look into the gender wise and sector wise and education wise distribution of SGs workers in Kerala. This is mentioned in the tables below from the NSSO unit level data 68th round.

After getting the picture of the sectoral composition of different groups the study look into the sector wise classification of ST workers in Kerala. And from the table we can see that in rural areas, nearly 50 percent STs are engaged in primary sector followed by around 28 percent in tertiary sector and 24 percent in secondary related activities. The picture is reverse in urban Kerala. In urban Kerala around 60 percent ST workers are engaged in tertiary sector followed by both primary and secondary activities. Now when we look into the gender wise analysis of industrial classification among Kerala ST, we can see that females are more engaged in primary sector than males in rural areas. Males are employed more in tertiary related activities. On the other hand the participation of males and females in secondary and

related activities is more or less same (24 percent). In short we can see that apart from sectors there is differences in the participation of males and females in different sectors. The males have more movement than females. The major limitation for this may be their education and early marriage which limit them in the surroundings of their settlement. Which is evident from the literacy rate of ST in Kerala from census 2011. The sectoral composition in urban areas shows us a different picture. In urban areas, females are more engaged in tertiary activities and less in primary activities and vice versa. Another important point noted from the table is that none of the urban female ST workers are involved in secondary sector. All these facts are clear from the following two tables.

Table 3.8: NIC (2008) Classification of Social Groups in Rural India and Kerala (in Percentage)

Social Groups	National Industrial Classification (2008)					
	Rural Persons					
	India			Kerala		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
ST	76.2	16.4	7.4	48.2	24.3	27.51
SC	59.6	27.3	13.1	35.68	43.47	20.86
OBC	64.8	19.3	15.9	26.35	34.24	39.41
Others	60.1	18.3	21.6	40.33	21.88	37.78
Total	64.1	20.4	15.5	31.42	31.93	36.65
Rural Males						
Social Groups	India			Kerala		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
ST	72.7	18.3	9	44.48	24.43	31.09
SC	53.2	31.1	15.7	30.04	48.88	21.08
OBC	60.2	20.6	19.1	22.82	34.12	43.06
Others	56.8	18.4	24.8	39.75	21.11	39.14
Total	59.4	22	18.7	28.18	32.23	39.59
Rural Females						
Social Groups	India			Kerala		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
ST	81.8	13.5	4.7	52.5	24.14	23.36
SC	73.3	19.2	7.4	45.39	34.14	20.47
OBC	75.4	16.2	8.4	35.04	34.53	30.44
Others	69.8	18	12.2	41.58	23.53	34.89
Total	74.9	16.7	8.3	38.69	31.26	30.05

Source: NSS unit level data, 68th round on Employment and Unemployment Situation in India

Table 3.8 shows the distribution of Social groups by broad industry of work according to usual status in 2011-12 for India and Kerala. The sectoral composition in 2011-12 shows that

all social groups are more engaged in primary sector followed by secondary and tertiary sectors. Sector wise analysis shows that STs are the highest participants in primary sector followed by OBC, SC and Others. In secondary sector SC are more followed by OBC, others and ST. and in tertiary sector others are more employed followed by OBC, SC and others.

Among the rural males in India, males in all social groups are engaged more in primary sector followed by secondary sector and tertiary sector except for others. Others are more in primary sector followed by tertiary and then in secondary sector during 2011-12 the same pattern is seen among the rural females. Gender wise analysis shows that, rural females are more engaged in primary sector compared to rural males in India whereas, their employment in secondary and tertiary sector is comparatively low to their male counter parts in rural areas.

As against the Indian situation, in rural Kerala highest percent of the workers are in tertiary sector followed by both secondary and primary sector. social group wise analysis shows that the SG, ST and other category workers are more in primary sector, SCs are more in secondary sector and OBC in Tertiary sector for their major source of income. It is also noted from the table is that STs have the highest percent of workers engaged in primary sector and SCs depend highly on secondary activities and OBC SG dominate the tertiary sector more than others.

Gender wise analysis of the same shows that both ST males and females are engaged in primary and allied activities followed by tertiary and secondary, SC males are more in secondary activities followed by primary works while females in primary activities followed by secondary occupations, OBC males in tertiary occupations and females in both primary and secondary occupations, Other category males are more or less equally distributed in primary and secondary works while females more in primary activities. This trend may be because of the ownership of land by different social groups in rural Kerala, where land and education are considered the major determinants of occupational selection. It is also noted the others and STs are engaged in primary sector, which means that others are engaged as self-employed in agriculture whereas, STs as casual labourers in agriculture.

Table 3.9: NIC (2008) Classification of Social Groups in Urban India and Kerala (in Percentage)

Social Groups	National Industrial Classification					
	Urban Persons					
	India			Kerala		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
ST	12.2	32.9	54.8	19.11	19.05	61.85
SC	7.1	37.9	55	13.11	36.89	50
OBC	8.6	37.1	54.2	8.62	33.96	57.42
Others	4	31.9	64	7.62	24.79	67.59
Total	6.7	35	58.3	8.71	31.49	59.8
Urban males						
Social Groups	India			Kerala		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
ST	8.8	33.8	57.4	26.54	36.73	36.73
SC	6	40.7	53.3	14.08	42.01	43.91
OBC	7.3	36.4	56.3	7.65	34.76	57.6
Others	3.6	32.3	64.1	7.6	25.68	66.72
Total	5.6	35.3	59.1	8.17	32.94	58.89
Urban Females						
Social Groups	India			Kerala		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
ST	22.5	30.3	47.2	11.1	0	88.9
SC	10.9	28.3	60.8	10.67	24.08	65.25
OBC	13.9	39.7	46.3	11.67	31.47	56.86
Others	5.9	30.2	63.9	7.65	23.11	69.23
Total	10.9	34	55.1	10.13	27.68	62.19

Source: NSS unit level data, 68th round on Employment and Unemployment Situation in India

Table 3.9 gives a detailed picture of the distribution of workers by broad industry of work according to usual status in urban areas. From the table it is observed that both males and females in urban areas were concentrated more on tertiary sector followed by secondary and the least in primary sector across all social groups in India 2011-12. From the above table we can see that in rural India all social groups are engaged in primary sector followed by secondary and tertiary sector except for other social group category especially males. They are engaged in primary the most followed by tertiary and secondary sectors. The same is true for OBC category males in rural areas. But in urban India, social groups are engaged more in tertiary sector and least in primary sector. So in short we can say that all social groups are engaged more in primary sector followed by secondary and tertiary except for other SG, as most of the Indian are living in rural areas of the country. The above said fact will be more precise with the following table given below.

After understanding the sectoral distribution of urban workers in India, we have to go through the same in urban Kerala to get a picture of the broad status of different social groups. And it shows that around 60 percent urban workers are engaged in tertiary and allied activities followed by secondary and least in primary works. Social group wise analysis also shows the same pattern. Among the SGs, most of the STs in urban areas are engaged in tertiary activities preceded by other category workers. And the workers least in tertiary activities compared to other SGS are SCs. Gender wise analysis also shows that ST and SC males are more or less equally distributed in secondary and tertiary activities. And their female counter parts in tertiary activities. While about 60 percent of the OBC and Other SG males and females are in tertiary activities.

From the above section we got a brief picture of various social engaged in three broad sectors of Indian and Kerala economy. Next table gives the association between educational qualification and broad industry of work of scheduled tribes in India and Kerala. In the present context, only scheduled tribe social group is taken as our prime concern is about their participation. Education being the most important determinant for employment, the association between the two is considered with the 68th round NSSO unit level data.

Table 3.10: NIC (2008) Classification of ST Workers on the basis of Education (in Percentage)

General education	National Industrial Classification 2008					
	India			Kerala		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
Not literate	77.84	18.17	3.99	50.45	25.6	23.94
Literate Without Formal Schooling	70.16	13.78	16.06	0	0	0
TLC	98.16	7.37	0.46	0	0	0
Others	85.64	10.71	3.64	0	0	0
Literate: Below Primary	74.87	19.54	5.58	68.13	22.65	9.21
Primary	71.06	19.13	9.8	89.12	10.88	0
Middle	65.88	17.69	16.43	35	38.1	26.9
Secondary	56.58	17.77	25.65	25.99	28.32	45.69
Higher Secondary	47.69	16.17	36.14	0	0	100
Diploma/Certificate Course	25.99	18.53	55.48	0	0	100
Graduate	20.49	9.55	69.96	68.87	0	31.13
Post Graduate and Above	16.63	3.84	79.53	0	0	100
Total	70.37	17.95	11.68	46.72	24.03	29.25

Source: NSS unit level data, 68th round on Employment and Unemployment Situation in India

Table 3.10 shows the educational classification of ST workers engaged in Primary, Secondary and tertiary sectors as per NSSO 68th round. From the table we can see that, of the total workers engaged in Primary sector, most of them have education less than or equal to higher secondary and those who completed diploma, graduation, post-graduation and above are engaged in tertiary sector in India. The workers having educational qualification below and equal diploma are engaged more in secondary sector. The workers with graduation and above are more in tertiary sector followed by primary and least in secondary activities. From the above tables we are enriched with the industrial classification of Social groups and the

STs in particular in detail. Now we have to know the occupational distribution of SGs and ST in specific to understand their status in the labour market of India.

We get a different picture of industrial classification of tribals on the basis of education in Kerala from that of India. We see that in India the qualified tribal workers are engaged mostly in tertiary sector. They are also engaged in secondary activities, whereas in Kerala even the graduates from tribal are engaged mostly in primary activities. The qualified tribal workers completely avoided or neglected the secondary sector as their source of earning. Only the workers with and below secondary education in Kerala are engaged in secondary activities. The ST workers with Higher Secondary, diploma/certificate course, postgraduate and above are engaged wholly in tertiary activities.

From the reviews we see that the tribals are engaged in menial jobs in the tertiary sector. In order to understand with in the sector where they are concentrated, we have to go through the occupational classification for the ST workers in Kerala. The next section dealt with the same.

3.5 Occupational Distribution of Social Groups in India.

For understanding the occupational distribution of various social groups in India, we have taken the broad classification given by National Classification of Occupation prepared by directorate general of employment. The NCO describes and assigns codes to different occupations and aligns it with the international standard classification of occupations (ISCO) of ILO, which is reviewed and updated periodically to reflect developments in the labour market. The Directorate General of Employment, Ministry of Labour and Employment, government of India is the nodal agency for maintaining and updating the NCO in India. The first classification of NCO was NCO-1964 followed by NCO 1958, NCO 1968, NCO 2004 and the current series NCO 2015. Which is aligned with ISCO-2008. Present study uses broad divisions (1 digit level) of NCO-2004. The broad classification taken for the study is given below. Here, the occupational distribution is detailed for India and Kerala Separately for a better and clear understanding and convenience.

Table 3.11: Occupational Classification by Social Groups (Usual Status) in India (in Percentage)

NCO 2004) based on usual Principal status in India											
Rural + Urban Persons											
Social Group	1	2	3	4	5	6	7	8	9	X	Total
ST	2.69	1.17	2.01	0.9	3.51	45.66	6.68	1.66	35.61	0.1	100
SC	3.26	1.94	2.15	1.38	4.94	21.71	14.96	4.09	45.46	0.11	100
OBC	6.58	2.68	2.57	1.47	7.51	34.39	13.97	4.89	25.92	0.03	100
Others	11.09	6.97	5.1	3.29	10.3	29.62	12.32	5.76	15.37	0.18	100
total	6.77	3.55	3.11	1.89	7.36	31.8	12.98	4.64	27.81	0.09	100
Rural + Urban Male											
	1	2	3	4	5	6	7	8	9	X	Total
ST	2.81	1.44	1.95	1.25	4.29	43.36	7.81	2.54	34.35	0.11	100
SC	3.84	2.1	2.12	1.7	5.36	18.09	16.41	5.53	44.74	0.1	100
OBC	7.65	2.81	2.45	1.7	8.65	31.37	14.36	6.21	24.74	0.03	100
Others	12.58	6.77	4.78	3.38	11.6	26.92	11.65	7.13	14.98	0.22	100
ALL	7.94	3.71	3.02	2.15	8.51	28.66	13.39	6.03	26.49	0.11	100
Rural + Urban Female											
	1	2	3	4	5	6	7	8	9	X	Total
ST	2.5	0.73	2.11	0.3	2.2	49.38	4.78	0.19	37.74	0.09	100
SC	1.88	1.58	2.21	0.64	3.95	30.19	11.56	0.72	47.15	0.11	100
OBC	3.79	2.34	2.86	0.85	4.52	42.31	12.89	1.41	29.02	0.01	100
Others	5.95	7.67	6.2	2.98	5.81	38.97	14.66	1.01	16.7	0.04	100
ALL	3.69	3.13	3.36	1.2	4.37	40.02	11.89	1.01	31.28	0.05	100

Source: NSS unit level data, 68th round on Employment and Unemployment Situation in India

Note: 1. Legislators, Senior Officials and Managers; 2. Professionals; 3. Technicians and Associate Professionals 4. Clerks 5. Service Workers and Shop & Market Sales Workers 6. Skilled Agricultural and Fishery Workers 7. Craft and related Trades Workers 8. Plant and Machine Operators and Assemblers 9. Elementary Occupations; X. Workers not classified by occupation

Table 3.11 gives a clear picture of the occupational distribution of various social groups in India. It is evident from the table that in India most of the employed population is engaged in

elementary occupations followed by Craft and related trade works. And least in clerical works. From the table we can also see that the social group other than SC, ST and OBC are employed more in high salaried and dignified works such as Legislators, senior officials and managers, Professionals, technicians and associate professionals, service workers, shop and market sales workers in India. They are followed by the social groups OBC, SC and ST. whereas, the STs are employed more as skilled agricultural and fishery workers followed by OBC, Others and SC. Craft and related trade works are occupied with SCs followed by OBC, Others and ST. on the other hand, Others are more in the occupation plant and machine operators and assemblers, they are followed by OBC, SC and ST. it is also clear from the table that Elementary occupations are more among SCs, followed by STs, OBCs and Others.

Social group wise analysis on the occupations gives us the idea that Scheduled tribes are more employed as skilled agricultural and fishery workers SCs are more in Elementary occupations, OBCs and Others in skilled agricultural and fishery workers and Elementary occupations. All the social groups except STs are engaged in crafts and related trades work also. In short we can say that even though all SGs are in skilled agricultural and fishery works, ST and SC and some OBCs social groups are engaged more in low paid works whereas, certain percent of OBCs and high percent of others are employed more as professionals and clerical jobs The same pattern can be seen among the males and females of overall India. After getting the idea on the occupational distribution of various social groups of India in brief, the next two tables gives a detailed picture of the occupational distribution of males and females for rural and urban India in detail.

Table 3.12: Occupational Classification by Social Groups (Usual Status) in Rural India (in Percentage)

Occupational Classification (NCO 2004)											
Rural Persons											
Social Group	1	2	3	4	5	6	7	8	9	X	Total
ST	2.23	0.73	1.36	0.31	2.33	49.54	5.78	1.13	36.47	0.1	100
SC	2.16	1.17	1.27	0.58	3.28	26.2	13.06	2.91	49.28	0.08	100
OBC	3.76	1.38	1.57	0.67	5.09	44.02	10.9	3.32	29.27	0.02	100
Others	5.02	3.18	3.15	1.45	6.74	46.79	10.97	3.55	18.9	0.25	100
ALL	3.52	1.66	1.83	0.78	4.74	41.61	10.73	3.01	32.03	0.1	100
Rural Male											
Social Group	1	2	3	4	5	6	7	8	9	X	Total
ST	2.26	0.91	1.39	0.46	2.69	48.11	6.83	1.75	35.48	0.11	100
SC	2.63	1.39	1.18	0.78	3.79	22.24	13.99	4.01	49.91	0.08	100
OBC	4.48	1.52	1.48	0.79	6.01	41.37	11.31	4.36	28.65	0.02	100
Others	5.8	3.45	3.08	1.8	7.87	44.13	9.95	4.6	19.01	0.32	100
ALL	4.17	1.88	1.79	0.99	5.63	38.85	11.04	4.06	31.47	0.12	100
Rural Female											
Social Group	1	2	3	4	5	6	7	8	9	X	Total
ST	2.19	0.45	1.3	0.08	1.76	51.83	4.11	0.13	38.06	0.09	100
SC	1.15	0.69	1.48	0.16	2.18	34.76	11.03	0.54	47.92	0.08	100
OBC	2.08	1.06	1.77	0.38	2.95	50.2	9.95	0.91	30.7	0.01	100
Others	2.78	2.42	3.35	0.45	3.43	54.51	13.96	0.5	18.57	0.04	100
ALL	2.03	1.14	1.93	0.3	2.68	47.92	10.01	0.63	33.33	0.05	100

Source: NSS unit level data, 68th round on Employment and Unemployment Situation in India

Note: 1. Legislators, Senior Officials and Managers; 2. Professionals; 3. Technicians and Associate Professionals 4. Clerks 5. Service Workers and Shop & Market Sales Workers 6. Skilled Agricultural and Fishery Workers 7. Craft and related Trades Workers 8. Plant and Machine Operators and Assemblers 9. Elementary Occupations; X. Workers not classified by occupation.

Occupational distribution of males and females in India based on US approach is detailed in the table 3.12. It is clear from the table that in rural areas ST, OBC and Others are employed more as skilled agricultural and fishery workers followed by elementary occupations. SCs are more employed in elementary occupations followed by skilled agricultural and skilled workers, which shows the worse off situation of SC communities in India. Another thing noticed from the table is the SG least engaged as professionals and other high paid works are the ST groups, mainly as professionals and clerks. This shows the inaccessibility of ST

communities in high paid works after 70 years of independence. Same trend is seen for both males and females of rural India.

Next our turn is to look into the occupational status of various social groups in urban India to check whether the situation of STs are better in urban India compared to rural India in terms of occupation. This is given in the table below.

Table 3.13: Occupational Classification by Social Groups (Usual Status) in Urban India (in Percentage).

Occupational Classification (NCO 2004)											
Urban Persons											
Social Group	1	2	3	4	5	6	7	8	9	X	Total
ST	7.29	5.54	8.52	6.75	15.25	6.9	15.6	7.01	27.04	0.09	100
SC	7.55	4.99	5.6	4.54	11.45	4.03	22.46	8.73	30.46	0.2	100
OBC	14.92	6.51	5.52	3.82	14.64	6	23.02	9.49	16.04	0.05	100
Others	20.46	12.83	8.1	6.12	15.82	3.09	14.41	9.17	9.92	0.07	100
ALL	15.79	8.79	6.67	4.95	14.66	4.57	19.22	9.16	16.09	0.08	100
Urban Male											
Social Group	1	2	3	4	5	6	7	8	9	X	Total
ST	7.3	5.71	6.49	7.75	17.27	5.52	15.77	8.92	25.17	0.1	100
SC	8.06	4.58	5.42	4.92	10.83	3.59	24.87	10.84	26.71	0.17	100
OBC	15.87	6.16	4.98	4.06	15.48	5.45	22.36	11	14.59	0.05	100
Others	22.04	11.42	7.15	5.58	16.81	2.87	14.02	10.67	9.36	0.08	100
ALL	17.03	8.09	5.99	4.93	15.43	4.12	19.05	10.77	14.49	0.08	100
Urban Female											
Social Group	1	2	3	4	5	6	7	8	9	X	Total
ST	7.26	5.01	14.74	3.7	9.09	11.1	15.09	1.17	32.78	0.07	100
SC	5.82	6.35	6.18	3.25	13.51	5.5	14.41	1.7	43.02	0.27	100
OBC	11.19	7.9	7.61	2.88	11.34	8.14	25.62	3.6	21.71	0.01	100
Others	13.06	19.46	12.59	8.67	11.16	4.1	16.25	2.16	12.51	0.03	100
ALL	10.77	11.63	9.45	5.04	11.55	6.37	19.9	2.66	22.56	0.07	100

Source: NSS unit level data, 68th round on Employment and Unemployment Situation in India

Note: 1.Legislators, Senior Officials and Managers; 2. Professionals; 3. Technicians and Associate Professionals 4. Clerks 5. Service Workers and Shop & Market Sales Workers 6. Skilled Agricultural and Fishery Workers 7. Craft and related Trades Workers 8. Plant and Machine Operators and Assemblers 9. Elementary Occupations; X. Workers not classified by occupation.

Table 3.13 gives a detailed picture of occupational distribution of different social groups in India during 2011-12. From the table we can see that even though comparative majority of STs are employed more as elementary workers their situation in urban areas are better off than in rural India as their employment as professionals and other high paid works are high in urban India than rural India. As we know that their situation is pathetic compared to OBC and others but better than SCs in urban India in terms of their participation in various occupations. But the hard truth is that more than 60 percent of STs are concentrated in rural areas of India. Another noted factor is that the other SGs are more or less evenly distributed in all occupations and are not concentrated in certain occupations like the ST, SC, and OBCs. In urban areas of India OBCs are engaged more on craft and related trades work followed by elementary occupations. Whereas, both SC and ST are engaged more in elementary occupations followed by craft and related trades work. As against all the other category of SGs are employed more as legislators, senior officials and managers followed by service works and shop and market sales works. In short we can say that, the others are far better off in India compared to other social groups whereas STs and SCs are least in high paid works in both rural and urban India. But better off in urban India compared to rural India. This is true for both males and females of all social groups in general whereas, the females in urban India are engaged more as professionals, which gives the high status of other SG females compared to ST,SC and OBCs.

In short when we compare the ST workers in both rural and urban areas we can see that the tribals in urban areas are in better occupations (that is away from elementary occupations) than rural ST workers. But unfortunately, tribal population is far more concentrated in rural India than in urban India. To get a better idea we have to go through educational level and occupational status of ST workers. This is detailed in the following table.

Table 3.14: Occupational Classification and Education of STs in India (in Percentage)

General Education	Occupational Classification (NCO 2004)										
	1	2	3	4	5	6	7	8	9	X	Total
Not Literate	1.94	0.14	0.3	0.01	1.27	47.63	5.91	0.64	42.1	0.07	100
Literate Without Formal Schooling	5.41	0.16	0.31	0.05	1.83	57.98	12.88	0.15	21.22	0	100
TLC	0	0.29	0	0	0	39.89	0	0	59.36	0.46	100
Others	1.51	1.3	0	0	0.22	69.03	7.17	0.27	20.46	0.04	100
Literate: Below Primary	2.17	0.36	0.16	0.03	2.13	47.05	7.1	1.34	39.56	0.11	100
Primary	3.15	0.97	0.38	0.15	3.7	47.3	7.18	1.17	35.74	0.25	100
Middle	2.47	0.97	0.87	0.64	6.36	45.72	8.33	3.86	30.69	0.09	100
Secondary	5.01	1.39	2.84	2.72	9.95	43.93	8.87	4.35	20.83	0.11	100
Higher Secondary	4.82	3.33	13.54	5.25	8.92	37.4	5.15	3.75	17.75	0.08	100
Diploma/Certificate Course	11.94	5.02	33.85	1.29	1.87	19.27	8.75	10.1	7.9	0	100
Graduate	5.23	13.5	25.4	14.77	11.68	19.11	3.89	1.84	4.57	0.01	100
Postgraduate and Above	10.95	32.36	25.91	5.33	5.71	16.35	2.71	0.67	0	0.01	100
Total	2.69	1.17	2.01	0.9	3.51	45.66	6.68	1.66	35.61	0.1	100

Source: NSS unit level data, 68th round on Employment and Unemployment Situation in India

Note: 1. Legislators, Senior Officials and Managers; 2. Professionals; 3. Technicians and Associate Professionals 4. Clerks 5. Service Workers and Shop & Market Sales Workers 6. Skilled Agricultural and Fishery Workers 7. Craft and related Trades Workers 8. Plant and Machine Operators and Assemblers 9. Elementary Occupations; X. Workers not classified by occupation.

Table 3.14 above gives a clear picture of the distribution of ST workers on the basis of their education and occupation in which they are engaged in. It is evident from the table that the workers who have completed their education below higher secondary are engaged more in skilled agricultural and fishery workers followed by elementary occupations and least in clerical, technical and associate profession and other professions. The workers with higher secondary education are more or less equally distributed in all occupations after skilled agricultural and elementary occupations. Diploma certificate holders and graduates are more employed as technicians and associate professionals followed by skilled agricultural and fishery workers and least as clerks. They are not far away from other occupations too. Whereas, post graduates and above are engaged as professionals followed by technicians and

associate professions and least in elementary occupations and plant and machine operators and assemblers.

3.5.1 Occupational Distribution of Social Groups in Kerala.

Above section clearly pictures the occupational distribution of various social groups in India and the association between education and occupation of STs in detail. The present section gives a detailed picture of the occupational distribution of different social groups in India with special focus on STs in Kerala.

Table 3.15: Occupational Distribution for Social Groups (Usual status) in Kerala (in Percentage)

National Classification of Occupation											
Total Persons											
Social Groups	1	2	3	4	5	6	7	8	9	X	Total
ST	2.38	8.14	3.82	0	7.97	5.68	16.21	0.22	55.58	0	100
SC	3.28	1.28	3.13	1.84	6.38	5.6	23.4	5.16	49.93	0	100
OBC	9.48	3.08	5.79	2.25	13.3	14.74	22.89	8.72	19.75	0.01	100
Others	8.48	8.2	8.39	4.17	12.27	25.26	13.57	5.77	13.85	0.02	100
Total	8.46	4.33	6.17	2.68	12.22	16.43	20.37	7.43	21.9	0.01	100
Total Males											
	1	2	3	4	5	6	7	8	9	X	Total
ST	1.84	3.35	3.56	0	12.38	3.62	13.06	0.41	61.78	0	100
SC	2.41	0.8	2.42	1.66	6.68	4.9	27.75	7.19	46.19	0	100
OBC	10.89	2.18	4.56	1.63	14.5	13.26	24.44	11.67	16.87	0	100
Others	10.18	6.28	6.68	3.15	12.88	26.88	26.93	14.97	8.44	10.45	0.04
Total	9.78	3.1	4.88	2	13.31	15.82	22.21	10.28	18.61	0.01	100
Total Females											
	1	2	3	4	5	6	7	8	9	X	Total
ST	3.01	13.66	4.11	0	2.87	8.06	19.85	0	48.43	0	100
SC	4.88	2.18	4.44	2.17	5.83	6.9	15.36	1.41	56.83	0	100
OBC	5.78	5.44	9.03	3.86	10.15	18.61	18.81	0.99	27.28	0.04	100
Others	4.99	12.18	11.93	6.28	11.01	21.81	10.69	0.25	20.87	0	100
Total	5.37	7.18	9.19	4.26	9.69	17.85	16.08	0.8	29.56	0.02	100

Source: NSS unit level data, 68th round on Employment and Unemployment Situation in India

Note: 1. Legislators, Senior Officials and Managers; 2. Professionals; 3. Technicians and Associate Professionals 4. Clerks 5. Service Workers and Shop & Market Sales Workers 6. Skilled Agricultural and Fishery Workers 7. Craft and related Trades Workers 8. Plant and Machine Operators and Assemblers 9. Elementary Occupations; X. Workers not classified by occupation.

Occupational distribution of different SGs in Kerala shows a different picture from that of India. From the table 3.15 we can see that the occupations like technicians and associate professions, skilled agricultural and fishery workers, and clerical works are more occupied with other category. Legislators, senior officers and managers, service workers, shop and market sales workers, plant and machine operators are more among OBCs. Professionals are more among others and STs. Craft and related trade workers are more among OBCs and SCs in Kerala, elementary workers are more among STs. Social group wise distribution shows that STs and SCs are more engaged in elementary occupations followed by Craft and related trade works and SC are employed least as professionals. OBCs are more or less equally distributed in occupations like Craft and related trade works, elementary occupations, skilled agricultural and fishery workers and service workers, shop and market sales workers and least as clerks. Likewise, others are more or less equally distributed in Craft and related trade works, elementary occupations, skilled agricultural and fishery workers and service workers, shop and market sales works and Craft and related trade works few are engaged in clerical works. The social groups SC, OBC and others are not too far away from other occupations. Tribals are away from clerical and plant and machine operators and assemblers. In short we can say that the ST workers are concentrated more on elementary occupations and craft and related works. Only a few are engaged as professionals.

Gender wise analysis of the same shows that ST and SC males and females are engaged more in elementary occupations followed by crafts and related trades works and STs are least in clerical jobs and SCs in professional works. OBC males are more in craft and related trades work followed by clerical works while females more in elementary occupations followed by craft and related trades work and skilled agricultural and fishery works and least in clerical work. Other category SGs males are more in skilled agricultural and fishery works and craft and related trades work followed by plant and machine operators and assemblers. On the other hand, Other category females are more in skilled agricultural works and elementary occupations followed by professionals while least as clerks.

When we compare the social groups on the basis of education gender wise we can see that the females of other SG have more advantage than others and the other category males and females are more engaged in high paid works followed by OBC and the least participant in high paid works are the tribal communities of Kerala. But their employment as professionals is comparable to that of others.

Table 3.16: Occupational Distribution for Social Groups (Usual status) in Rural Kerala (in Percentage)

Social Groups	National Classification of Occupation										
	Rural Person										
	1	2	3	4	5	6	7	8	9	X	Total
ST	2.51	6.28	4.02	0	7.6	5.98	16.85	0	56.75	0	100
SC	3.33	0.72	2.04	1.02	5.47	5.78	23.28	4.43	53.92	0	100
OBC	7.38	2.28	5.34	1.9	11.1	17.73	23.48	9.15	21.61	0.01	100
Others	5.89	4.46	7.5	2.55	11.46	32.92	14.05	6.48	14.66	0.03	100
Total	6.44	2.74	5.49	1.93	10.48	20.03	20.91	7.75	24.2	0.02	100
	Rural Male										
Social Groups	1	2	3	4	5	6	7	8	9	X	Total
ST	1.93	3.52	3.75	0	11.55	3.81	13.3	0	62.13	0	100
SC	2.07	0.44	1.07	0.79	5.56	5.16	27.15	6.31	51.46	0	100
OBC	8.69	1.92	4.04	1.37	12.2	16.19	25.3	12.42	17.87	0	100
Others	7.04	3.3	5.29	1.63	12.45	34.92	15.6	9.35	10.37	0.05	0.04
Total	7.48	2.14	4.04	1.35	11.56	19.58	22.86	10.82	20.16	0.01	100
	Rural Female										
Social Groups	1	2	3	4	5	6	7	8	9	X	Total
ST	3.18	9.48	4.34	0	3.03	8.51	20.96	0	50.51	0	100
SC	5.5	1.22	3.72	1.42	5.31	6.84	16.61	1.21	58.17	0	100
OBC	4.14	3.18	8.57	3.21	8.4	21.55	19	1.08	30.84	0.05	100
Others	3.45	6.92	12.21	4.51	9.35	28.67	10.75	0.36	23.79	0	100
Total	4.11	4.09	8.75	3.21	8.07	21.05	16.66	0.87	33.26	0.03	100

Source: NSS unit level data, 68th round on Employment and Unemployment Situation in India

Note: 1.Legislators, Senior Officials and Managers; 2. Professionals; 3. Technicians and Associate Professionals 4. Clerks 5. Service Workers and Shop & Market Sales Workers 6. Skilled Agricultural and Fishery Workers 7. Craft and related Trades Workers 8. Plant and Machine Operators and Assemblers 9. Elementary Occupations; X. Workers not classified by occupation.

Table 3.16 shows the rural urban classification of workers of various social groups according to their occupations. It is evident from the table that around 60 per cent ST and SC workers are engaged in elementary occupations followed by craft and related works and none as clerks and plant and machine operators and assemblers in rural areas. OBC category is engaged more as craft and related trade workers followed by elementary occupations. Whereas, even though the highest proportion of other category workers are engaged in skilled agricultural and fishery works, they are more or less evenly engaged in almost all occupations in rural Kerala. The same trend can be seen in the occupational distribution of males and females among various social groups.

Gender wise analysis of the same shows that ST and SC males and females are engaged more in elementary occupations followed by crafts and related trades works and STs are least in clerical jobs and SCs in professional works. OBC males are more in craft and related trades work followed by clerical works while females more in elementary occupations followed by craft and related trades work and skilled agricultural and fishery works and least in clerical work. Other category SGs males are more in skilled agricultural and fishery works, and craft and related trades work followed by elementary occupations, plant and machine operators and assemblers. Other category females are more in skilled agricultural works and elementary occupations followed by professionals while least as clerks.

Comparison of males and females across all Social groups on the basis of occupation shows that females of all social groups are engaged more in high paid workers compared to their male counterparts. Apart from all these the ST employment as professionals are comparable to that of others.

Table 3.17: Occupational Distribution for Social Groups (Usual Status) in Urban Kerala (in Percentage)

	National classification of occupation (2004)										
	Urban Person										
Social Groups	1	2	3	4	5	6	7	8	9	X	Total
ST	0	42.8	0	0	14.73	0	4.32	4.32	33.83	0	100
SC	3.05	3.61	7.62	5.24	10.17	4.88	23.9	8.17	33.35		100
OBC	15.3	5.29	7.04	3.2	19.37	6.46	21.23	7.53	14.59	0	100
Others	15	17.64	10.65	8.27	14.31	5.95	12.37	3.97	11.84	0	100
Total	14.21	8.85	8.11	4.82	17.17	6.17	18.82	6.54	15.32	0	100
	Urban Male										
	1	2	3	4	5	6	7	8	9	X	Total
ST	0	0	0	0	28.4	0	8.33	8.33	54.94	0	100
SC	3.65	2.12	7.37	4.88	10.79	3.95	29.95	10.44	26.84	0	100
OBC	16.61	2.85	5.9	2.3	20.48	5.67	22.19	9.71	14.28	0	100
Others	18.39	14.07	10.31	7.15	14.02	6.02	13.32	6.06	10.66	0	0.04
Total	16.04	5.74	7.16	3.76	18.05	5.61	20.43	8.81	14.39	0	100
	Urban Female										
	1	2	3	4	5	6	7	8	9	X	Total
ST	0	88.9	0	0	0	0	0	0	11.1	0	100
SC	1.55	7.33	8.26	6.14	8.62	7.21	8.73	2.48	49.69	0	100
OBC	11.18	12.89	10.58	6.03	15.9	8.94	18.21	0.71	15.57	0	100
Others	8.57	24.42	11.29	10.41	14.86	5.83	10.55	0	14.07	0	100
Total	9.4	17.02	10.59	7.6	14.85	7.63	14.57	0.59	17.76	0	100

Source: NSS unit level data, 68th round on Employment and Unemployment Situation in India

Note: 1.Legislators, Senior Officials and Managers; 2. Professionals; 3. Technicians and Associate Professionals 4. Clerks 5. Service Workers and Shop & Market Sales Workers 6. Skilled Agricultural and Fishery Workers 7. Craft and related Trades Workers 8. Plant and Machine Operators and Assemblers 9. Elementary Occupations; X. Workers not classified by occupation.

Occupational Distribution for Social Groups (Usual Status) in urban Kerala is given in table 3.17. The occupational distribution in urban areas brings us a very different picture that ST workers in urban Kerala are engaged mostly as professionals followed by elementary occupations and they form the highest in this occupation followed by other category. This is

high among urban females than males of ST population. Males of ST workers in urban areas are still in elementary occupations. And least as legislators, senior officials, managers, technicians and associate professionals and service workers shop and market sales persons. St s are more in elementary occupations followed by craft and related trades work, this is same for SC females while males are employed more as craft and related trades work followed by elementary workers and least as professionals.

OBC social group is engaged more in craft and related trades work followed by service workers shop and market sales persons, legislators, senior officials, managers, and elementary occupations. Same can be seen among OBC males and females of urban Kerala and a very few of them works as clerks. Other social group except the above mentioned three are engaged more in professional works followed by legislators, senior officials, managers, service workers shop and market sales persons and least in skilled agricultural and fishery works. Urban males of other category is employed more in 1 while females as professionals. Both males and female workers of other category are employed least in plant and machine operators and assemblers.

As mentioned earlier we can say that most high paid works are occupied by others and OBC and least by SC and ST. only in urban Kerala STs are comparatively better off in the sense that they are engaged as professionals but still nil in all other major occupations. This shows the backwardness of ST in almost all better paying jobs. This compels us to learn about the reasons or the factors behind the seen. These are examined in the following chapters with special focus on them. Before that we just want to know the association of occupation and education, the most determinant factor for employment. This is briefed in the next table.

Table 3.18: Occupational Status of ST Workers in Kerala on the basis of Education (in Percentage)

General Education	National classification of occupation (2004)								
	1	2	3	5	6	7	8	9	Total
Not Literate	2.85	0	0	14.8	3.4	22.75	0	56.2	100
Literate: Below Primary	4.24	0	0	9.21	0	14.86	0	71.69	100
Primary	5.58	0	0	0	0	0	0	94.42	100
Middle	1.87	0	0	0	20.37	15.66	0	62.1	100
Secondary	0	16.41	11.34	15.98	0	28.32	1.97	25.99	100
Higher Secondary	0	76.62	23.28	0	0	0	0	0	100
Diploma/Certificate Course	0	100	0	0	0	0	0	0	100
Graduate	0	0	31.13	0	0	0	0	68.87	100
Postgraduate and Above	0	100	0	0	0	0	0	0	100
Total	2.38	8.14	3.82	7.97	5.68	16.21	0.22	55.58	100

Source: NSS unit level data, 68th round on Employment and Unemployment Situation in India

Note: 1. Legislators, Senior Officials and Managers; 2. Professionals; 3. Technicians and Associate Professionals 4. Clerks 5. Service Workers and Shop & Market Sales Workers 6. Skilled Agricultural and Fishery Workers 7. Craft and related Trades Workers 8. Plant and Machine Operators and Assemblers 9. Elementary Occupations; X. Workers not classified by occupation.

Occupation wise classification of ST workers on the basis of education in Kerala (table 3.18) shows that the workers below higher secondary education are engaged more in elementary occupations followed by craft and related trades work. The workers with graduation are also engaged in elementary occupations followed by craft and related trades work. The ST workers with secondary education are more or less equally distributed among various occupations focussing more on craft and related trades work followed by elementary occupations and least in skilled agricultural and fishery workers and professionals. Diploma holders and post graduate and above are fully engaged as professionals in Kerala. Here also

we get a little bit different picture from that of India. Where the low educates are mostly in low paid works and qualified are more or less in almost all occupations.

3.6 Distribution of workers on the basis of Persons Unemployed

Having a clear picture of the employment particulars of different social groups in India and Kerala, we have to examine the unemployment aspect to get a clearer picture on the facts about labour market participation of different social groups. This is examined in the next section

Table 3.19: Persons Unemployed for Various Social Groups in Rural Areas (in Percentage)

NSSO Rounds	PU for RURAL MALE									
	Social Groups									
	ST		SC		OBC		OTHER		ALL	
Kerala/India	India	Kerala	India	Kerala	India	Kerala	India	Kerala	India	Kerala
1999-2000	0.6	5.2	1.0	4.8	0.8	4.7	1.2	4.6	1.0	4.4
2004-05	0.6	1.3	0.9	3.1	0.8	3.2	1.1	2.5	0.9	3
2009-10	1.0	0	1.0	2.6	0.7	1.9	1.1	1.8	0.9	1.9
2011-12	0.7	0	1.1	2.4	0.9	2	1.0	1.1	1.0	1.8
NSSO Rounds	PU for RURAL FEMALE									
	Social Groups									
	ST		SC		OBC		OTHERS		ALL	
Kerala/India	India	Kerala	India	Kerala	India	Kerala	India	Kerala	India	Kerala
1999-2000	0.2	3.3	0.2	4.5	0.3	3.7	0.5	4.9	0.3	2.8
2004-05	0.2	4.9	0.5	7.4	0.6	6.5	0.8	6.1	0.6	6.4
2009-10	0.3	4.3	0.4	8.3	0.4	3.3	0.5	4.3	0.4	4.2
2011-12	0.4	0.8	0.4	3.4	0.4	4	0.5	2.9	0.4	3.6

Source: NSS Reports on Employment and Unemployment Situation in India.

As the WPR and LFPR are high for ST males, the PU is lowest for them and highest for 'other' social group during 1999-2000, further increased after that not only for ST males but also for all social groups. It was high during 2009-10. The PU among the rural females of various social groups shows that the PU has increased for rural females among all social

group during the period 1999-'00 to 2011-12. Among the females also the PU is high for OBC and 'others, social group also. The same for Kerala shows the PU for males among all social groups declined from 1999-2000 to 2011-12 whereas for females it increased from 2.8 percent in 1999-2000 to 3.6 percent in 2011-12. The PU is high for SC males in all survey periods followed by OBC and other males in rural Kerala. It is also noticed from the table that the PU for ST males is comparatively low and even '0' during 2009-10 and 2011-12. This is true for rural females also. The PU for rural females is low among ST females and it becomes less than 1 percent during 2011-12. Whereas, it is very high for SC females and it remains high till 2009-10, but declined during the last survey round of NSSO i.e., 2011-12. Meanwhile, the PU for all social groups except OBC declined during the period from 1999-2000 to 2011-12.

Table 3.20: Persons Unemployed for various Social Groups in Urban Areas (in Percentage)

NSSO rounds	PU for URBAN MALE									
	Social Group									
	ST		SC		OBC		OTHER		ALL	
Kerala/India	India	Kerala	India	Kerala	India	Kerala	India	Kerala	India	Kerala
1999-2000	2.2	0.4	2.7	4	2.2	4.4	2.6	3.4	2.5	3.1
2004-05	1.6	0	3.1	1.2	1.9	3.6	2.1	4.4	2.2	3.6
2009-10	2.4	0	1.7	0.8	1.5	1.8	1.5	1.6	1.6	1.6
2011-12	1.8	0	1.8	4.3	1.4	1.3	1.9	1.5	1.7	1.5
NSSO rounds	PU for URBAN FEMALE									
	Social Group									
	ST		SC		OBC		OTHER		ALL	
Kerala/India	India	Kerala	India	Kerala	India	Kerala	India	Kerala	India	Kerala
1999-2000	0.6	5.3	6	8	0.9	5.8	0.9	5	0.8	4.01
2004-05	0.9	7.3	10	10.1	1.3	9.3	1.3	11.4	1.2	10
2009-10	0.9	0	8	2.3	1.0	4.1	0.7	4	0.8	3.9
2011-12	1.0	9	8	3.8	0.7	3.3	0.9	2.4	0.8	3.1

Source: NSS Reports on Employment and Unemployment Situation in India.

From the table we can see that the PU for urban males is high compared to their female counterparts and also more than the rural males and females. The PU is high for ST males followed by SC males and other males including OBC during 1999-2000, which declined

during 2011-12. During 2011-12, PU was high for ST urban males in India. The PU for urban females among the ST has increased meagrely over the years and declined for SC and Others and OBC. PU is high for urban females among the OBC and others which declined during 2011-12, while the PU for ST females increased during the same period.

3.7 Conclusion

From the chapter we can conclude that in India ST households depends more on self - employment in agriculture in India while in Kerala the households depends on casual works for their main source of income. It is found that the LFPR and WPR is highest for Scheduled tribes compared to other Social groups across gender. Sector wise composition examined in the chapter shows that Primary sector is occupied more with STs, secondary sector with SCs and tertiary sector with non-SC. Occupational classification examined using NSSO unit level data showed that STs are engaged in elementary occupations with low paid works. It is also found that education plays an important role in the labour market participation in general and of STs of India and Kerala in particular, which is well known for its Kerala model of development and where the economic and social indicators (especially education and health indicators) are far better off compared to other states of India. In short, In this chapter we are flourished with the labour market participation, sectoral and occupational composition of different social groups in detail from various NSSO reports. But the small sample size of NSSO and the lack of labour market information about the individual tribal communities of Kerala make us to focus on the data released by Census of India which has more authenticity. And the following Chapter deals with the same.

Chapter IV

TRIBAL LABOUR MARKET IN KERALA

- *Introduction*
 - *Scheduled Tribe Population in Kerala*
 - *Economic Activity Status of Tribal Inhabited Districts*
 - *Industrial Classification of Tribal Inhabited Districts*
 - *Population among Major Tribal Communities*
 - *Economic Activity Status among Major Tribal Communities*
 - *Industrial Classification among Major Tribal Communities*
 - *Occupational Classification among Major Tribal Communities*
 - *Conclusion*
-

4.1 Introduction

The tribal populations in Kerala are the indigenous people mostly located in the northern parts of Kerala. They are concentrated mostly in Wayanad, Idukki, Palakkad, Kasaragod and Kannur. They were the most primitive population of the state and the history of the tribes dates back to the time period of Pazhassi, the raja of Malabar. The jungle was everything for them- both food, medicine, clothes. They collected and used the forest goods for self-consumption. They had a life where needs are limited and resource are unlimited. But over centuries, government has taken so many steps (policies and programs) for their upliftment. Illiteracy, economic backwardness and social inequality were the main concerns. Political parties view them as the vote banks and the changing political parties as governments tried their maximum for tribal upliftment, even though it adversely affected most of the tribal communities, as they lack their freedom/ right over forest and land they utilized and Karipath (year). Political parties made them as the tool for came into power. A tribal feminist noted that they were treated as humans only after getting voting right. As a part of that, development came into their interior areas also. Roads came into their way as the first stage of development. As a result forest resource became alienated for them. Gradually both tribal land and women are exploited by the non- tribes, as the non- tribes occupy the tribal areas and settled there. Earlier they were unaware of casual labour but when they lost their forest and land, poverty entered their life, they became the slaves of occupiers. Slowly they are trying to cop up with the new situation, some tribes have merged with their new life, but unfortunately there are so many communities which are far away from the development and still dependent on forest for their subsistence. Culture, customs and traditions is a major reason for this situation. They are being exploited the most by both the forward tribal communities and the non-tribes, especially who migrated to the tribal areas and occupy the land and property given by government. As a result the effort of the changing governments to develop them over centuries went in vein, as we look into the current status of the different tribal communities in Kerala.

“They are still vulnerable not only because of the lack of government policies and its reachability but also because that their problems are being marketed by many people for their own needs” dinar (year). According to him, the group who market the problems of tribal communities in Kerala consists of politicians, contractors, bureaucrats and NGOs. The

politicians are being audited by the people every 5 years but NGOs are not. Another who maximum market the tribals are the medias, they exaggerate the problems and loose the real situation. Apart from all these, another noted factor is that the tribals don't know or they can't understand that they are being exploited. The poverty and unemployment coupled with lack of education is the major reason behind that.

In this chapter an attempt is made to find out the participation of individual Scheduled tribes in the labour market of Kerala, its growth and characteristics in detail with the help of Census data from 1981 to 2011. The study is limited to rural areas, as the tribal concentration is more in rural Kerala than urban Kerala. This chapter has been divided into section A and section B. Section A look into labour market participation of tribal communities in Kerala and the tribal concentrated districts. General picture of Industrial classification of tribal communities in the state is detailed in section A. Section B details the labour market participation of major tribal communities in the tribal dominated districts. Sectoral and occupational composition of major communities is also examined in this section. This is followed by conclusion.

4.1.1 Census Data

Census of India is the largest Source of information related to different characteristics of the people of India. The first census was conducted in the year 1872, non-synchronously in different parts of the country. It is a reliable, time tested exercise every ten years. A house to house enquiry on demographic data on birth and death rates, literacy, employment, life expectancy, size and composition of population and the like were collected and published through census. The census of India was conducted by the office of the registrar general and census commissioner, India under the ministry of home affairs, government of India. It was set up on an ad-hoc basis for each Census till the 1951 Census. The census act was enacted in India in 1948 for conducting population census with duties and responsibilities assigned to the census officers and decided in May 1949 to initiate steps for developing systematic collection of statistics on the size of population, its growth, etc., and established an organisation in the Ministry of Home Affairs under Registrar General and ex-Officio Census Commissioner, India. This organisation is responsible for engendering data on population statistics including Vital Statistics and Census. Later in 1969, this office was also assigned the obligation for Registration of Births and Deaths Act, 1969. Even though began in 1872, the first complete census was conducted in 1881 and since, census has been conducted 15

times including the one in 2011, and the next will be 2021. In this perspective, the present chapter explores various demographic, literacy and employment aspects of ST population and the individual communities in Kerala from census 1981 to 2011.

Section A

Section A (4.2) looks into the Labour market Participation of tribal communities in Kerala, with special reference to tribal concentrated districts such as Wayanad, Idukki, Palakkad and Kasaragod.

4.2.1 Distribution Scheduled Tribe Population in Kerala

This section gives a detailed picture of the scheduled tribe population in Kerala and the districts, for rural and urban areas separately. The tribal population in Kerala is 1.45 percentage of the total population in Kerala. According to the report of ST development department there are more than 107965 tribal households are in Kerala and the literacy rate is 64.35 percentage and sex ratio is 1035. The detailed pictures of all the indicators are explained below.

Table 4.1: Scheduled Tribe Population in Kerala

Percentage of ST Population in Kerala						
Census year	Rural + Urban					
	Total Population in Kerala	Percentage of ST Population	Male Population in Kerala	Percentage of ST Male Population	Female Population in Kerala	Percentage of ST Female Population
1981	25453680	1.03	12527767	1.05	12925913	1.01
1991	29098518	1.10	14288995	1.13	14809523	1.08
2001	31841374	1.14	15468614	1.16	16372760	1.12
2011	33406061	1.45	16027412	1.49	17378649	1.42
Rural						
1981	20682405	1.24	10167417	1.27	10514988	1.22
1991	21418224	1.45	10512788	1.47	10905436	1.42
2001	23574449	1.48	11451282	1.51	12123167	1.46
2011	17471135	2.48	8408054	2.54	9063081	2.43
Urban						
1981	4771275	0.10	2360350	0.11	2410925	0.10
1991	7680294	0.15	3776207	0.15	3904087	0.14
2001	8266925	0.16	4017332	0.15	4249593	0.17
2011	15934926	0.32	7619358	0.33	8315568	0.32

Source: Computed from Census, 1981, 1991, 2001 and 2011

Table 4.1 shows percentage of ST population to total in Kerala from 1981 to 2011. It is clear from the table that the ST population as a percentage to total population has increased for both males and females in rural and urban areas from 1981 to 2011. It is evident from the table that ST Male population is higher than ST female Population. Status of Scheduled tribe population is detailed (Ref. Annexure 4.1).

Table 4.2: Regional Distribution of ST Population in Kerala

Districts	ST population in Rural areas				ST population in Urban areas				ST population			
	1981	1991	2001	2011	1981	1991	2001	2011	1981	1991	2001	2011
Kerala	256485	309764	350019	433092	4990	11203	13170	51747	261475	320967	363189	484839
Kasaragod		28924	29720	46094		359	618	2763		29283	30338	48857
Wayanad	95557	113759	134584	148215	0	2426	3128	3228	95557	116185	137712	151443
Palakkad	28720	35139	39439	47023	74	566	429	1949	28794	35705	39868	48972
Idukki	38263	49859	50547	55243	449	738	845	572	38712	50597	51392	55815

Source: Computed from Census, 1981, 1991, 2001 and 2011

Note: *During 1981 Kasaragod is not in the district list

Table 4.2 shows the ST population in Kerala from 1981 to 2011. Table also gives the ST population in rural and urban areas separately. Wayanad has the highest ST population in Kerala from 1981 to 2011. During 1981, Idukki follows Wayanad whereas during 2011, Idukki and Palakkad has the second and third highest ST population in Kerala. In rural areas Wayanad has the highest ST population followed by Idukki and

Palakkad during 1981 which continued till 2011. Most the ST are concentrated in rural areas. From the table we can see that the ST population is concentrated mainly in four districts Wayanad (31.24 %) district followed by Idukki (11.51%), Palakkad (10.10%) and Kasaragod (10.08%) districts. So the study focus on the labour market indicators of these four districts of Kerala. (Ref. Annexure 4.2)

Table 4.3: Sex Ratio of Scheduled Tribes in Kerala

Sex Ratio		
State/Districts	Year	
	1981	2011
Kerala	992	1035
Kasaragod	-	1040
Wayanad	1010	1033
Palakkad	979	1014
Idukki	963	994

Source: Computed from Census, 1981, 1991, 2001 and 2011

The table gives a picture of the sex ratio of Scheduled tribes in Kerala from 1981-2011. It is clear from the table that the number of females per thousand males is higher in Kerala. This has a growth rate of 4.33 percent. The proportion of ST females to males is higher in all the districts except Idukki. There is a positive growth in the sex ratio in Idukki, but still it has the lowest sex ratio.

Table 4.4: Literacy Rates of Scheduled Tribes in Kerala

Literacy Rate			
State/ District	Year		
	1981	2011	Growth rate
Kerala	31.79	75.8	138.44
Kasaragod	-	73.02	-
Wayanad	20.74	70.52	240.02
Palakkad	12.04	61.48	410.63
Idukki	43.35	76.62	76.75

Source: Computed from Census, 1981, 1991, 2001 and 2011

Table 4.4 depicts the literacy rate among the ST in Kerala increased tremendously over the period from 1981 to 2011. The same trend can be seen among all the tribal concentrated

districts in Kerala. Literacy can be considered as the path way to development and we can say that they are on the path to development. The literacy rate is highest among the tribes of Idukki district during 1981 which continued till 2011. During 1981 Palakkad has the lowest rate of literacy in Kerala and it has the highest growth in literacy rate during 2011. In short we can say that the literacy rates of all districts improved highly during the period from 1981 to 2011.

4.2.2 Distribution of Tribal Population on the basis of Economic Activity Status

Here we have taken the total workers, WPR, main workers and marginal workers to understand the labour market participation of the ST in Kerala. As the tribal hamlets are concentrated more in interior regions of rural areas, the above said phenomenon is detailed for Scheduled tribes in rural areas of the state and major districts, where they concentrate more.

Table 4.5: Scheduled Tribe Total Workers in Rural Kerala

Districts	Rural male				Rural females			
	Year				Year			
	1981	1991	2001	2011	1981	1991	2001	2011
Kerala	69412	85824 (-23.64)	99979 (16.49)	125508 (25.53)	47207	57483 (21.77)	63188 (9.92)	85366 (35.1)
Kasaragod	7699	8486 (10.22)	13283 (56.53)			4788	5443 (13.68)	8858 (62.74)
Wayanad	25488	31037 (21.77)	38021 (22.5)	42898 (12.83)	21211	24033 (13.3)	25882 (7.69)	31777 (22.78)
Palakkad	8796	10335 (17.5)	11660 (12.82)	13712 (17.6)	6861	8824 (28.61)	9202 (4.28)	10763 (16.96)
Idukki	10535	14472 (37.37)	15217 (5.15)	17778 (16.83)	5354	7490 (39.9)	9054 (20.88)	12567 (38.8)

Source: Computed from Census, 1981, 1991, 2001 and 2011

* Figures in the parenthesis shows growth rate

It is clear from the table 4.5 that tribal male workers declined during 1991 while increased afterwards. Male workers among tribal communities shows a different trend. The male

workers for all tribal concentrated districts increased over the years from 1981 to 2011. Likewise, female workers have increased continuously over the years in all tribal dominated districts and the state as a whole. That is, the total tribal workers has increased in the state, especially in the tribal dominated districts of Kerala.

Table 4.6: Work Participation Rate of Scheduled Tribe Workers in Rural Kerala

Districts	Rural Males				Rural Females			
	1981	1991	2001	2011	1981	1991	2001	2011
Kerala	53.94	55.38 (2.67)	57.7 (4.19)	58.87 (2.03)	36.94	37.14 (0.54)	35.75 (-3.74)	38.82 (8.59)
Kasaragod	-	52.55	57.27 (8.98)	58.58 (2.29)	-	33.55	36.52 (8.85)	37.82 (3.56)
Wayanad	53.61	55.25 (3.06)	57.68 (4.4)	58.76 (1.87)	44.18	42.64 (-3.49)	38.62 (-9.43)	42.25 (9.4)
Palakkad	60.61	58.72 (-3.12)	59 (0.48)	58.81 (-0.32)	48.29	51.01 (5.63)	47.26 (-7.35)	45.4 (-3.94)
Idukki	53.97	57.65 (6.82)	60.66 (5.22)	64.1 (5.67)	28.57	30.66 (7.32)	36.15 (17.91)	45.68 (26.36)

Source: Computed from Census, 1981, 1991, 2001 and 2011

* Figures in the parenthesis shows growth rate

Table 4.6 shows the WPR for rural males and females in Kerala and the districts from 1981 to 2011. It is observed from the table that the WPR for ST rural males in Kerala has increased continuously from 54 percent in 1981 to 59 percentage in 2011 and from 49 percentage in 1981 to 54 percentage in 2011. It is also clear that the WPR for rural ST males is higher than urban ST males in Kerala (given in the next table). It is noticed from the table that the increase in the WPR is more or less same for both rural and urban ST males in Kerala. Among the districts where STs concentrated more, Wayanad has the highest male WPR and

Idukki has the highest Female WPR in rural areas followed by Palakkad for both males and female WPR and least in Kasaragod district of Kerala. The WPR for both males and females in Palakkad district has declined over the years. Even though the total ST population and workers is high in Wayanad, in the case of WPR, Wayanad stands on an average.

Table 4.7: Rural Main Workers from 1981 to 2011 as a Percentage to Total Workers in Kerala

Main Workers in Rural Kerala								
State/Districts	RURAL MALE				RURAL FEMALE			
	1981	1991	2001	2011	1981	1991	2001	2011
Kerala	93.54	92.7	70.29	75.42	83.77	79.52	55.54	60.89
Kasaragod	-	96.57	81.53	77.14	-	87.05	63.77	65.86
Wayanad	92.61	91.1	64.43	74.44	84.3	78.39	49.71	60.64
Palakkad	93.66	94.88	75.39	76.3	84.3	89.64	64.12	66.03
Idukki	96.72	94.72	82.01	78.23	85.67	74.93	60.48	61.71

Source: Computed from Census, 1981, 1991, 2001 and 2011

Table 4.7 gives the distribution of main workers out of total workers for rural males and females in Kerala. It is observed from the table that the main workers among the ST males and females declined over the years from 1981 to 2011. For males it has declined from 94 percent in 1981 to 75 percentage in 2011. For rural females it has declined from 84 percent in 1981 to 61 percentage in 2011. This means that the decline is high for rural females than rural males among the ST workers.

The main worker out of total workers has declined for rural males and females in all districts. During 1981 to 2011, Idukki has the highest ST male main workers in Kerala and Wayanad has the lowest ST male main workers in Kerala. The data on ST rural female main workers in Kerala shows that Idukki has the highest female main workers in Kerala during 1981 while Palakkad has the credit in highest female main workers during 2011. It is also observed that the rural ST female main workers in Kerala have declined over the years from 1981 to 2011.

Table 4.8: Rural Marginal Workers as a Percentage to Total Workers in Kerala

Marginal Workers in Rural Kerala								
State/ Districts	RURAL MALE				RURAL FEMALE			
	1981	1991	2001	2011	1981	1991	2001	2011
Kerala	6.46	7.30	29.71	24.58	16.23	20.48	44.46	39.11
Kasaragod	-	3.43	18.47	22.86	-	12.95	36.23	34.14
Wayanad	7.39	8.90	35.57	25.56	15.70	21.61	50.29	39.36
Palakkad	6.34	5.12	24.61	23.70	15.70	10.36	35.88	33.97
Idukki	3.28	5.28	17.99	21.77	14.33	25.07	39.52	38.29

Source: Computed from Census, 1981, 1991, 2001 and 2011

The table shows the percentage distribution of marginal workers among ST population in the rural areas of Kerala state. As is clear from all the above tables that total workers and WPR has increased for ST in Kerala during 1981 to 2011, whereas the percentage of main workers to total workers has declined during the same period. It is clear from the above said facts that the percentage of Marginal workers in Kerala has increased over the study years. And the table makes the above said fact more clear. The marginal workers for ST rural males and females have increased in the study area from 1981 to 2011. It has increased from 7 percentages to 25 percentages for rural males and from 16 percentage to 39 percentage for rural females in Kerala. And the increase is greater for rural females than rural males. From the table it is evident that During 1981 Idukki has the highest number of male marginal workers in Kerala and Wayanad has the highest male marginal workers during 2011. The same trend is seen among the rural females in Kerala also. ST females have a dominant role than ST males as marginal workers in rural Kerala, which clearly shows their pattern and status of work in the state of Kerala.

4.2.3 Distribution of ST main Workers in Kerala on the basis Industrial Classification

For the purpose of the study, we have taken the 3 fold industrial classification, used by NSSO to get a clear picture of the industrial classification of the ST workers in Kerala.

Table 4.9: Industrial Classification of Tribal Workers in Rural Kerala

Districts	Year	Industrial Sectors		
		Primary	Secondary	Tertiary
Kerala	1981	85935	3526	5011
	1991	111558 (-29.82)	4900 (-38.97)	8816 (-75.93)
	2001	84692 (-24.08)	8550 (-74.49)	12695 (-44)
	2011	111434 (-31.58)	16960 (-98.36)	18368 (-44.69)
Kasaragod	1981	-	-	-
	1991	7532	2766	1305
	2001	6127 (-18.65)	3055 (-10.45)	1315 (-0.77)
	2011	11331 (-84.94)	3494 (-14.37)	1398 (-6.31)
Wayanad	1981	40552	166	768
	1991	44813 (-10.51)	369 (-122.29)	1931 (-151.43)
	2001	33028 (-26.30)	1070 (-189.97)	2710 (-40.34)
	2011	44042 (-33.35)	3182 (-197.38)	4000 (-47.6)
Palakkad	1981	13503	120	389
	1991	16824 (-24.59)	207 (-72.5)	685 (-76.09)
	2001	13146 (-21.86)	1090 (-426.57)	880 (-28.47)
	2011	13931 (-5.97)	1948 (-78.72)	1708 (-94.09)
Idukki	1981	14055	139	583
	1991	17934 (27.6)	237 (-70.5)	1149 (-97.08)
	2001	15029 (-16.2)	500 (-110.97)	1595 (-38.82)
	2011	17652 (17.45)	1118 (-123.6)	2854 (-78.93)

Source: Computed from Census, 1981, 1991, 2001 and 2011

Note: figures in parenthesis shows growth rate

The industrial classification of ST population in Kerala (table 4.9) shows that more than 80 percent of the tribal population is still engaged in primary sector followed by tertiary and

secondary sectors. Among the tribal concentrated districts, tribal population in Wayanad is engaged highly on primary sector followed by Idukki (nearly 80 percent). Which means that majority of the tribal population is solely depend on agriculture and allied activities for their livelihood. The tribal population in Kasaragod is the least to depend on agriculture and allied activities for their main Source: Computed from Census, 1981, 1991, 2001 and 2011 of income. The tribal population in Kasaragod is engaged more on secondary sectors followed by Palakkad and the tribal population in Idukki is engaged more on service and related activities followed by Palakkad district. The tribal population in Wayanad is the least engaged in other than agricultural activities. Compared to previous years the tribal participation in all sectors increased meagrely. And the increase is more towards secondary activities.

Gender wise distribution of tribal population on various industrial sectors also shows the same pattern but male participation is more or less evenly distributed in secondary and tertiary sectors. This is detailed in the following tables.

Table 4.10 gives a clear picture of the industrial classification of tribal communities for males in tribal dominant districts. It is clear from the table that tribal males in rural areas are engaged more in primary activities followed by tertiary and secondary activities during 1981. The same trend can be seen among the tribal dominated districts also. In rural Kerala the tribal male's participation in primary activities declined over the years while their participation in secondary and tertiary activities increased. And the increase is more towards secondary activities than tertiary activities. But still the proportion of population engaged in secondary and tertiary activities is more or less same during 2011. Among the districts Wayanad has the highest proportion of ST population engaged in primary and allied activities followed by Idukki. Kasaragod has the highest proportion of ST population engaged in secondary activities followed by Palakkad. And Idukki has the highest proportion of ST population engaged in tertiary activities followed by Palakkad district. It is also noted that the participation of tribal males in rural areas increased in all sectors and the increase is more to secondary activities.

Table 4.10: Industrial Classification of Tribal Population for Rural Males in Kerala

Districts	Year	Industrial Sectors		
		Primary	Secondary	Tertiary
Kerala	1981	59658	1661	3606
	1991	71107 (19.19)	2199 (32.39)	6256 (73.49)
	2001	56961 (-19.89)	4990 (126.92)	8250 (31.87)
	2011	70758 (24.22)	11870 (137.88)	12034 (45.87)
Kasaragod	1981	-	-	-
	1991	5633	699	1103
	2001	4769 (-15.34)	1310 (87.41)	965 (-12.51)
	2011	7048 (47.79)	2302 (75.73)	928 (-3.83)
Wayanad	1981	22946	131	528
	1991	26768 (16.66)	275 (109.92)	1231 (133.14)
	2001	21746 (-18.76)	720 (161.82)	1755 (42.57)
	2011	27155 (24.87)	2148 (198.33)	2620 (49.29)
Palakkad	1981	7870	84	274
	1991	9177 (16.61)	171 (103.57)	458 (67.15)
	2001	7489 (-18.39)	620 (262.57)	655 (43.01)
	2011	8036 (7.30)	1250 (101.61)	1166 (78.02)
Idukki	1981	9684	91	414
	1991	12752 (31.68)	149 (63.74)	807 (94.93)
	2001	10491 (-17.73)	365 (144.97)	1100 (36.31)
	2011	11214 (6.89)	772 (111.51)	1920 (74.55)

Source: Computed from Census, 1981, 1991, 2001 and 2011

Note: figures in parenthesis shows growth rate.

Table 4.11: Industrial Classification of Tribal Population for Rural Females in Kerala

Districts	Year	Industrial Sectors		
		Primary	Secondary	Tertiary
Kerala	1981	26277	1865	1405
	1991	40451 (53.94)	2701 (44.83)	2560 82.21
	2001	27731 (-31.45)	3560 (31.80)	4445 73.63
	2011	40676 (46.68)	5090 (42.98)	6334 42.50
Kasaragod	1981	-	-	-
	1991	1899	2067	202
	2001	1358 (-28.49)	1745 (-15.58)	350 (73.27)
	2011	4283 (215.39)	1192 (-31.69)	470 (34.29)
Wayanad	1981	17606	35	240
	1991	18045 (2.49)	94 (168.57)	700 (191.67)
	2001	11282 (-37.48)	350 (272.34)	955 (36.43)
	2011	16887 (49.68)	1034 (195.43)	1380 (44.50)
Palakkad	1981	5633	36	115
	1991	7647 (35.75)	36 (0.0)	227 (97.39)
	2001	5657 (-26.02)	470 (1205.56)	225 (-0.88)
	2011	5895 (4.21)	698 (48.51)	542 (140.89)
Idukki	1981	4371	48	169
	1991	5182 (18.55)	88 (83.33)	342 (102.37)
	2001	4538 (-12.43)	135 (53.41)	495 (44.74)
	2011	6438 (41.87)	346 (156.30)	934 (88.69)

Source: Computed from Census, 1981, 1991, 2001 and 2011 Note: Figures in parenthesis shows annual growth rate

Industrial Classification of Tribal Population for Rural Females in Kerala is depicted in table 4.11. The participation of tribal females in Kerala is more in primary activities followed by tertiary and secondary sectors. Apart from primary activities, the tribal females in Kasaragod districts are engaged more in secondary activities compared to the females of Wayanad and Idukki. While the females of Idukki and Wayanad are engaged more in tertiary activities. As mentioned in the above tables, there is an increase in the tribal females towards all industrial sectors and the increase is more to the manufacturing and construction activities.

Section B

Section B (4.3) details the labour market participation tribal communities in Kerala with special focus on 12 communities like Adiyar, Kattunayakan, Urally, Kuruman, Kurichchan, Paniyan, Irular, Koraga, Kudiya, Malai Arayan, Mannan and Muthuvan from Wayanad, Palakkad, Kasaragod and Idukki respectively

4.3.1 Distribution of Population among Major Tribal Communities in Kerala

It is evident from the above sections that most of the tribals are engaged as casual labourers followed by self - employment and only a few in government services for their existence. There are occupational and educational differences in different tribal groups of Kerala. In order to get a real picture of the tribals in Kerala with special reference to their labour market participation we have to go through the major factors relating to the employment aspects to understand their labour market participation and how they have changed from the earlier situations, in their labour market participation which is the major Source: Computed from Census, 1981, 1991, 2001 and 2011 to overcome poverty. This is examined in the present chapter. For this purpose we have taken the communities mala Vettuvan, Mavilan of Kasaragod district, Adiyar, Kattunayakan, Kurichyan, Kuruman, Paniyan, and Urally of Wayanad district, Irular of Palakkad district, Malai Arayan, Muthuvan and Mannan of Idukki district to represent the respective districts. But as per 2011 census, Mavilan and Malai Vettuvan of Kasaragod district has the highest population. Whereas, the data related to employment indicators are not available for the communities before 2001 so the study takes Kudiya and Koraga as the representation of Kasaragod district which is the primitive communities of Kasaragod district and which has the highest population next to Mavilan and Malai Vettuvan.

Table 4.12: Population of Major Tribal Communities in Kerala

ST Communities	RURAL POPULATION			
	Census Year			
	1981	1991	2001	2011
1. Adiyar	8098	9592 (18.45)	10613 (10.64)	11383 (7.26)
2. Irular, Irulan	18690	21782 (16.54)	23809 (9.31)	23291 (-2.18)
3. Kattunayakan	8619	11534 (33.82)	14323 (24.18)	17476 22.01
4. Koraga	1057	1548 (46.45)	949 (-38.70)	951 (0.21)
5. Kudiya, Melakudi	591	748 (26.57)	439 (-41.31)	769 (75.17)
6. Kurichchan	22161	28017 (26.42)	32202 (14.94)	33354 (3.58)
7. Kurumans	20710	23008 (11.10)	25326 (10.07)	23657 (-6.59)
8. Malai Arayan	24183	24208 (0.10)	29947 (23.71)	30024 (0.26)
9. Mannan	5002	6868 (37.31)	7467 (8.72)	9448 (26.53)
10. Muthuvan	11201	17132 (52.95)	21104 (23.18)	23397 (10.87)
11. Paniyan	56874	65978 (16.01)	79337 (20.25)	85335 (7.56)
12. Urally	8874	10083 (13.62)	10827 (7.38)	10916 (0.82)

Source: Computed from Census, 1981, 1991, 2001 and 2011

Note: figures in parenthesis shows growth rate

From the table 4.12 we will get same picture of the tribal communities in Kerala related to population which we get from the above tables. i.e. Paniyan, followed by Kurichchan maliarayan, and Kuruman community has highest population in rural areas and Kudiya and Koraga communities has the lowest population among the selected tribal communities during the study period. A detailed picture of population on all individual tribes is detailed (Ref. Annexure 4.3).

Table 4.13: Sex Ratio of Major Tribal Communities in Kerala

ST community	Sex Ratio			
	Census Year			
	1981	1991	2001	2011
1. Adiyar	1062	1022	1084	1090
2. Irular, Irulan	980	988	994	1016
3. Kattunayakan	942	938	982	1013
4. Koraga	855	999	953	1033
5. Kudiya, Melakudi	993	971	886	948
6. Kurichchan	967	966	988	993
7. Kurumans	968	978	995	1017
8. Malai Arayan	1000	995	1031	998
9. Mannan	1259	987	1036	1041
10. Muthuvan	979	983	976	990
11. Paniyan	1041	1042	1048	1068
12. Urally	938	944	1002	996

Source: Computed from Census, 1981, 1991, 2001 and 2011

From the table 4.13 we can see that the sex ratio is high for Adiyar community followed by Paniyan, while unfavourable among Kudiya community. Compared to 1981 the sex ratio has increased for all the communities except for Kudiya and Malai Arayan communities (there is a decline in sex ratio for these communities).

From the above table we can clearly understand the distribution of population among various tribal communities for males and females separately. Now we have to go through the population of different tribal communities in rural areas and urban areas to substantiate that the tribals are concentrated more in rural parts of Kerala.

4.3.2 Distribution of Major Tribal Communities on the Basis of Economic Activity Status in Kerala

After getting a picture of the demographic particulars of tribal communities in Kerala, the study attempts to look into the labour market participation of tribal communities in Kerala with special focus on rural areas using the indicators, WPR and total workers as fundamental and percentage of population as main workers and marginal workers subsidiary part.

Table 4.14: Growth Rate of Total Workers among Major Tribal Communities in Kerala

Tribal communities	TOTAL WORKERS (Male+Female)			
	Census Year			
	1981	1991	2001	2011
1. Adiyar	4428	5223 (17.95)	5538 (6.03)	5787 (4.50)
2. Irular, Irulan	9949	11793 (18.53)	12474 (5.77)	12252 (-1.78)
3. Kattunayakan	4511	6002 (33.05)	7069 (17.77)	8775 (24.13)
4. Koraga	577	754 (30.68)	532 (-29.44)	553 (3.95)
5. Kudiya, Melakudi	305	342 (12.13)	193 (-43.57)	332 (72.02)
6. Kurichchan	8542	10711 (25.39)	13799 (28.83)	16197 (17.38)
7. Kurumans	8648	9629 (11.34)	10990 (14.13)	11770 (7.10)
8. Malai Arayan	7774	8977 (15.47)	11968 (33.32)	13592 (13.57)
9. Mannan	2863	3473 (21.31)	3494 (0.60)	5073 (45.19)
10. Muthuvan	5236	7152 (36.59)	10480 (46.53)	13043 (24.46)
11. Paniyan	29597	34571 (16.81)	38830 (12.32)	42579 (9.65)
12. Urally	3664	4315 (17.77)	5482 (27.05)	6046 (10.29)

Source: Computed from Census, 1981, 1991, 2001 and 2011

Note: figures in parenthesis shows growth rate

Table 4.14 shows the number of workers among the major ST communities in Kerala. Total workers includes both main and marginal workers. It is observed from the table that the number of workers has increased in all communities except Koraga community of Kasaragod and Malai Arayan communities of south Kerala. The number of workers among these communities in rural areas has declined meagrely from 1981 to 2011 and the decline is not a continuous one as far as these communities are considered. From the table it is also clear that the community with highest population has the maximum number of workers among the ST communities in Kerala and vice versa i.e. Paniyan community of Wayanad with highest workers and Kudiya community with lowest workers during 1981 to 2011.

The second highest workers are among the Irular community of Palakkad, followed by Kurumans and Kurichchan of Wayanad and Malai Arayan community of Idukki during 1981. But this picture has changed in the current past that Paniyan community still remained with highest number of ST workers in Kerala (42579). The Irular community which was the second highest for having highest number of workers came to fifth position (12252). The communities preceded by Irular community are Kurichchan community with 16197 workers followed by Malai Arayan community with 13592 workers, Muthuvan community of Idukki and Palakkad districts with 13043 workers. The communities with least number of workers are Kudiya and Koraga community of Kasaragod district.

The growth rate in workers shows that Kudiya community followed by Mannan community has highest growth in workers, while, Irular and Koraga community has the least increase in workers. Moreover, Irular community of Palakkad district has a negative growth rate in the number of workers during the period from 1981 to 2011. In order to get a clearer picture we have to analyse the total workers among males and females separately. This is given in the following tables.

Table 4.15: Community wise Distribution of Total Workers for Males in Kerala

Tribal communities	TOTAL WORKERS			
	Census Year			
	1981	1991	2001	2011
1. Adiyam	2213	2708 (22.37)	2903 (7.20)	3143 (8.27)
2. Irular, Irulan	5687	6397 (12.48)	7009 (9.57)	6776 (-3.32)
3. Kattunayakan	2519	3471 (37.79)	4162 (19.90)	4961 (19.19)
4. Koraga	331	409 (23.56)	295 (-27.87)	297 (0.68)
5. Kudiya, Melakudi	174	213 (22.41)	132 (-38.03)	229 (73.48)
6. Kurichchan	5359	6839 (27.62)	9047 (32.29)	10241 (13.20)
7. Kurumans	5300	5886 (11.06)	7146 (21.41)	7275 (1.81)
8. Malai Arayan	6065	6819 (12.43)	8792 (28.93)	9076 (3.23)
9. Mannan	1634	2048 (25.34)	2109 (2.98)	2955 (40.11)
10. Muthuvan	3049	4548 (49.16)	6003 (31.99)	7062 (17.64)
11. Paniyan	15350	18611 (21.24)	22425 (20.49)	23647 (5.45)
12. Urally	2441	2924 (19.79)	3369 (15.22)	3511 (4.21)

Source: Computed from Census, 1981, 1991, 2001 and 2011

Note: figures in parenthesis shows growth rate

Table 4.15 gives clear picture of ST males workers among major tribal communities in Kerala. From the table it is clear that as mentioned in the earlier table the total male workers has increased for all communities except Malai Arayan and Koraga communities from 1981 to 2011. The communities' Kudiya Followed by Mannan has the highest growth rate in male total workers in 2011. All other communities follow more or less same slightest growth in total male workers in Kerala. There are fluctuations in the workers over the years from 1981 to 2011. Most communities showed a continuous increase. For some communities it

increased in 1991 then declined compared to that year. And for some it increased during 2001 and then declined meagrely. Irular community has the negative growth rate during 2011.

When we look into further details we can see that Paniyan community has the highest male workers with 15350 workers followed by Malai Arayan (6065), Irular (5687), Kurichchan (5359) and Kuruman (5300) communities during 1981. During 2011 Paniyan still continued to have the highest male workers among ST communities in Kerala i.e. 23647 workers followed by Kurichchan community with 10241 workers, Malai Arayan community with 9076 workers. The communities with least number of male workers are among Kudiya and Koraga community during 1981 and 2011.

Table 4.16: Total Female Workers in Kerala among Tribal communities

Tribal communities	Total Workers			
	Census Year			
	1981	1991	2001	2011
1. Adiyam	2215	2515 (13.54)	2635 (4.77)	2644 (0.34)
2. Irular, Irulan	4262	5396 (26.61)	5465 (1.28)	5476 (0.20)
3. Kattunayakan	1992	2531 (27.06)	2907 (14.85)	3814 (31.20)
4. Koraga	246	345 (40.24)	237 (-31.30)	256 (8.02)
5. Kudiya, Melakudi	131	129 (-1.53)	61 (-52.71)	103 (68.85)
6. Kurichchan	3183	3872 (21.65)	4752 (22.73)	5956 (25.34)
7. Kurumans	3348	3743 (11.80)	3844 (2.70)	4495 (16.94)
8. Malai Arayan	1709	2158 (26.27)	3176 (47.17)	4516 (42.19)
9. Mannan	1229	1425 (15.95)	1385 (-2.81)	2118 (52.92)
10. Muthuvan	2187	2604 (19.07)	4477 (71.93)	5981 (33.59)
11. Paniyan	14247	15960 (12.02)	16405 (2.79)	18932 (15.40)
12. Urally	1223	1391 (13.74)	2113 (51.91)	2535 (19.97)

Source: Computed from Census, 1981, 1991, 2001 and 2011

Note: figures in parenthesis shows growth rate

Table 4.16 gives a detailed picture of ST female workers in Kerala from 1981 to 2011. It is observed from the table that the tribal female workers in Kerala have increased more than that of tribal male workers in Kerala from 1981 to 2011. The female workers in Kerala have increased for all communities except Kudiya from 1981 to 2011. During 1981 it was 131 for Kudiya which declined to 103, while increased compared to 2011 from (61 in 2001 to 103 in 2011). The female workers were high for Paniyan community (18932 in 2011) followed by Muthuvan and Kurichchan community (5981 and 5956 in 2011 respectively).

During 1981, the communities which have highest female workers followed by Paniyan community (14247 workers) was Irular, Irular community with 4262 workers, Kuruman community with 3348 workers, and Kurichchan community with 3183 workers. The community with least female workers are Kudiya and Koraga community with less than 300 female workers during the same period. During 2011, the community with highest female worker is without any change Paniyan community with 18932 workers followed by Muthuvan community with 5981 workers, Kurichchan community with 5956 workers, and Irular, Irular community with 5476 workers among ST community workers in Kerala. The communities has the least number of workers is in Kudiya and Koraga community itself.

The reason for increase in the number of workers among females in general may be the necessity of their income to support and sustain the family and that they are more engaged in low paid unskilled works. Along with that minimum of one acre land has been allotted for each family in each hamlet and they have taken settled cultivation for their own use (KIRTADS studies on SC and ST), which increased the number of female workers among STs in Kerala. Inorder to get a more clear picture, we have to know the WPR of tribal communities. This is deatailed in the table 4.17.

Table 4.17 shows the WPR for tribal communities in Kerala from 1981 to 2011 across gender. From the table it is found out that the WPR has increased for tribal communities except for Adiyam community from 1981 to 2011. Even though the WPR for Kudiya community showed a negative growth in 2011, but compared to previous years the WPR for this community has increased. The WPR is highest for Mannan community followed by Kuruman and Kurichchan communities during 2001-2011. The same was highest for Malai Arayan community during 1981-1991. Only Kurichchan, Kuruman and Mannan community showed a continuous increase in WPR. The WPR of all other communities increased in 1991-

2001 or declined during the same period then increased during 2001-2011. The WPR for tribal communities is on an average 46 percentage in 1981 and 50 percentages in 2011.

Table 4.17: WPR for Major Tribal Communities in Kerala

Census Year	Gender	1. Adiyan	2. Irular, Irulan	3. Kattunayakan	4. Koraga	5. Kudiya	6. Kurichchan	7. Kurumans	8. Malai Arayan	9. Mannan	10. Muthuvan	11. Paniyan	12. Urally
1981	Total	55	53	52	55	52	39	42	32	57	47	52	41
	Male	56	60	57	58	59	48	50	50	74	54	55	53
	Female	53	46	48	51	44	29	33	14	44	39	49	28
1991	Total	54	54	52	49	46	38	42	37	51	42	52	43
	Male	57	58	58	53	56	48	51	56	59	53	58	57
	Female	52	50	45	45	35	28	33	18	42	31	47	28
2001	Total	52	52	49	56	44	43	43	40	47	50	49	51
	Male	57	59	58	61	57	56	56	60	58	56	58	62
	Female	48	46	41	51	30	30	30	21	36	43	40	39
2011	Total	51	53	50	58	43	49	50	45	54	56	50	55
	Male	58	58	57	62	58	61	62	60	64	60	57	64
	Female	45	47	44	54	28	36	38	30	44	51	43	47

Source: Computed from Census, 1981, 1991, 2001 and 2011

Note: figures in parenthesis shows growth rate

WPR of rural males among the major tribal communities in Kerala indicates that the WPR for rural males has on an average increased over the years from 1981 to 2011 except for Kattunayakan, Paniyan and Irular. The WPR for male among major tribal communities in the state is negative for Kattunayakan, Paniyan and Irular community and highest for Mannan, Kuruman and Kurichchan communities during 2001-2011 periods. The growth rate in WPR for males is only for Muthuvan community. During 1981-1991, Malai Arayan community has the highest growth in WPR followed by Paniyan community and Mannan community has the least followed by Koraga community. Table: WPR of rural females for major tribal communities in Kerala from 1981 to 2011.

WPR for rural females among major tribal communities in Kerala from 1981 to 2011 observed that the WPR for rural females has increased by on an average 2 percentage points from 1981 to 2011. In Kerala the WPR for females has increased while the picture is different

for different communities. During 1981, Adiyam and Koraga community has the highest percentage of female WPR in Kerala. While during 2011, Koraga followed by Muthuvan has the highest female work participation rate among the major tribal communities in Kerala. The growth rate of WPR in Kerala shows that the community's Malai Arayan followed by Irular and Kuruman has the highest growth while all other communities had a negative growth in female WPR during 1981-1991. During 2001-2011, Malai Arayan followed by Kuruman, Kurichchan and Mannan has the highest WPR while, Kudiya community followed by Adiyam has the negative WPR among the ST females in Kerala.

Table 4.18: Main Workers for Major Tribal Communities as a Percentage to Total Workers in Kerala

Tribal Communities	Rural Main Workers (total)			
	Census Year			
	1981	1991	2001	2011
1. Adiyam	89.86	87.69	59.75	74.75
2. Irular, Irulan	88.86	93.91	69.99	67.24
3. Kattunayakan	88.27	81.07	56.59	57.11
4. Koraga	91.85	90.85	65.98	69.44
5. Kudiya, Melakudi	88.85	88.01	52.85	65.66
6. Kurichchan	89.41	87.51	66.9	69.46
7. Kurumans	86.05	82.9	61.87	73.55
8. Malai Arayan	91.96	88.58	80.93	72.89
9. Mannan	94.03	80.02	69.63	59.18
10. Muthuvan,	89.97	90.7	65.55	63.74
11. Paniyan	89.61	85.97	55.44	68.13
12. Urally	95.33	83.04	68.86	75.98

Source: Computed from Census, 1981, 1991, 2001 and 2011

Table 4.18 enumerates main workers as a percentage to total workers for different communities in Kerala from 1981 to 2011. The total main workers in Kerala and the main workers in Kerala for males and females have declined in Kerala during the period from 1981 to 2011. It is observed from the table that the main workers for major tribal communities in Kerala have declined over the years from 1981 to 2011. The decline is highest for Mannan community followed by Kattunayakan community. And the decline is lesser for Kuruman community followed by Adiyam community of Wayanad. Now we have to have a look on the main workers on gender basis to get a clearer picture of the same.

Table 4.19: Male Main Workers for Major Tribal Communities in Kerala (in percentage)

Tribal Communities	MAIN WORKERS (Male)			
	Census Year			
	1981	1991	2001	2011
1. Adiyar	92.36	91.95	65.04	78.36
2. Irular, Irulan	93.04	96.12	75.57	71.97
3. Kattunayakan	90.75	84.93	62.13	60.85
4. Koraga	93.96	92.67	70.85	69.36
5. Kudiya, Melakudi	92.53	97.18	61.36	72.49
6. Kurichchan	91.81	94.2	73.37	76.64
7. Kurumans	92.06	91.23	68.02	80.34
8. Malai Arayan	96.98	96.52	84.62	81.08
9. Mannan	96.45	88.77	75.53	63.69
10. Muthuvan	95.05	92.99	75.56	69.19
11. Paniyan	92.08	90.11	60.37	73.68
12. Urally	97.17	91.66	74.95	82.83

Source: Computed from Census, 1981, 1991, 2001 and 2011

Table 4.19 traces out the percentage of male main workers among different ST communities in Kerala during 1981 to 2011. From the table it is observed that the main workers among major tribal communities have declined by 16 percentage points during the period from 1981 to 2011. During the period 1981, Urally community followed by Malai Arayan and Mannan communities has the highest percentage of main workers out of the total workers in Kerala. Like during 2011, Urally community followed by Kuruman community and Malai Arayan community has the highest male main workers among the ST communities in Kerala. As mentioned in the above table the main workers out of total workers has declined highly for Mannan followed Kattunayakan male workers and least among Kuruman and Urally males during 1981 to 2011.

Table 4.20: Female Main Workers for Major Tribal Communities in Kerala (in percentage)

Tribal communities	MAIN WORKERS (Female)			
	Census Year			
	1981	1991	2001	2011
1. Adiyar	87.36	83.1	53.93	70.46
2. Irular, Irulan	83.29	91.29	62.84	61.38
3. Kattunayakan	85.14	75.78	48.64	52.23
4. Koraga	89.02	88.7	59.92	69.53
5. Kudiya, Melakudi	83.97	72.87	34.43	50.49
6. Kurichchan	85.36	75.7	54.59	57.1
7. Kurumans	76.55	69.78	50.42	62.56
8. Malai Arayan	74.14	63.48	70.72	56.42
9. Mannan	90.81	67.44	60.65	52.88
10. Muthuvan,	82.9	86.71	52.13	57.3
11. Paniyan	86.94	81.13	48.71	61.18
12. Urally	91.66	64.92	59.16	66.51

Source: Computed from Census, 1981, 1991, 2001 and 2011

Table 4.20 indicates the percentage of female main workers among the major tribal communities in Kerala from 1981 to 2011. From the table we can observe that there is a decline of female main workers by an average of 19 percentage during the period from 1981 to 2011. During 1981, Urally females followed by Mannan and Koraga community females had the highest number of female main workers among the tribes. Whereas, during 2011, Adiyar community has the highest female main workers followed by Urally community and the decline of female main workers among communities and the females as a whole is very high in Kerala. The decline in agriculture is considered as the major reason behind this.

It is again noticed that the communities with lowest female main workers during 1981 has an increase in the percentage of the same during 2011. Whereas, the communities with lowest female main workers has a decline in workers in 2011 compared to 1981. Hitherto, it is clear that the percentage of main workers has declined for both males and females in 2011 compared to 1981. It is also clear that with increase in WPR, decline in main workers leads to increase in marginal workers in Kerala. This is evident from the previous chapter that the

percentage of marginal workers for both males and females increased during the period from 1981 to 2011 (table 5.11)

So the next section gives detailed tables on marginal workers for males and females separately among major tribal communities in Kerala.

Table 4.21: Marginal Workers for Major Tribal Communities as a Percentage to Total Workers in Kerala

Tribal communities	MARGINAL WORKERS (Total)			
	Census Year			
	1981	1991	2001	2011
1. Adiyar	10.14	12.31	40.25	25.25
2. Irular, Irulan	11.14	6.09	30.01	32.76
3. Kattunayakan	11.73	18.93	43.41	42.89
4. Koraga	8.15	9.15	34.02	30.56
5. Kudiya, Melakudi	11.15	11.99	47.15	34.34
6. Kurichchan	10.59	12.49	33.1	30.54
7. Kurumans	13.95	17.1	38.13	26.45
8. Malai Arayan	8.04	11.42	19.07	27.11
9. Mannan	5.97	19.98	30.37	40.82
10. Muthuvan,	10.03	9.3	34.45	36.26
11. Paniyan	10.39	14.03	44.56	31.87
12. Urally	4.67	16.96	31.14	24.02

Source: Computed from Census, 1981, 1991, 2001 and 2011

Table 4.21 gives a detailed picture of the percentage of marginal workers among the major tribal communities in Kerala from 1981 to 2011. It is indicated in the table that Mannan community followed by Malai Arayan and Koraga communities has the least number of

marginal workers in Kerala among the different ST communities, while Irular Kattunayakan and Kudiya followed by rest of the communities has highest marginal workers during 1981. During 2011, Kattunayakan community (43 percentage) followed by Kadar and Mannan community (41 percentage) has the highest percentage of marginal workers among the major tribal communities in Kerala and the communities Urally (24.02 per cent), Adiyen (25 per cent), Kuruman (26 per cent) and Malai Arayan (27 per cent) has least marginal workers in Kerala. This shows higher participation of these communities in labour market. The increase in the marginal workers is high among Mannan followed by Urally community and low among Kuruman community.

Table 4.22: Male Marginal Workers for Major Tribal Communities in Kerala (in percentage)

Tribal communities	MARGINAL WORKERS (Male)			
	Census Year			
	1981	1991	2001	2011
1. Adiyen	7.64	8.05	34.96	21.64
2. Irular, Irulan	6.96	3.88	24.43	28.03
3. Kattunayakan	9.25	15.07	37.87	39.15
4. Koraga	6.04	7.33	29.15	30.64
5. Kudiya, Melakudi	7.47	2.82	38.64	27.51
6. Kurichchan	8.19	5.8	26.63	23.36
7. Kurumans	7.94	8.77	31.98	19.66
8. Malai Arayan	3.02	3.48	15.38	18.92
9. Mannan	3.55	11.23	24.47	36.31
10. Muthuvan,	4.95	7.01	24.44	30.81
11. Paniyan	7.92	9.89	39.63	26.32
12. Urally	2.83	8.34	25.05	17.17

Source: Computed from Census, 1981, 1991, 2001 and 2011

Tables 4.22 pictures out the percentage distribution of male marginal workers among the major tribal communities in Kerala from 1981 to 2011. It is observed from the table that Kattunayakan community males followed by Paniyan and Kurichchan males has the highest marginal workers while, Malai Arayan community followed by Mannan and Muthuvan communities has the least number of male marginal workers in Kerala during 1981. During 2011 also Kattunayakan has the highest number of male marginal workers in Kerala followed

by Mannan community, whereas, Urally followed by Malai Arayan and Kuruman communities has the lowest male marginal workers in Kerala. Compared to 1981, Mannan community followed by Malai Arayan and Muthuvan has the highest increase in male marginal workers. On the other hand, Kuruman community followed by Adiyen community has the least increase in male marginal workers in the state.

Table 4.23: Female Marginal Workers for Major Tribal Communities in Kerala (in percentage)

Tribal Communities	RURAL MARGINAL WORKERS (Female)			
	Census Year			
	1981	1991	2001	2011
1. Adiyen	12.64	16.9	46.07	29.54
2. Irular, Irulan	16.71	8.71	37.16	38.62
3. Kattunayakan	14.86	24.22	51.36	47.77
4. Koraga	10.98	11.3	40.08	30.47
5. Kudiya, Melakudi	16.03	27.13	65.57	49.51
6. Kurichchan	14.64	24.3	45.41	42.9
7. Kurumans	23.45	30.22	49.58	37.44
8. Malai Arayan	25.86	36.52	29.28	43.58
9. Mannan	9.19	32.56	39.35	47.12
10. Muthuvan	17.1	13.29	47.87	42.7
11. Paniyan	13.06	18.87	51.29	38.82
12. Urally	8.34	35.08	40.84	33.49

Source: Computed from Census, 1981, 1991, 2001 and 2011

Table 4.23 shows the percentage of female marginal workers among the major tribal communities in Kerala from 1981 to 2011. It is clear from the table that the female marginal workers have an increase on an average of 18 percentage points from 1981 to 2011. It is evident from the table that among the female workers, female workers among the Urally tribe followed by Mannan tribe has the least percentage of marginal workers out of total workers in Kerala and Kuruman tribe followed by Malai Arayan tribe had the highest percentage of workers as marginal workers during 1981. On the other hand, Adiyen and Koraga tribe

females has the least marginal workers whereas, females of Kudiya tribe followed by kattunayakan and Mannan tribe has the highest female marginal workers as per 2011 census. The growth rate of female marginal workers among different tribes shows that Mannan and Urally tribes has the highest growth rate in female marginal workers and Kuruman and Malai Arayan tribe has the lowest female marginal workers over the period from 1981 to 2011.

In short we can see that the marginal workers has increased for all the communities, only the growth rate differs, but from the tables we can say that Kuruman and Malai Arayan tribes are more engaged as main workers and least as marginal workers, which gives a clear picture of the higher position in the labour market of Kerala. It is further clear that the communities with lowest marginal workers in 1981 have highest marginal workers in 2011 and vice versa.

From the tables it is clear that the main workers are highest in percentage compared to marginal workers out of total workers in Kerala. So we have to concentrate on the industrial classification of main workers among the major tribal communities to know a detailed and clear picture of the works where the most of the tribal communities are engaged in and change in the industrial classification of the workers.

4.3.3 Distribution of Tribal Communities on the basis Industrial Classification

In this session the study attempts to look into the industrial classification of different tribal groups in Kerala. For this purpose the study computed three fold industrial classification from the detailed classification given by census of India. A detailed industrial classification on individual scheduled tribes is not published by census organisation for the 2001. The study avoided the year for convenience. From the data it is clear that all tribal communities are employed in primary sector followed by tertiary sector and secondary sector except for Koraga and Kudiya community of Kasaragod district. Koraga and Kudiya communities are engaged more in secondary activities followed by primary and tertiary works during 1981. During 2011 all the tribal communities are engaged more in agriculture and allied activities followed by tertiary and secondary sector activities. The communities Irular, Koraga, Kudiya, Kattunayakan, Paniyan were engaged more in secondary sector activities than tertiary sector activities. A detailed picture on the employment of individual tribal communities in primary, secondary and tertiary sectors across gender is detailed in this section.

Table 4.24: Primary Sector Employment of Major Tribal Communities (in percentage)

Tribal Communities	Census Year/ Industrial Classification								
	Primary Sector								
	Total			Male			Female		
	1981	1991	2011	1981	1991	2011	1981	1991	2011
All Scheduled tribes	90.96	89	76	91.89	89.37	74.75	88.93	88.49	78.07
1. Adiyar	94.87	97	93	94.21	96.71	92.27	95.56	97.22	93.87
2. Irular, Irulan	96.42	95	74	95.68	93.38	72.22	97.49	96.29	76.9
3. Kattunayakan	91.18	94	90	90.42	93.05	89.15	92.22	94.89	90.3
4. Koraga	23.96	31	36	31.83	40.11	53.4	12.79	20.59	14.79
5. Kudiya, Melakudi	32.91	67	65	51.19	81.16	71.43	12.16	35.11	46.88
6. Kurichchan	96.45	93	75	95.93	92.39	75.45	97.34	93.18	75.19
7. Kurumans	96.58	92	69	96.28	91.75	67.52	97.22	92.34	71.3
8. Malai Arayan	86.53	78	56	87.86	81.12	62.4	80.33	64.09	39.14
9. Mannan	96.51	97	85	95.75	96.75	84.34	97.58	98.75	87.38
10. Muthuvan,	97.69	97	91	97.86	97.38	90.69	97.41	95.84	92.21
11. Paniyan	97.79	95	90	97.56	94.5	89.8	98.13	95.68	90.88
12. Urally	97.39	95	85	97.3	96.53	85.33	97.59	91.14	84.74

Source: Computed from Census, 1981, 1991, and 2011

Table 4.24 indicates the employment in primary sector across individual tribes in Kerala. It can be noted that there is marked differences in the proportion of population employed in primary sector. It is also clear that there is a decline in primary sector activities among all the communities' and the decline is high among Malai Arayan community followed by Kuruman, Irular and Kurichchan communities. While the participation in primary activities increased for Kudiya and Koraga communities of Kasaragod district. The pattern observed in general is more or less similar across males and females.

Table 4.25: Secondary Sector Employment of Major Tribal Communities (in percentage)

Tribal Communities	Secondary Sector								
	Total			Male			Female		
All Scheduled tribes	3.73	3.91	12	2.56	2.76	12.54	6.31	5.91	9.77
1. Adiyar	0.81	0.57	3	1.1	0.68	3.74	0.52	0.43	1.94
2. Irular, Irulan	0.73	1.23	15	0.75	1.76	16.18	0.7	0.57	14.46
3. Kattunayakan	2.59	3.27	6	2.98	4.17	5.75	2.06	1.88	5.7
4. Koraga	69.62	58.39	57	59.16	43.27	36.89	84.47	77.12	80.47
5. Kudiya, Melakudi	43.04	25.58	20	14.29	10.63	10.99	75.68	58.51	46.88
6. Kurichchan	0.63	1.29	10	0.74	1.32	10.53	0.44	1.23	9.97
7. Kurumans	0.58	1.04	11	0.67	1.25	12.1	0.4	0.61	9.47
8. Malai Arayan	1.29	2.19	10	1.22	2.13	9.23	1.58	2.48	12.14
9. Mannan	1.45	0.43	7	1.46	0.55	7.45	1.43	0.21	5.33
10. Muthuvan,	1.04	0.91	3	1	0.33	3.1	1.1	1.99	3.26
11. Paniyan	0.4	0.98	7	0.43	1.22	7.38	0.36	0.66	5.93
12. Urally	0.66	1.09	8	0.8	0.82	8.64	0.36	1.88	6.22

Source: Computed from Census, 1981, 1991 and 2011

It is evident from the table 4.25 that the secondary sector employment of tribal communities is very low except for Koraga and Kudiya communities during 1981. While this has increased for all communities, and the increase is more across Irular community of Palakkad followed by Kuruman and Kurichchan communities of Wayanad. The pattern observed in total is more or less similar across males and females of these communities. On the other hand the employment in secondary sector declined for Kudiya and Koraga communities of Kasaragod.

Table: 4.26: Tertiary Sector Employment of Major Tribal Communities (in percentage)

Tribal Communities	Tertiary Sector								
	Total			Male			Female		
	1981	1991	2011	1981	1991	2011	1981	1991	2011
All Scheduled tribes	5.3	7	13	5.55	8	13	4.76	6	12
1. Adiyar	4.32	2	4	4.69	3	4	3.93	2	4
2. Irular, Irulan	2.85	4	10	3.58	5	12	1.8	3	9
3. Kattunayakan	6.23	3	5	6.61	3	5	5.72	3	4
4. Koraga	6.42	10	7	9	17	10	2.74	2	5
5. Kudiya, Melakudi	24.05	8	15	34.52	8	18	12.16	6	6
6. Kurichchan	2.92	6	14	3.32	6	14	2.22	6	15
7. Kurumans	2.83	7	20	3.05	7	20	2.38	7	19
8. Malai Arayan	12.19	20	34	10.91	17	28	18.09	33	49
9. Mannan	2.04	2	8	2.79	3	8	0.99	1	7
10. Muthuvan,	1.27	2	6	1.14	2	6	1.49	2	5
11. Paniyan	1.81	4	3	2.01	4	3	1.51	4	3
12. Urally	1.95	4	7	1.9	3	6	2.05	7	9

Source: Computed from Census, 1981, 1991, 2001 and 2011

Table 4.26 provides a detailed picture of the employment of individual tribal communities in tertiary sector. As mentioned above, it is observed from the table that the tertiary sector employment varies across tribal communities in Kerala. The tertiary sector employment is comparatively high among Kudiya and Malai Arayan community during 1981, while high among Malai Arayan and Kuruman community. Compared to 1981, the employment in tertiary sector increased for all communities and the increase is high for Malai Arayan followed by Kuruman and Kurichchan communities and declined for Kudiya, Kattunayakan and Adiyar communities. The same pattern of employment can be seen across males and females.

On the whole, as mentioned earlier there is an increase in the female participation in all sectors. And the overall growth is more towards tertiary sector, while male's growth is towards secondary sector. Growth of tribal females in various sectors during 2011 compared to 1981 shows that there is an increase in female employment in primary sector across

Kattunayakan, Kudiya, Kurichchan, Muthuvan and Urally communities. While the females of all other communities declined from agriculture and allied activities. There is an increase in secondary sector activities among tribal females except for Koraga and Kudiya communities. Tertiary sector activities also increased among tribal females except for Kattunayakan and Kudiya communities.

From the above tables it is clear that the tribal communities are still highly dependent on primary sector activities, even though there is a meagre increase in primary sector and huge increase in their participation in other two sectors, with more on secondary sector. Increase in primary sector participation may be due to the land holdings the tribal communities possess or may be because of their residing place where possibility of agriculture is high. It may be because of their traditions and customs that they are formerly dependent on land and forest. Ethnicity also plays an important role here, which may be a limiting factor for their movement to other sectors away from their land (forest land). Primary sector participation does not mean that they are worse off, but their actual situation can be understood by looking into their occupation which is considered as a proxy for their earnings. From their occupational situation we will be able to understand whether they become better off or worse off with increase in participation in primary sector activities. This is detailed in the tables below.

4.3.4 Distribution of Tribal Communities on the basis of Occupational Classification

For the purpose of the study 9 fold occupational classification for selected tribal communities for the year 1991 and 2011 were taken. For the convenience of the study NCO 68 were taken and the NCO 2004 tables of Census 2011 were converted to NCO 68.

From the census data on occupation, we can see that most of the tribal workers are engaged as farmers and fishermen during 1991, while during 2011 they are engaged more in elementary occupations, which means that they changed from self- employed to casual labours, showing that they lack their self- sufficiency and are getting worse off. So within the primary sector and those who have moved to other sectors are employed more in elementary occupations as casual labours. Over the years there is a decline in their employment in clerical works and farmers and fishermen.

Trend in occupational distribution which we seen in rural Kerala is same for all communities. Small difference can be seen among the communities like Kattunayakan, Koraga whose occupational distribution has declined over the years from 1991 to 2011. All other communities showed an increase in their occupational participation and the highest increase is seen among the Irular community followed by Malai Arayan and Kurichchan community. The workers engaged in clerical jobs declined for all communities except Mannan community where it remained same, Kuruman and Urally community where their employment in clerical jobs increased. The same trend can be seen among the tribal males and females of different communities, which is detailed in the tables below (Ref. Annexure 4.4).

4.4 Conclusion

This chapter is flourished with the labour market participation, sectoral and occupational distribution of individual tribal communities in Kerala. We got a clear evidence that majority of the ST workers are still dependent on agriculture and allied activities for their livelihood, but at the same time there is a meagre movement towards other sectors for employment. It is also clear that almost all tribal concentrated districts have more or less same pattern of employment. Again it is evident from the chapter that there is inter community and intra-community differences among the Scheduled tribes in Kerala. The labour market participation of different tribal groups is different which makes us to enquire the reasons or the factors behind such a situation in the background that they are considered homogenous. Even though we can say that they are still depends on agriculture, there are differences. And within the difference the degree in which each community transforming itself is different. They are many factors behind the scenario, which is analysed with the help of primary data.

Chapter V

LABOUR MARKET AND TRIBAL COMMUNITIES IN KERALA- EMPIRICAL EVIDENCES

-
- *Introduction*
 - *Socio- Economic profile*
 - *Inter- Generational Occupation
Mobility*
 - *Occupation of Three Generations
Tribal Communities*
 - *Conclusion*
-

5.1 Introduction

In the previous chapters we have analyzed the sectoral composition and occupational distribution of tribal communities in Kerala, on the basis of NSSO and Census data. For a detailed analysis of the labour market participation, occupational choice and inter- generation occupational mobility of tribal communities in Kerala, it is necessary to conduct a primary survey on the tribal households in Kerala. The present chapter details the findings of primary survey. Primary surveys at household level and Individual level were conducted for the same. For the purpose of the study, the activity status one, i.e. “working or being engaged in economic activity (work)”, is taken. As per NSSO employment and unemployment report, “Activity status is the situation in which a person was found during the reference period with regard to the person's participation in economic and non-economic activities”. For inter generation occupational mobility, detailed variables of only generations were considered, as it was unable to get detailed data on third generation. So the study just mentions the major variables influencing inter-generational occupational mobility like landholdings, education, sector of work and occupation of third generation. Likewise, as age cohort is not possible among tribal communities. This is because it is not possible practically to collect age of the second and third generation from primary survey. For the study, we have taken present generation as first generation and parents of present generation as second generation and the grandparents of present generation as third generation. The factors determining occupational mobility of tribal communities are also analysed in this chapter. The factors such as the age, gender, education, discrimination, problems with non- tribes, exploitation, migration aspects and subsidiary activity status and are considered here. Inter community differences in income and landholdings are also analysed in the present chapter.

The present chapter is divided into six sections. With introduction in the first section, second section deals with socio- economic profile of sample communities which includes household type, land holdings, education, sector of work, occupation. Third section examines inter-generational occupation mobility. Fourth section is on the factors determining inter-generational occupation mobility. Fifth section compares the occupation of three generations in detail. This is followed by conclusion of the chapter.

5.2 Socio- Economic profile of sample communities under study

It deals with the household characteristics of sample communities. The samples for the present study is taken mainly from three districts Wayanad, Idukki and Palakkad which are the main habitat of tribal population in Kerala. Within the sample communities selected are Malai Arayan, Muthuvan, Irular, Paniyan, Kurichchan, Kurumans and Kattunayakan (Primitive Tribe). These seven communities together accounts 51 percent of the tribal population of the state.

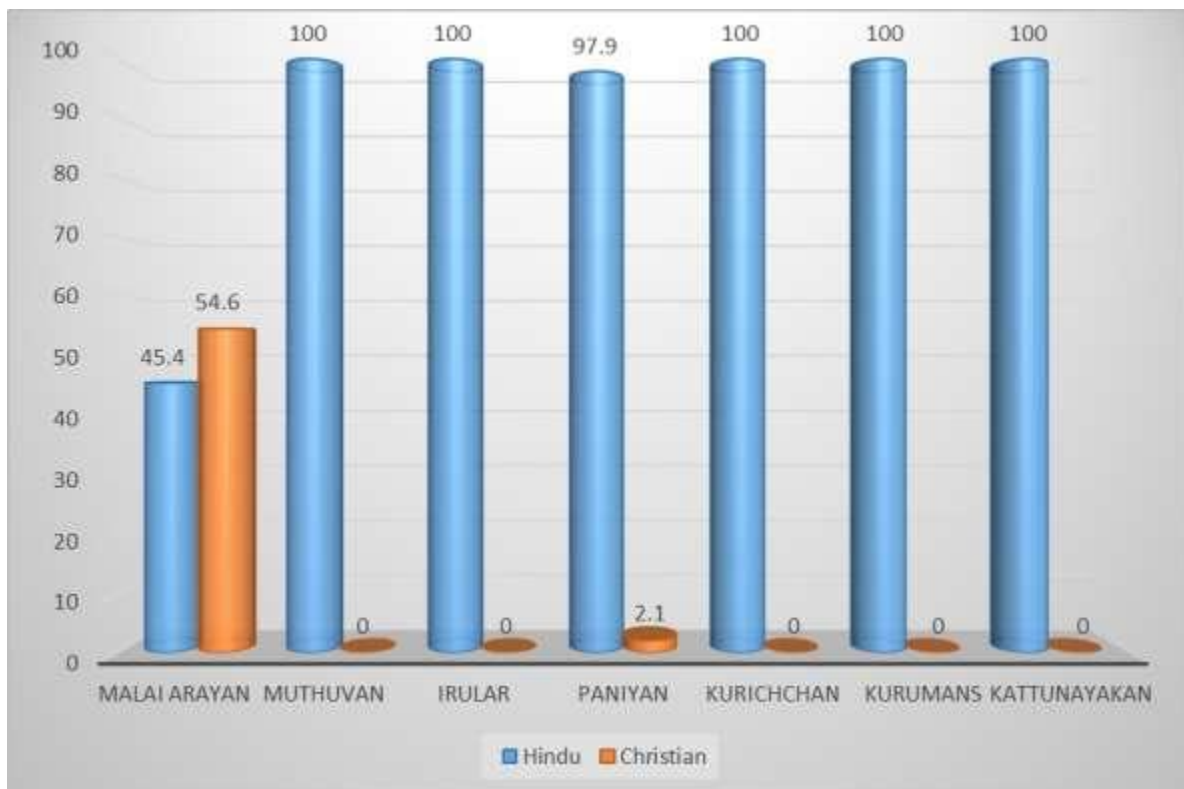
Table 5.1: Distribution of Respondent Communities in Kerala (in Percentage)

Sample Districts	Sample Communities	Total no. of Households	Total Population	Sample Household	Percent
Idukki	Malai Arayan	15.82	13.45	97	15.7
	Muthuvan	10.39	9.61	64	10.4
Palakkad	Irular	10.89	9.60	67	10.9
Wayanad	Paniyan	31.38	35.81	193	31.3
	Kurichchan	13.93	14.24	85	13.8
	Kurumans	10.27	9.92	65	10.6
	Kattunayakan	7.30	7.37	45	7.3
	Total	100	100	616	100

Source: Primary survey

Table 5.1 shows the percentage of surveyed Sample Communities in Kerala. In the present study 31.3 percentage Paniyan communities are surveyed followed by Malai Arayan with 15.7 percent, Kurichchan with 13.8 percent, Irular with 10.9 percentage Kurumans with 10.6 percent, Muthuvan with 10.4 percent and Kattunayakan with 7.3 percentage which is the proportion to their total population. Among these tribal communities the Kattunayakan community falls under particularly vulnerable tribes as per the tribal department of India.

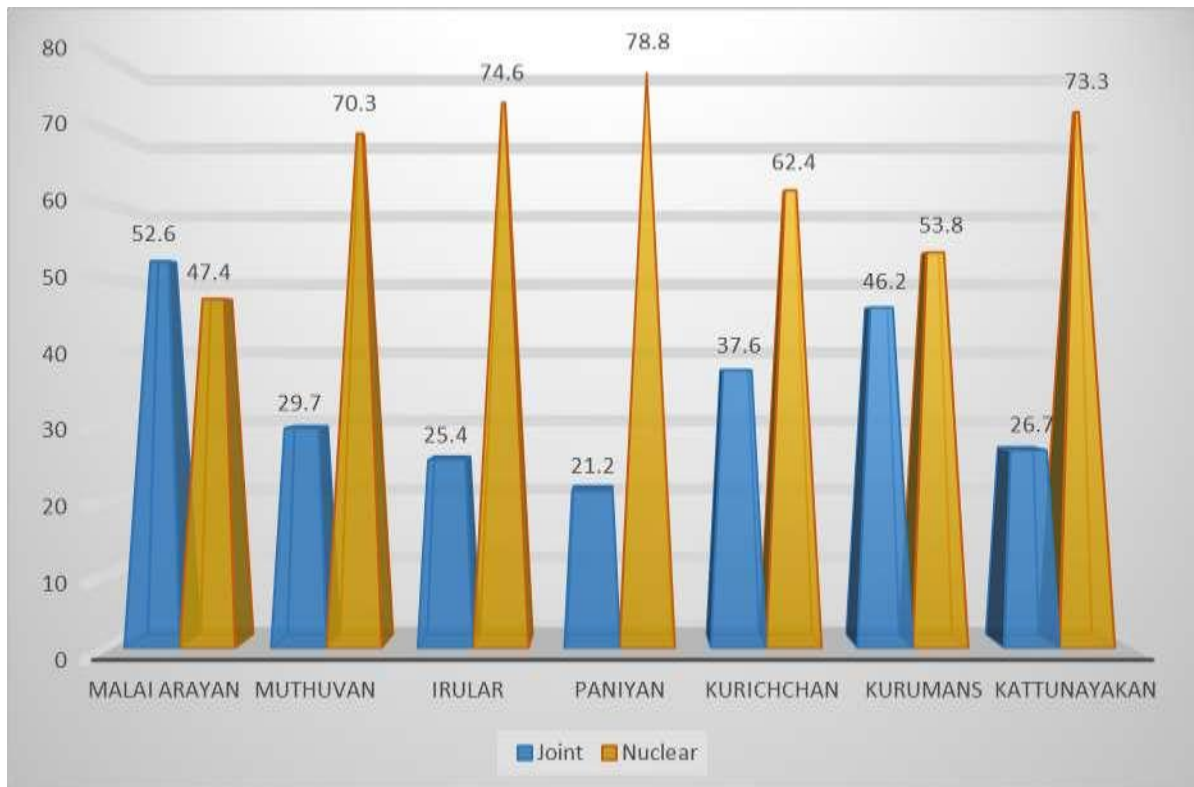
Figure 5.1: Religion Followed by Tribal Household (in Percentage)



Source: Primary survey

From figure 5.1 we can see that 90.7 Percentage of the surveyed households are Hindus and 9.3 percentage are Christians. Out of the surveyed households, Christianity is followed by Malai Arayan (54.6 per cent) and Paniyan community (2.1 per cent). Many members of Malai Arayan community converted to Christianity, church of south India (CSI) between 1848 and 1878 to avail protection from the exploitation and social oppression. Thereafter, they enjoy the benefits given by the missionaries and tribal departments and had a huge development in their social and economic conditions. All other sample households of Irular, Muthuvan, Kurichchan, and Kurumans and Kattunayakan community followed Hinduism. These communities are very conservative about their customs and beliefs and do not want to bypass them. Those who disregard the customs and beliefs will be expelled from their community.

Figure 5.2: Nature of Family of the Respondent Household (in Percentage)



Source: Primary survey

Figure 5.2 shows the nature of family of the respondent households among various tribal communities in Kerala. From the figure it is interesting to note that 67.2 percent of the respondent households follow nuclear family system and 32.8 percent follows joint family system. Among the various communities, the communities that still follow joint family system are the Malai Arayan community followed by Kurumans and Kurichchan community with 53 percentages, 46 percentage and 38 percent respectively. The community which followed joint family system the least is the Paniyan community followed by Paniyan and Irular with 21 percent and 25 percent respectively. The opposite is the case with nuclear family system. It is also clear that most of the respondent households follow a nuclear family system rather than a joint family system.

Table 5.2: Household Size of Sample Household (in Percentage)

Sample Communities	Household Size				Total
	01-03	04-06	07-09	>9	
Malai Arayan	42.30	49.50	8.20	0.00	100.00
Muthuvan	48.40	46.90	4.70	0.00	100.00
Irular	32.80	62.70	3.00	1.50	100.00
Paniyan	40.90	48.20	10.40	0.50	100.00
Kurichchan	11.80	85.90	2.40	0.00	100.00
Kurumans	16.90	81.50	0.00	1.50	100.00
Kattunayakan	26.70	57.80	15.60	0.00	100.00
Total	33.40	59.30	6.80	0.50	100.00

Source: Primary survey

The household size of respondent households among the tribal communities is shown in the table 5.2. It is clear from the table 5.2 that the household size is higher among the Paniyan community followed by Irular and Kurumans community. Average household size among all the communities is 4 to 6 persons. Against this, among the Muthuvan community the average household size is 1 to 3 persons. The reason for this is that the Muthuvan community people got married in their early ages and got separated from the joint family system but land holdings are jointly held in a family. In short it may be noted that the household sizes did not vary much among the tribal communities except for Paniyan and Muthuvan communities.

Table 5.3: Type of Ration Card of Respondent Household (in Percentage)

Sample Communities	Type of Ration Card				Total
	APL	BPL	AAV	No Ration Card	
Malai Arayan	29.90	57.70	12.40	0.00	100.00
Muthuvan	0.00	81.30	18.80	0.00	100.00
Irular	7.50	26.90s	64.20	1.50	100.00
Paniyan	1.00	22.80	76.20	0.00	100.00
Kurichchan	4.70	95.30	0.00	0.00	100.00
Kurumans	24.60	64.60	4.60	6.20	100.00
Kattunayakan	0.00	64.40	35.60	0.00	100.00
Total	9.10	52.30	37.80	0.80	100.00

Source: Primary Survey

Table 5.3 gives the type of ration card issued by the government of Kerala to various tribal communities surveyed. From the table it is clear that 52.3 percent of the households are BPL card holders, 37.8 percent are AAY card holders, 9.1 percent are APL card holders and 0.8 percent households have no ration card at all. The households without ration card have just applied for card. All the tribal communities are either BPL card holders or AAY card holders except Malai Arayan community (29.9 percent) followed by Kurumans (24.6 percent), Irular (7.5 Percent), Kurichchan (4.7 percent), and Paniyan (1 Percent). This means that Malai Arayan and Kurumans community is comparatively better off than other communities surveyed.

5.2.1 Household Type

Household type of sample tribal communities in Kerala and from the table it is clear that about 52.6 percent of tribal household depends on casual labour in agriculture for their livelihood followed by self-employment in agriculture (25 percent), regular wage/ salaried (11.7 percent), casual labour in non-agriculture (6.8 percent), self-employment in non-agriculture (3.1 percent) and others (0.8 percent). On the other hand, the household type of second generation shows that 54.9 percent of the households are engaged in casual works in agriculture for their major source of income. 42 per cent depends on self-employment in agriculture for their primary source of income. This implies that more than 70 percent are engaged in agriculture related works for their livelihood. 1.8 percent of the previous generation was employed as regular wage/ salaried works for their major source of income and less than 1 percent considered non- agriculture related works as their earning. While the household type of third generation, as per the respondent shows that 36.4 percent of the heads grandparents depended on casual labour in agriculture and 32.1 percent depended on self-employment in agriculture for their subsistence. About 10.2 percent depended on shifting cultivation. On the other hand 18.2 percent of the heads of present generation is unaware of their grandparents.

Table 5.4: Household Type of Major Communities Surveyed (Generation wise) (in Percentage)

Sample Communities	Household Type																	
	Self-Employed in Agriculture			Self-Employed in Non-Agriculture			Regular Wage/ Salary Earning			Casual Labour in Agriculture			Casual Labour in Non-Agriculture			Others		
	First	Second	Third	First	Second	Third	First	Second	Third	First	Second	Third	First	Second	Third	First	Second	Third
Malai Arayan	59.8	94.8	89.7	7.2	0	0	27.8	5.2	_	0	0	2.1	2.1	0	_	3.1	0	8.2
Muthuvan	42.2	75	9.4	4.7	0	0	1.6	0	_	50	25	45.3	0	0	_	1.6	0	45.3
Irular	1.5	1.5	1.5	3	0	0	22.4	4.5	_	55.2	94	61.2	17.9	0	_	0	0	37.3
Paniyan	4.1	3.1	4.7	0.5	0	0	0.5	0	_	87.6	95.9	65.3	7.3	0	_	0	1	30.1
Kurichchan	52.9	84.7	67.1	4.7	4.7	1.2	7.1	1.2	_	25.9	9.4	4.7	8.2	0	_	1.2	0	27.1
Kurumans	20	60	56.9	1.5	0	0	32.3	3.1	_	35.4	33.8	24.6	10.8	3.1	_	0	0	18.5
Kattunayakan	4.4	2.2	4.4	2.2	0	0	2.2	0	_	91.1	97.8	51.1	0	0	_	0	0	44.5
Total	25	42	32.3	3.1	0.6	0.2	11.7	1.8	_	52.6	54.9	39.1	6.8	0.3	_	0.8	0.3	28.4

Source: Primary survey

It is observed from the survey table 5.4 that proportion of households with self-employment as the major source of income was the highest among the households in Malai Arayan community (59.8 per cent) followed by Kurichchan (52.9 per cent) and Muthuvan (42.2 per cent) community. It is also observed that households with self-employment in non-agriculture is highest among the households in Malai Arayan community (7.2 per cent) followed by Kurichchan and Muthuvan community (4.7 percent). The present survey reveals that the proportion of households with regular wage / salaried was among the Kurumans community (35.4 percent) followed by Malai Arayan community (27.8 percent) and Irular community (22.4 percent). The households depending on casual works in agriculture is highest among Kattunayakan community (91.1 percent) followed by Paniyan community (87.6 percent). On the other hand the households depending on casual labour in non-agriculture is highest among Irular community (17.9 percent) followed by Kurumans community (10.8 percent). Around 3 percent of Malai Arayan community and 2 percent of Muthuvan and Kurichchan community was engaged in other than the above said activities for their major source of income.

It is also clear from the survey that the proportion of households among the Malai Arayan community has the major source of income from self-employment in agriculture (59.8 percent) followed by regular wage/ salary earnings (27.8), self-employment in non-agriculture (7.2 percent) , other (3.1 percent) and casual labour in non-agriculture (2.1 percent). Against this none of the household among this community is found to be depending on casual labour in agriculture as their major source of income. 50 percent of the households among the Muthuvan community depends on casual labour in agriculture as their major source of income followed by self-employment in agriculture (42.2 percent), self-employment in non-agriculture (4.7 percent) , regular wage/ salary (1.6 percent) and others (1.6 percent). Among the surveyed households of Irular community, highest proportion of households depends on casual labour in agriculture as their major source of income (55.2 percent) followed by regular wage/ salary (22.4 percent), casual labour in non-agriculture (17.9 percent), self-employment in non-agriculture (3 percent) and self-employment in agriculture (1.5 percent). More than 85 percent of Paniyan households depends on casual labour in agriculture and 7.3 percent in casual labour in non-agriculture followed by 4.1 percent in self-employment in agriculture and 0.5 percent in self-employment in non-agriculture and regular wage of salaried works.

53 percent of the Kurichchan community had their major source of income from self-employed in agriculture followed by casual labour in agriculture i.e. about 25.9 percent. Around 8.2 depends on casual labour in non- agriculture, 7.1 percent in regular wage/ salaried job, 4.7 [percent on self-employment in non-agriculture and 1.2 percent on other types of work for their major source of income. Only Kurumans community is distributed more or less evenly on casual labour in agriculture (35.4) and regular wage/ salaried (32.3) employments for their major source of income. About 20 percent of Kurumans households depends on self-employment in agriculture followed by casual labour in non- agriculture (10.8 percent) and 1.5 percent on self-employment in non-agriculture for their major source of income. 91.1 percent of the Kattunayakan community depends on casual labour in agriculture for their major source of income. Only 4.4 percent depends on self- employment in agriculture followed by 2.2 percent on self-employment in non- agriculture and 2.2 on regular wage/ salaried works for their major source of income. In short we can say that, Paniyan and Kattunayakan were the communities which is deprived in economic terms as their households depends on casual –labour in agriculture as their major source of income.

The household type of second generation shows that, Self- employment in agriculture is the major source of income for the communities like Malai Arayan followed by Kurichchan, Muthuvan and Kattunayakan. Muthuvan community was engaged more on self-employment in non- agriculture. It is the only community in that field. The communities Kattunayakan, Irular and Paniyan are the communities least engaged in this type of work as land is menial to them. Malai Arayan community followed by Irular, Kurumans and Kurichchan communities Kurichchan Rare engaged more on regular wage/ salaried jobs. Casual labour in agriculture is the major source of income for Kattunayakan followed by Paniyan and Irular communities.

The communities Kurumans and Muthuvan also engaged highly on casual works in agriculture next to the above said communities. But as mentioned earlier these communities are engaged more on self-employment in agriculture. All these facts are clear from the table 5.4. As against the previous generation, present generation is engaged more on self-employment which shows betterment in their livelihood.

Community wise analysis on household type of third generation shows that 89.7 percent of the G.P of Malai Arayan community head, 65.9 percent of the Kurichchan G.P and 56.9 percent of the Kurumans G.P depended more on self-employment in agriculture for their

earnings. About 23.1 percent of the G.P of Kurumans community also depended on casual – labour in agriculture for their subsistence. Whereas, 27.1 percent of the Kurichchan head and 18.5 percent of Kurumans head of present generation don't know about their G.Ps. whereas, 65.3 percent of the Paniyan G.Ps followed by 61.2 percent Irular, 51.1 percent Kattunayakan and 43.8 percent Muthuvan were engaged as casual labour in agriculture for their subsistence. Only meagre households from this community were self-employed in agriculture.

5.2.2 Land Holdings

Land holdings of tribal households of three generation are detailed below. Land holdings of first generation shows that 39.3 percent of tribal households have less than 50 cents of land. It is among Paniyan and Kattunayakan community most of the households have 3 to 20 cents. 25.5 percent of the households have 50 to 100 cents of land, 6.3 percent have 101 to 150 cents 14.4 percent have 150- 200 cents, 3.6 percent have 201-250cents and 4.4 percent have 251-300 cents of land. Among the ST households 3.1 percent have no land and 3.4 percent have more than 300 cents of land. Among the communities, Malai Arayan community has the highest land holdings i.e., about 41.2 percent has 151-200 cents of land, Muthuvan (56.3 percent), and Kurichchan (22.4 percent) has 100-150 cents all the other communities like Irular, Paniyan, Kurumans and Kattunayakan fall under 50-100 cent land category. But most of the households of the Kurumans community has more than 40 cents of land. Land holdings of second generation reveals that 29.1 percent of the parents of the head possessed less than 50 cents, about 15.9 percent possessed 250-300 cents of land and 14.9 percent Possessed land between 50-100 cents. The thing noticed from the survey is that the parents of the communities' Malai Arayan, Kurichchan and Kurumans falls under second category and the communities' Irular, Paniyan, Kattunayakan falls under the first category and the Muthuvan community comes under the third category. 0.6 percent of the households are unaware of the land holdings of their previous generation. On third generation land holdings, it is clear from the survey that 18.2 percent of the 3rd generation H.Hs had more than 300 cents followed by 7.3 percent 50-100 cents. 6.5 percent with less than 50 cents, 4.7 percent with 151-200 cents, 4.5 percent with 251-300 cents, and 1.6 percent had 101-150 cents and 1 percent with 201-250 cents of land. Whereas, 37.2 percent had no land and 19 percent respondents don't know about their 3rd generations land holdings.

Table 5.5: Land Owned in Cents by First Generation Households (in Percentage)

Sample Communities	Land Owned in Cents								Total
	No land	<50 cents	50-100 cents	101-150 cents	151-200 cents	201-250 cents	251-300 cents	>300 cents	
Malai Arayan	0.00	0.00	17.50	10.30	41.20	6.20	10.30	14.40	100
Muthuvan	4.70	4.70	56.30	10.90	15.60	1.60	4.70	1.60	100
Irular	16.40	43.30	35.80	1.50	0.00	1.50	0.00	1.50	100
Paniyan	2.60	79.30	12.40	0.50	3.60	1.60	0.00	0.00	100
Kurichchan	0.00	11.80	22.40	16.50	18.80	9.40	16.50	4.70	100
Kurumans	0.00	38.50	33.80	7.70	15.40	3.10	0.00	1.50	100
Kattunayakan	0.00	48.90	33.30	2.20	13.30	2.20	0.00	0.00	100
Total	3.10	39.30	25.50	6.30	14.40	3.60	4.40	3.40	100

Source: Primary survey

Table 5.5 shows land owned in cents by households of various tribal communities in the sample. From the table it is clear that 14.4 percent of the Malai Arayan community has more than 300 cents of land 10.3 percent has 251-300 cents. 6.2 percent has 201-250 cents, 10.3 percent has 101-150 cents 17.5 percent says that they have only less than 50 cents of land. Apart from the 56.3 percent of the Muthuvan community 15.6 percent has 151-200 cents of land 10.9 percent has 101-150 cents and 4.7 with no land and with 250-300 cents of land and about 1.6 percent with 201-250 and more than 300 cents of land most of the land are used for agricultural purposes. Among the Irular community 35.8 percent has 50-100 cents of land and 16.4 percent has no land at all. 1.5 percent with more than 300 cents. Most of the land holdings of Irular community are barren land not useful for agricultural purpose as it is full of rocks. About 16.4 percent has no land at all among the Irular community which is highest among the surveyed tribal communities of Kerala.

About 12.4 percent of the Paniyan community has 50-100 cents of land, 3.6 percent has 151-200 cents of land and 1.6 percent has 201-250 cents. About 2.6 percent has no land among this community. 18.8 percent of Kurichchan has 151-200 cents of land followed by 16.5 with 250-300 cents and 101-150 cents, 11.8 percent with less than 50 cents, 9.4 with 201-250 cents and 4.7 with more than 300 cents of land. Among the Kurumans community 33.8 percent has 50-100 cents of land 15.4 percent has 151-200 cents of land, 7.7 percent has 101-150 cents of land, 3.1 with 201-250 cents and 1.5 with more than 300 cents of land. Among

the Kattunayakan 33.3 percent has 50-100 cents of land followed by 13.3 percent has 151-200 cents, 2.2 percent with 101-150 cents and 201-250 cents of land.

It is also clear from the survey that 97.5 percent of the households have settlement land 1.2 percent have leased land and 0.8 percent have owned land and 0.5 percent have both owned and settlement land. Among the communities, Malai Arayan, Irular, Muthuvan, Paniyan and Kurumans with one household has owned land and among the communities, 2.1 percent of the Malai Arayan, 2.4 percent Kurichchan, 3.1 percent Kurumans, and 0.5 percent Paniyan has leased land for agriculture. 3.5 percent of the Kurichchan community has both owned and settlement land. Kattunayakan community is the only community with only settlement land with them. (Ref. Annexure 5.1)

Table 5.5 also makes it clear that 40 percent of the households are still landless or have land up to 3 cents only especially among Paniyan, Kattunayakan, and Irular communities. This supports the findings by many researchers that the institutional reform introduced in Kerala during 1969 did not benefit the ST of Kerala (Ravi Raman, 2002; 2003; 2005). Again the forest conservation and the resultant relocation of tribal people from forest land further worsened their situation by making them landless. The government has promised to give them Rs.25 lakhs, but according to the respondents it is very much unlikely to materialise. Supporting evidence is that during 1975, 420 tribal families from various hamlets of Attapady were relocated with a promise of 5 acres of land and those family members are now landless and are working as farm labourers in different farms of the district and Tamil Nadu. Yet again their cry for land is still continuing particularly in the tribal concentrated areas of Wayanad and Idukki.

To analyse the community wise difference in land holdings one- way ANOVA was conducted across seven tribal communities such as Malai Arayan, Muthuvan, Irular, Paniyan, Kurichchan, Kurumans and Kattunayakan. One- way Analysis of variance (ANOVA) examines the mean difference between more than two independent samples. It is used when we have a categorical independent variable and a normally distributed interval or ratio dependent variable.

Table (5.6) reveals that there is significant mean differences in land holdings across tribal communities at $F(6,610) = 63.517, p = 0.000$. Post hoc analysis will be used to identify which pairs of means contributed to significant F value. Post hoc comparisons using Dunnett

T3 test reveals that mean score for the land holdings of Malai Arayan community is similar to Kurichchan community (M=59.230, SD=19.790), while different from all other communities. Mean difference in land holdings of Muthuvan community is similar to Kurumans community with M=33.199, SD=14.018 and Irular is similar with Paniyan, Kurumans and Kattunayakan with M=16.040, SD=14.272, M=42.709, SD=16.859, M=25.444, SD=16.696 respectively. It is also similar between Kurumans and Kattunayakan community with M=17.27, SD=13.44.

Pair wise comparison also reveals that there are high mean differences in landholdings of seven tribal communities except similar pairs mentioned above. Among the tribal communities Malai Arayan and kurichchan communities are having highest land holdings whereas Paniyan and kattunayakan communities possess low levels of land holdings. Because of these differences in landholdings there is a high mean difference between the pairs of Malai Arayan-Kurichchan and Paniyan-Kattunayakan (Rajasenana2009).

Table: 5.6: One-Way ANOVA – Landholdings across Tribal Communities

F (6,610) = 63.517, p = .000						
Pair-Wise Comparison : Dunnett T3						
Dependent Variable: Land holdings in cents						
(I) Sample Communities	(J) Sample Communities	Mean Difference (I-J)	Std. Error	Sig	95% Confidence Interval	
					Lower Bound	Upper Bound
Malai Arayan	Muthuvan	114.500*	18.86	0.00	56.43	172.57
	Irular	190.409*	21.06	0.00	125.63	255.19
	Paniyan	206.448*	16.27	0.00	156.01	256.89
	Kurichchan	59.23	19.79	0.06	-1.60	120.06
	Kurumans	147.700*	18.58	0.00	90.48	204.92
	Kattunayakan	164.965*	18.43	0.00	108.12	221.81
Muthuvan	Malai Arayan	-114.500*	18.86	0.00	-172.57	-56.43
	Irular	75.908*	17.17	0.00	22.81	129.00
	Paniyan	91.948*	10.77	0.00	58.29	125.61
	Kurichchan	-55.270*	15.59	0.01	-103.31	-7.23
	Kurumans	33.20	14.02	0.33	-10.11	76.51
	Kattunayakan	50.464*	13.82	0.01	7.61	93.32
Irular	Malai Arayan	-190.409*	21.06	0.00	-255.19	-125.63
	Muthuvan	-75.908*	17.17	0.00	-129.00	-22.81
	Paniyan	16.04	14.27	1.00	-28.64	60.72

	Kurichchan	-131.179*	18.19	0.00	-187.27	-75.09
	Kurumans	-42.71	16.86	0.23	-94.87	9.45
	Kattunayakan	-25.44	16.70	0.94	-77.21	26.32
Paniyan	Malai Arayan	-206.448*	16.27	0.00	-256.89	-156.01
	Muthuvan	-91.948*	10.77	0.00	-125.61	-58.29
	Irular	-16.04	14.27	1.00	-60.72	28.64
	Kurichchan	-147.218*	12.33	0.00	-185.51	-108.93
	Kurumans	-58.749*	10.27	0.00	-90.81	-26.69
	Kattunayakan	-41.484*	10.00	0.00	-73.10	-9.87
Kurichchan	Malai Arayan	-59.23	19.79	0.06	-120.06	1.60
	Muthuvan	55.270*	15.59	0.01	7.23	103.31
	Irular	131.179*	18.19	0.00	75.09	187.27
	Paniyan	147.218*	12.33	0.00	108.93	185.51
	Kurumans	88.470*	15.25	0.00	41.49	135.45
	Kattunayakan	105.735*	15.07	0.00	59.18	152.29
Kurumans	Malai Arayan	-147.700*	18.58	0.00	-204.92	-90.48
	Muthuvan	-33.20	14.02	0.33	-76.51	10.11
	Irular	42.71	16.86	0.23	-9.45	94.87
	Paniyan	58.749*	10.27	0.00	26.69	90.81
	Kurichchan	-88.470*	15.25	0.00	-135.45	-41.49
	Kattunayakan	17.27	13.44	0.99	-24.40	58.93
Kattunayakan	Malai Arayan	-164.965*	18.43	0.00	-221.81	-108.12
	Muthuvan	-50.464*	13.82	0.01	-93.32	-7.61
	Irular	25.44	16.70	0.94	-26.32	77.21
	Paniyan	41.484*	10.00	0.00	9.87	73.10
	Kurichchan	-105.735*	15.07	0.00	-152.29	-59.18
	Kurumans	-17.27	13.44	0.99	-58.93	24.40
*. The mean difference is significant at the 0.05 level.						

Source: calculated from Primary Survey

Table 5.7: The Purpose of Land of the Present Generation Household (in Percentage)

Sample Communities	Purpose of Land Used				Total
	Agriculture	Residential	Barren Land	Others	
Malai Arayan	100.00	0.00	0.00	0.00	100.00
Muthuvan	98.40	1.60	0.00	0.00	100.00
Irular	44.60	37.50	17.90	0.00	100.00
Paniyan	37.20	58.00	3.20	1.60	100.00
Kurichchan	91.80	8.20	0.00	0.00	100.00
Kurumans	87.70	12.30	0.00	0.00	100.00
Kattunayakan	75.60	24.40	0.00	0.00	100.00
Total	70.50	26.30	2.70	0.50	100.00

Source: Primary Survey

The table 5.7 shows the purpose for which the land is used by the households. And it is clear from the table that 70.5 percent of the households use their land for agricultural purposes followed by 26.3 percent for residential purpose 2.7 percent have barren land and 0.5 percent use their land for other purpose. According to the respondents, All the Malai Arayan community use their land for agriculture purpose followed by Muthuvan community (98.4 percent), Kurichchan (91.8 percent), Kurumans (87.7 percent), Kattunayakan (75.6 percent), Irular (44.6 percent) and 37.2 percent Paniyan used their land for agricultural purpose. 58 percent of the Paniyan followed by 37.5 percent Irular and 24.4 percent Kattunayakan, 12.3 percent Kurumans, 8.2 percent Kurichchan and 1.6 percent Muthuvan use their land for residential purpose. 17.9 percent Irular and 3.2 percent Paniyan has barren land issued by the government. 1.6 percent Paniyan use their land for other purposes.

Table 5.8: Earnings from the Land Possessed by the Household (Present Generation) (in Percentage)

Sample Communities	Earnings from land								Total
	<5000	5001-10000	10001-15000	15001-20000	20001-25000	25001-30000	>30001	No earnings	
Malai Arayan	5.20	37.10	34.00	16.50	0.00	4.10	3.10	0.00	100.00
Muthuvan	29.50	45.90	18.00	4.90	0.00	0.00	0.00	1.60	100.00
Irular	35.70	1.80	0.00	1.80	0.00	0.00	0.00	60.70	100.00
Paniyan	20.20	5.90	2.10	0.00	0.00	0.00	0.00	71.80	100.00
Kurichchan	7.10	25.90	7.10	10.60	10.60	17.60	10.60	10.60	100.00
Kurumans	32.30	12.30	6.20	9.20	10.80	3.10	1.50	24.60	100.00
Kattunayakan	42.20	20.00	0.00	0.00	0.00	0.00	0.00	37.80	100.00
Total	21.30	19.30	9.70	5.90	2.70	3.50	2.20	35.50	100.00

Source: Primary Survey

The table 5.8 shows the earnings that each household earned from the land they possessed. From the table it is clear that 21.3 percent households earn less than rs.5000 from land. 19.3 percent earns an income of Rs. 50001-10000, 9.7 percent earns Rs. 10001-15000, 5.9 percent earns Rs. 15001-20000, 2.7 percent earns Rs. 20001-25000, 3.5 percent earns Rs. 25001-30000, 2.2 percent earns More than Rs. 30000. 35.5 percent earns no earnings. Around 28.2 percent Kurichchan, 13.9 percent Kurumans and 4.1 percent Malai Arayan, lies between 20001 to 30000 and 10.6 percent Kurichchan, 3.1 percent Malai Arayan and 1.5 percent Kurumans earns an income of Rs. more than 30000.

About 88 percent of the Malai Arayan community earns an income of rs.50001- 20000, 69 percent Muthuvan community earns an income of rs.50001-20000, 43.6 percent Kurichchan community, 27.7 percent Kurumans, 20 percent Kattunayakan, 8 percent Paniyan and 3.6 percent earns an income of Rs. 5001 to 20000 from land. 42.2 percent Kattunayakan followed by 35.7 percent Irular and Paniyan, 32.3 percent Kurumans, 29.5 percent Muthuvan, 7.1 percent and 5.2 percent Malai Arayan earns an income less than 5000 from land. 71.8 percent Paniyan community, 60.7 percent Irular community, 37.8 percent Kattunayakan, 24.6 percent

Kurumans, 10.6 percent Kurichchan and 1.6 percent Muthuvan has no earnings from land. In short it is clear that the communities, Kurichchan community, Malai Arayan community, Kurumans community followed by Muthuvan community earns more income from land and the community Paniyan, Irular and Kattunayakan earns least income from land.

Table 5.9: Classification of Household Type on the basis of Land Owning (present Generation) (in Percentage)

Land Ownership (in cents)	Household Type			Total
	Self-employed	casual labour	Regular wage/ salaried	
Upto150	13.60	74.40	12.00	100.00
Above 150	69.80	16.40	13.80	100.00
Total	28.10	59.40	12.50	100.00

Source: Primary Survey

Table 5.9 on household type on the basis of land holdings indicates that the households owning land above 150 cents are engaged mostly as self-employed in agriculture and only 16.4 percent of them are engaged as casual labourers. While those household possess few cents of land are engaged mainly as casual labours for their income i.e. about 74.4 percent. And that with land holdings above 150 cents engaged in self-employment is only 13.6 percent. It is also observed from the table that land holdings of households have least influence on their participation in regular wage or salaried works. The chi-square test is used and found significant association between household type and landholdings of the tribes, $X^2(2) = 200.069$; $p = .000$. In short we can conclude that as the households possess large acres of land, there is a chance of being in agriculture than others. And those with small and marginal land holdings have a tendency to move to non- agriculture especially to casual works. This means that landholdings play an important role in the livelihood of the tribal communities. As far as tribal communities are concerned those who possess large land holdings and those depending on agriculture are far better off than those away from non- agriculture. The movement of tribal communities towards non- agriculture employment is concentrating largely on low paid casual works than high paid works. So land distribution should be initiated, supported and encouraged to ensure the betterment of tribal communities.

Table 5.10: Land Holdings of Second Generation (in Percentage)

Sample Communities	Land holdings of Second Generation								Total
	No land	<50 cents	50-100 cents	101-150 cents	151-200 cents	201-250 cents	251-300 cents	>300 cents	
Malai Arayan	0.00	1.00	10.30	3.10	21.60	4.10	9.30	50.50	100.00
Muthuvan	17.20	0.00	28.10	14.10	21.90	0.00	9.40	9.40	100.00
Irular	32.80	53.70	10.40	1.50	1.50	0.00	0.00	0.00	100.00
Paniyan	18.70	63.70	9.30	1.00	5.70	0.50	0.00	1.00	100.00
Kurichchan	1.20	0.00	15.30	9.40	21.20	5.90	15.30	31.80	100.00
Kurumans	3.00	7.70	30.80	6.20	18.50	3.10	9.20	21.50	100.00
Kattunayakan	35.60	31.10	13.30	0.00	20.00	0.00	0.00	0.00	100.00
Total	14.20	29.10	14.90	4.40	14.00	1.90	5.50	15.90	100.00

Source: Primary Survey

The table 5.10 shows the land possessed by the parents of the present generation as given by the respondents. It is clear from the table that 14.20 percent of the sample communities has no land at all. Individual community wise data shows that 50.5 percent of Malai Arayan's second generation possessed lands more than 300 cents followed by 21.6 percent with 151-200 cents of land and only 1 percent has less than 50 cents of land. Among the Muthuvan community, 28.1 percent of the previous generation has land about 50-100 cents, 21.9 percent with 151-200 cents and 18.8 percent has land above 251 cents. 17.2 percent had no land. On the other hand 53.7 percent of the Irular's previous generation had only less than 50 cents of land and 32.8 percent has no land at all. 10.4 percent has land between 50-100 cents and about 3 percent had more than 100 cents of land.

Likewise, 63.7 percent of the second generation Paniyan community had only less than 50 cents land and 17.1 percent with no land at all. Only 1.6 percent has land more than 300 cents. This is more or less same with the present generation of the Paniyan community. Like the Malai Arayan community, kurichchan's second generations also held land more than 300 cents is higher i.e. about 31.8 percent followed by 151-200 cents (21.2 percent) and only 1.2 percent with no land. Among the Kurumans community second generation, 30.8 percent possessed land between 50-100 cents, 21.5 percent possessed land more than 300 cents and 18.5 percent with 151-200 cents of land.

Most of the Kattunayakan's previous generation falls under either no land category or under less than 50 cents category. Just 20 percent had possessed between 151-200 cents and 13.3 per cent with 50-100 cents of land. When we compare their previous generations, it is also clear from the table that it is the Kattunayakan community which has the highest number of no land households among the surveyed communities.

Table 5.11: Association between Landholdings and Household type of Second Generation (in Percentage)

Household Type	Land Holdings of Second Generation			Total
	≤100 cents	101-200	≥201 cents	
Agriculture	17.90	35.80	46.40	100.00
Non- Agriculture	90.40	8.10	1.50	100.00
Total	57.80	20.50	21.70	100.00

Source: computed from primary survey

The table 5.11 shows the association between landholdings and household type of second generation and it is found that the households with more cents of lands are more in agriculture sector than the households with less than 100 cents of land. It is also clear that as the households possess more lands there is a chance of being in agriculture than the rest of the households. The chi- square test is used and the result $X^2 (2)=333.607$; $P=.000$ indicates that since p-value is less than .05, there is a significant relation between landholdings and household type of the second generation like in the case of present generation. The same pattern is seen among the present generation also.

The table 5.12 shows the land holdings of the 3rd generation as given by the respondents. Community wise analysis shows that 46.4 percent of the Malai Arayan followed by 41.2 percent of the Kurichchan and 40 percent of the Kurumans third generation had land more than 300 cents. 91.1 percent Kattunayakan, 94 percent Irular, 50.8 percent Paniyan and 28.1 percent Muthuvan had no land at all. While, 9.4 percent and 7.8 percent of the Muthuvan had land about 50-100 cents and above 300 cents respectively. 19.2 percent of the Paniyan had land below 50 cents and 10.4 percent had 50-100 cents. The communities with very meagre land holdings are Irular and Kattunayakan. Only 2.1 percent of the Malai Arayan and 10.8

Per cent of the Kurumans had no land. On the other hand, all the 3rd generation Kurichchan had land.

Table 5.12: Land Holdings of Third Generation (in Percentage)

Sample Communities	Land holdings of Third generation									Total
	No Land	<50 Cents	50-100 Cents	101-150 Cents	151-200 Cents	201-250 Cents	251-300 Cents	>300 Cents	Not Known	
Malai Arayan	2.10	1.00	13.40	3.10	11.30	3.10	11.30	46.40	8.20	100
Muthuvan	28.10	0.00	9.40	3.10	4.70	0.00	3.10	7.80	43.80	100
Irular	94.00	1.50	1.50	0.00	0.00	0.00	0.00	1.50	1.50	100
Paniyan	50.80	19.20	10.40	0.00	1.00	1.00	0.00	0.00	17.60	100
Kurichchan	0.00	0.00	4.70	3.50	8.20	0.00	11.80	41.20	30.60	100
Kurumans	10.80	0.00	1.50	3.10	9.20	1.50	7.70	40.00	26.20	100
Kattunayakan	91.10	2.20	0.00	0.00	0.00	0.00	0.00	0.00	6.70	100
Total	37.20	6.50	7.30	1.60	4.70	1.00	4.50	18.20	19.00	100

Source: Primary survey

5.2.3 Education

Education plays an important role in finding employment. From the survey we can see that 70 percent of the tribal population still have below higher secondary education. Higher education has attained mostly by the Malai Arayan community because of the interference and efforts taken by the Christian missionaries especially CSI during 1990's. About 72 percent generation males and 81 percent females of the second generation are illiterate. 94 percent third generation tribes are illiterate. Which shows that the education among tribal communities is improving compared to their previous generations.

Table 5.13: Educational Qualification of Sample Workers (Present Generation) (in Percentage)

Sample Communities	Educational qualification of first generation									Total
	Not literate	primary	Middle	Secondary	Higher secondary	Diploma	Graduate	PG and above	Technical education	
Malai Arayan	0	17.7	11.6	39.5	10.2	1.9	8.8	6.5	3.7	100
Muthuvan	33	44	9.3	11.5	0.5	0.5	0.5	0	0.5	100
Irular	18.7	48.8	8.9	13	5.7	3.3	1.6	0	0	100
Paniyan	40.6	36.7	9.2	8.3	2.8	0.4	1.5	0	0.4	100
Kurichchan	8.4	27.3	12.6	38.7	7.9	0	3.7	1	0.5	100
Kurumans	3.3	25.8	15	34.2	12.5	0.8	5.8	0.8	1.7	100
Kattunayakan	51	25.5	8.2	9.2	5.1	0	1	0	0	100
Total	24.4	32.7	10.5	20.5	5.6	0.9	3.2	1.2	1	100

Source: Primary Survey

Table 5.13 shows the educational qualification of Sample Communities. From the table it is clear that 32.7 percent ST are having primary education followed by 20.5 percent secondary education, 10.5 percent middle education, 5.8 percent higher secondary education, 3.2 percent graduates, 1.2 percent PG and above, 1 percent diploma education and 1 percent technical education. 24.6 percent are illiterates. Higher education holders are high among Malai Arayan community as evident from the above table. 1.7 percent Kurumans has technical education followed by Muthuvan, Kurichchan (0.5 percent) and Paniyan (0.4 percent) community. 3.3 percent Irular has qualified diploma followed by Kurumans, Muthuvan and Paniyan. Higher secondary qualifiers are high among Kurumans community followed by Malai Arayan. Secondary education is more among Kurichchan community followed by Kurumans community. Middle education is more among Kurumans community. Primary education is more among Muthuvan and Paniyan community. Below primary is high among Irular community. Illiterates are high among Kattunayakan and Paniyan community.

Another fact found out in the survey is that about 80 percent of the children of present generation among Kurichchan and Kurumans community are highly qualified. As they are students and employment seekers, they are not subject of our study. But this can have a great impact on their employment selection. That is, there is going to be a major change among the Kurichchan and Kurumans in their employment selection like the Malai Arayan as they have

the feeling that land is not productive and the safest thing is getting government or salaried jobs.

Education plays an important role in finding employment. From the survey we can see that 70 percent of the tribal population still have below higher secondary education. This means that they lag far behind in human capital formation and skill development. Higher education has been accessed mostly by the Malai Aryan community because of the interference and efforts taken by the Christian missionaries, especially CSI during 1990's. Missionaries started working between other communities only recently. This is one of the reasons why the other communities lag behind Malai Arayan community. This is also another reason why the ST social groups lag behind other social groups in finding employment. The better education attained by the people of the state in the earlier periods enabled them to find employment outside the state / country and there by receive remittances which made their life better off. Here, the most excluded ST population is lagging behind others in occupation and thereby a better standard of living (Chakravarthy (2005).

Table 5.14: Education of Second Generation (in Percentage)

Sample Communities	Education of Second generation									
	Not Literate		Primary		Middle		Secondary		Graduation and Above	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Malai Arayan	18.6	25.8	47.4	51.6	14.4	21.6	18.6	1	1	1
Muthuvan	96.9	100	3.1	0	0	0	0	0	0	0
Irular	76.1	92.5	23.9	7.5	0	0	0	0	0	0
Paniyan	94.3	94.8	4.7	4.6	1	0	0	0	0	0
Kurichchan	56.5	80	40	18.9	2.4	1.2	1.2	0	0	0
Kurumans	56.9	76.9	43.1	23.1	0	0	0	0	0	0
Kattunayakan	100	97.8	0	2.2	0	0	0	0	0	0
Total	71.9	80.5	22	15.6	2.9	3.6	3.1	0.2	0.2	0.2

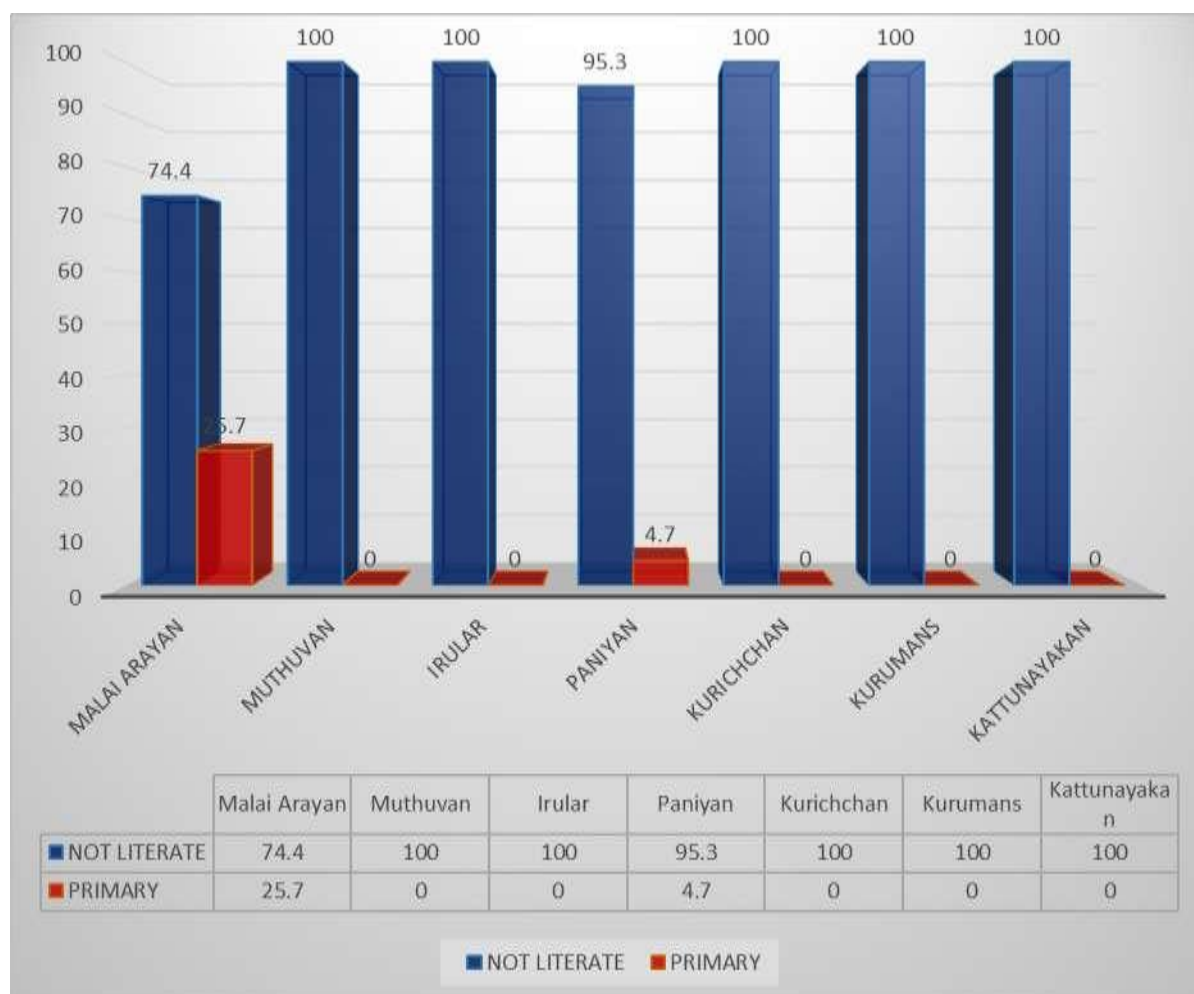
Source: Primary Survey

The table 5.14 shows the educational attainment of the previous generation. From the table we can see that almost 71.9 percent of the previous generation males are illiterate and the illiteracy is high among Kattunayakan, Muthuvan, Paniyan and Irular community and low among Muthuvan community. 22 percent received primary education among the ST males of previous generation which is high among Malai Arayan, Kurumans and Kurichchan community. Only 0.2 percent achieved PG and above qualification and it is among the Malai Arayan community. Community wise educational qualification shows that Malai Arayan community is better off in receiving educational qualification. Kattunayakan, Muthuvan and Irular are worse off in the same (as most of them are illiterates).

80.5 percent of the previous generation females are illiterate which is higher than their male counterpart. Followed by 15.6 percent received primary education, 3.6 percent with middle education, .2 percent with graduation and on the other hand, 0.2 percent don't know about their mother's education.

As in the case of males, 51.6 percent of Malai Arayan females had primary education 21.6 percent females of 2nd generation with middle education and 9 percent below primary and 1 percent graduation. 25.8 percent females are illiterates. All the Muthuvan females of second generation are illiterates followed by 97.8 percent of Kattunayakan females, 94.8 percent of Paniyan females and 92.5 percent of Irular females are illiterates whereas, 7.5 percent of Irular females, 3.6 percent Paniyan females and 2.2 percent of Kattunayakan females received literacy below primary. 80 percent of Kurichchan and 76.9 percent Kurumans females are illiterates. 23.1 percent Kurumans females received primary education, only 7.7 percent Kurichchan received the same qualification. 11.8 percent Kurichchan females received literacy class and 1.2 middle educations.

Figure 5.3: Education of Third Generation (in Percentage)



Source: Primary Survey

Figure 5.3 shows the educational profile of 3rd generation males among the surveyed Sample Communities. Here data is limited to third generation males from the figure we can also find out that 94.10 percent are illiterates, 5.90 percent had primary education.

Community wise analysis shows that all the 3rd generation are illiterate except among Malai Arayan and Paniyan community. Among the Malai Arayan community 25.70 percent had primary education and 1.3 percent had below primary education whereas among the Paniyan community 4.7 percent of the 3rd generation males had below primary education.

Table 5.15: Employment Status of Respondents (in Percentage)

ST Community	Employment Status							
	Worked as own account worker	Worked in own enterprise as employer	Worked in own enterprise as helper	Worked as regular wage/ salaried employer	Casual labour in agriculture	Casual labour in public works other than MGNREGA	Casual labour in non-agriculture (other types of work)	Others
Malai Arayan	46.00	0.00	25.10	23.70	0.00	0.90	3.70	0.50
Muthuvan	22.00	1.60	13.20	1.10	61.50	0.00	0.50	0.00
Irular	4.10	0.00	2.40	19.50	52.00	0.80	21.10	0.00
Paniyan	1.70	0.00	0.40	2.80	89.50	0.00	5.50	0.00
Kurichchan	38.70	0.00	13.60	10.50	27.20	0.00	9.90	0.00
Kurumans	15.00	0.00	7.50	25.00	37.50	0.00	13.30	1.70
Kattunayakan	6.10	0.00	2.00	3.10	85.70	0.00	3.10	0.00
Total	18.00	0.20	8.70	10.40	55.30	0.20	7.10	0.10

Source: Primary Survey

Table 5.15 shows the employment status of the sample communities surveyed. It is clear from the table that 55.3 percent of the workers are engaged as casual labour in agriculture followed by 18 percent worked as own account worker, 10.4 percent in worked as regular wage/ salaried employer, 8.7 percent as worked in own enterprise as helper, 7.1 percent casual labour in non-agriculture, 0.2 percent in worked in household enterprise as employer, casual labour in public works other than MGNREGA and 0.1 percent in Others.

Among the Malai Arayan community, 46 percent are engaged as own account worker followed by 25.1 percent as helper in own enterprise, and 23.7 percent worked as regular wage/ salaried employer. Among the Muthuvan community, 61.5 percent worked as casual labour in agriculture followed by worked as own account worker and 13.2 percent worked in own enterprise as helper. 52 percent of the Irular are engaged as casual labour in agriculture, especially in agriculture farms of Coimbatore, 21.1 percent as casual labour in non-agriculture and 19.5 percent as regular wage/ salaried worker.

89.5 percent of Paniyan community are engaged in casual labour in agriculture followed by 5.5 in casual labour in non- agriculture. 38.7 percent of the Kurichchan are engaged as worked in own enterprise followed by 27.2 percent as casual labour in agriculture, 13.6 percent as helper in own account work 10.5 percent as regular wage/ salaried and 9.9 as casual labour in non-agriculture. Among the Kurumans community 37.5 percent are

engaged as casual labour in agriculture, 25 percent as regular wage/ salaried, 15 percent as self- employed and 13.3 as casual labour in non- agriculture. About 85.7 percent of Kattunayakan members are engaged in casual labour in agriculture followed by 6.1 percent in self- employed and 3.1 percent as regular wage/ salaried and casual labour in non-agriculture.

In short, it is clear that Malai Arayan followed by Kurichchan and Muthuvan are more in own account works. Muthuvan is the only community with employment status worked in own enterprise as employer as per the survey, Malai Arayan followed by Kurichchan and Muthuvan are more in own enterprise as helper. Kurumans community followed by Malai Arayan and Irular are working more as regular wage/ salaried employer. Paniyan followed by Kattunayakan, Muthuvan and Irular are more engaged in casual labour in agriculture. Irular community followed by Kurumans community are engaged more as casual labour in non-agriculture.

Table 5.16: Relationship between Employment Status and Gender of Sample Tribal Workers (in Percentage)

Employment Status	Gender		Total
	Male	Female	
Work in household enterprise as own account work	81.20	18.80	100.00
Employer and helper works	14.60	85.40	100.00
Casual labour in agriculture	53.50	46.50	100.00
Worked as regular wage/ salaried employer	62.90	37.10	100.00
Casual labour in non-agriculture and others	83.20	16.80	100.00
Total	58.20	41.80	100.00

Source: Primary Survey

The table 5.16 indicated that male workers dominate in work in household enterprise as own account work, regular wage/ salaried works and casual works. While females dominate in works such as helpers in household works and casual labourers in agricultural and allied activities, showing that there exist a gender bias in the employment status of the tribal communities. We conducted chi-square test to analyse the association between these two variables and found significant association with the chi- square value $X^2 (4) = 184.476$; $P < 0.0001$ level of significance.

From the secondary data (NSSO unit level) we have found out that the high paid works are in favour of females and did not found the same in census data. So here an attempt is made to check whether the high paid jobs in the labour market of Kerala is favoured towards the females. For the same sector of work and occupation tables are detailed gender wise.

5.2.4 Sector of Work

Broad industrial classification is considered here. Sector of work is divided into three primary, secondary and tertiary. From the survey it is evident that all the communities are engaged more in primary sector followed by tertiary sector except for Irular and Paniyan communities among the first generation. From the second generation it is clear that 97.1 percent of the previous generation was engaged in primary sector and 2.3 percent in tertiary sector and 0.6 percent in secondary sector. Whereas, 99.8 percent third generation is engaged in primary sector and 0.2 percent in tertiary as per the respondents.

Table 5.17: Sector of Work of Sample Tribal Communities (in Percentage)

Sample Communities	Gender	Sector of work		
		Primary	Secondary	Tertiary
Malai Arayan	Male	57.3	3.2	39.5
	Female	65.9	4.4	29.7
	Total	60.90	3.70	35.30
Muthuvan	Male	93	0	97
	Female	100	0	0
	Total	95.10	0.00	4.90
Irular	Male	55.6	40.7	3.7
	Female	59.5	31	9.5
	Total	56.90	37.40	5.70
Paniyan	Male	86	9.7	4.3
	Female	96	1	3
	Total	90.40	5.90	3.70
Kurichchan	Male	69	15.9	15
	Female	85.9	1.3	12.8
	Total	75.90	9.90	14.10
Kurumans	Male	53.2	15.6	31.2
	Female	67.4	2.3	30.2
	Total	58.30	10.80	30.80
Kattunayakan	Male	85.5	5.5	9.1
	Female	95.3	0	4.7
	Total	89.80	3.10	7.10
Total	Male	73.9	11.8	14.4
	Female	85.7	3.6	10.7
	Total	78.70	8.40	13.00

Source: Primary survey

Table 5.17 shows the sector of work of different tribal communities in Kerala. It is evident from the table that 78.7 percent are engaged in primary sector followed by 13 percent in tertiary sector and 8.4 percent in secondary sector. 37.4 percent Irular workers are engaged in secondary sector whereas 5.7 percent in tertiary sector. Likewise, 5.9 percent Paniyan community workers are engaged in secondary sector followed by 3.7 percent in tertiary sector. None of the surveyed Muthuvan community is engaged in secondary sector.

Malai Arayan community is engaged more in tertiary sector (35.3 percent) followed by Kurumans community (30.8 per cent) and Kurichchan community (14.1 percent). All others with less than 10 percent. Irular community (37.4 percent) followed by Kurumans community (10.8 per cent) and Kurichchan (9.9 percent) are more in secondary sector whereas, Muthuvan community (95.1 percent) followed by Paniyan (90.4 per cent) and Kattunayakan (89.8 percent) are engaged more in primary sector.

From the secondary data (NSSO unit level) we have found out that the high paid works are in favour of females and did not found the same in census data. So here an attempt is made to check whether the high paid jobs in the labour market in Kerala are favoured towards the females. For the same sector of work and occupation tables are detailed gender wise.

From the table we can see that females are more engaged in primary sector while males are more in secondary and tertiary sectors. Females are engaged more in primary sector in all communities. Males are engaged more in secondary and tertiary activities. It is also noted that none of the females among the Muthuvan communities are engaged in secondary and tertiary sectors.

Table 5.18: Education and Sector of Work of Sample Tribal Workers (in Percentage)

Educational Qualification	Sector of work			Total
	Primary	Secondary	Tertiary	
Below primary	93.10	5.00	1.90	100.00
Up to plus two	82.00	8.30	9.80	100.00
plus two and above	26.70	17.60	55.80	100.00
Total	78.80	8.40	12.80	100.00

Source: Primary Survey

Table 5.18 depicts that among the first generation tribal workers those who engaged in primary sector have education up to plus two and those who have educational qualification of plus two and above are engaged in tertiary sector. It is also noted that the workers with primary education up to plus two are engaged more in secondary activities. This indicates that as education increases there will be a transformation from primary to other sectors. With higher educational qualification, the workers prefer tertiary sector than other two sectors. The chi-square test is used and found significant association between sector of work and educational qualification, $X^2 (4) = 373.639$; $p=0.000$.

Table 5.19: Broad Industry of Work of Second Generation (in Percentage)

Sample Communities	Broad industry work of second generation			Total
	Primary	Secondary	Tertiary	
Malai Arayan	94.80	0.00	5.20	100.00
Muthuvan	98.40	0.00	1.60	100.00
Irular	94.00	6.00	0.00	100.00
Paniyan	100.00	0.00	0.00	100.00
Kurichchan	94.10	0.00	5.90	100.00
Kurumans	95.40	0.00	4.60	100.00
Kattunayakan	100.00	0.00	0.00	100.00
Total	97.10	0.60	2.30	100.00

Source: Primary Survey

Table shows the broad industry of work of the second generation. The communities like Kurichchan, Malai Arayan and Kurumans are the communities engaged on tertiary sector related works and the community Irular is the only community engaged in secondary sector. When we compare this with present generation we can see that there is a movement from primary to secondary and tertiary sectors and the major reason given by the respondents is the reduction in earnings from agriculture and preference for more secured job.

Table 5.20: Broad Industry of Work of Third Generation (in Percentage)

Sample Communities	Broad Industry of Work of Third Generation Father		Total
	Primary	Tertiary	
Malai Arayan	100	0.00	100.00
Muthuvan	100	0.00	100.00
Irular	100	0.00	100.00
Paniyan	100	0.00	100.00
Kurichchan	98.80	1.20	100.00
Kurumans	100	0.00	100.00
Kattunayakan	100	0.00	100.00
Total	99.80	0.20	100.00

Source: Primary Survey

The table 5.20 shows the broad industry of work as per NIC 2008 of the third generation. From the table it is clear that 99.9 percent of the third generation were engaged in Primary sector and whereas, 0.2 percent were in service sector. In short we can say that among the known third generation, all of them were in the primary sector except Kurichchan as they were traditional medical practitioners.

5.2.5 Occupation

It is observed from the survey that among the first generation workers, 61.2 are engaged in elementary occupation with in the elementary occupation most are engaged as casual labour in agriculture. Paniyan community followed by Kattunayakan are engaged most in this occupation. 23.4 percent STs are engaged in skilled agriculture and fishery workers. Market oriented crop and animal producers are highest among these occupation and the community which is more in this occupation is Malai Arayan community followed by Kurichchan community. 3.2 percent ST are engaged in Service Workers and Shop & Market Sales Workers. Among the second generation workers, 54.5 percent of the previous generation males were engaged as Agricultural, Fishery and Related Labourers for their subsistence followed by Market- Oriented Crop and Animal Producers (39.6 percent). Third generation workers are engaged in skilled agricultural workers, elementary works and workers not classified in any occupation.

Table 5.21: Occupational Classification of Sample Tribal Communities (in Percentage)

Sample Communities	Gender	Occupation of Tribal Workers (First Generation)								
		1	2	3	4	5	6	7	8	9
Malai Arayan	Male	0.8	11.3	5.6	6.5	8.1	57.3	1.6	7.3	1.6
	Female	0.00	15.4	7.7	8.8	0	65.9	2.2	0	0
	Total	0.50	13	6.50	7.40	4.70	60.90	1.90	4.20	0.90
Muthuvan	Male	0	1	0	0	1	40	0	8	50
	Female	0.00	0	0	0	1.2	20.7	0	0	78
	Total	0.00	0.50	0.00	0.00	1.10	31.30	0.00	4.40	62.60
Irular	Male	0	2.5	0	0	1.2	4.9	7.4	7.4	76.5
	Female	0.00	0	2.4	0	7.1	7.1	2.4	7.1	73.8
	Total	0.00	1.60	0.80	0.00	3.30	5.70	5.70	7.30	75.60
Paniyan	Male	0	0.4	0	0	1.9	1.2	1.2	3.1	92.2
	Female	0.00	0	2	0	1	2	0	0	95
	Total	0.00	0.20	0.90	0.00	1.50	1.50	0.70	1.70	93.40
Kurichchan	Male	0	1.8	2.7	1.8	4.4	46	4.4	5.3	33.6
	Female	0	0	2.6	0	10.3	48.7	0	0	38.5
	Total	0.00	1.00	2.60	1.00	6.80	47.10	2.60	3.10	35.60
Kurumans	Male	1.3	1.3	3.9	9.1	6.5	19.5	2.6	3.9	51.9
	Female		4.7	9.3	14	2.3	23.3	0	0	46.5
	Total	0.80	2.50	5.80	10.80	5.00	20.80	1.70	2.50	50.00
Kattunayakan	Male	0	1.8	0	0	5.5	5.5	1.8	0	85.5
	Female	0	0	4.7	0	0	9.3	0	0	86
	Total	0.00	1.00	2.00	0.00	3.10	7.10	1.00	0.00	85.70
Total	Male	0.2	2.7	1.6	2.1	3.7	23.3	2.4	5	59
	Female		2.8	3.4	2.4	2.6	23.4	0.5	0.5	64.3
	Total	0.10	2.70	2.40	2.20	3.20	23.40	1.60	3.10	61.20

Source Primary Survey

Note: 1.Legislators, Senior Officials and Managers; 2. Professionals; 3.Technicians and Associate Professionals 4. Clerks 5. Service Workers and Shop & Market Sales Workers 6. Skilled Agricultural and Fishery Workers 7. Craft and related Trades Workers 8. Plant and Machine Operators and Assemblers 9. Elementary Occupations; X. Workers not classified by occupation.

The table 5.21 shows the broad occupational classification of tribal communities. It is evident from the survey that Kurichchan followed by Kurumans and Malai Arayan are highest in this category, protective service workers and market and shop sales persons are high in this category, 3.1 percent are engaged in Plant and Machine Operators and Assemblers, metal processing and plant operators are more. Irular community is engaged in this occupation. 2.7 percent are Professionals, Malai Arayan community followed by Kurumans community has

the highest number of professionals. Business professionals and engineering professionals are more in this category. 2.4 percent are Technicians and Associate Professionals, here also we can see the dominance of Malai Arayan community. Middle and primary education teachers are highest in this field of occupation. 2.2 per cent are Clerks and peons. Kurumans community is engaged more as clerks and peons followed by Malai Arayan community. Numerical clerks are more in this category. And it is seen that peons are more in Kurumans community whereas, clerks are more in Malai Arayan community. 1.6 percent are electrical and electronic equipment mechanics and fitters followed by machinery mechanics and fitters are more engaged in this occupation. Irular community followed by Kurichchan are engaged more in this occupation. 0.1 percent are Legislators, Senior Officials and Managers. Malai Arayan and Kurumans are engaged in such occupations.

In short we can see that most of the high professions are dominated by Malai Arayan community followed by Kurumans and Kurichchan whereas Paniyan and Malai Arayan community is more engaged in elementary occupations. This means that the empowerment policies and programmes are better utilised by the former communities.

As mentioned in chapter 4 section 4.3.3 education plays an important role in determining occupation and thereby income of the people. Here it is clear that the tribal communities lack both, which made them most deprived social group in Kerala. They are engaged more in elementary occupations because of above mentioned reasons, 1. They lack higher education for better employment opportunities, 2. They lack land for farming which is evident from the previous section (table 5.7).

The survey results like NSSO data also shows that females are employed more in high paid jobs compared to males i.e. females are more as Professionals, Technicians and Associate Professionals and Clerks. Males dominate females in Legislators, Senior Officials and Managers. It is also noted that that females are engaged more in elementary occupations while males in Service Workers and Shop & Market Sales Workers , Skilled Agricultural and Fishery Workers , Craft and related Trades Workers , Plant and Machine Operators and Assemblers. This is more or less true across all communities. This indicates that educated females among the tribal communities are in a better position than educated males, but is less than 10 percent. Less educated females are worse off than less educated males (who forms the majority). In short, it is evident majority of the female respondents are having low education and are engaged in elementary occupations with low paid works. From this we can

infer that only higher education can change the occupational status of tribal communities especially among females.

Table 5.22: Occupation of Second Generation (in Percentage)

Sample Communities	Occupation of second generation											
	2	3		4	5	6		7	9		10	
	Male	Male	Female	Male	Male	Male	Female	Male	Male	Female	Male	Female
Malai Arayan	1.00	4.10	0.00	0.00	0.00	92.80	99.00	0.00	2.10	1.00	0.00	0.00
Muthuvan	0.00	0.00	0.00	0.00	1.60	60.90	15.60	0.00	37.50	84.40	0.00	0.00
Irular	0.00	0.00	0.00	0.00	0.00	1.50	3.00	1.50	95.50	71.60	1.50	25.40
Paniyan	0.00	0.00	0.00	0.00	0.00	6.20	1.60	0.00	93.80	95.90	0.00	2.60
Kurichchan	0.00	4.70	2.40	0.00	2.40	84.70	77.60	0.00	8.20	20.00	0.00	0.00
Kurumans	0.00	0.00	0.00	3.10	0.00	53.80	58.50	0.00	43.10	41.50	0.00	0.00
Kattunayakan	0.00	0.00	0.00	0.00	0.00	22.20	2.20	0.00	77.80	95.60	0.00	2.20
Total	0.20	1.30	0.30	0.30	0.50	42.00	35.10	0.20	55.40	60.90	0.20	23

Source: Primary survey

Note: 1.Legislators, Senior Officials and Managers; 2. Professionals; 3.Technicians and Associate Professionals 4. Clerks 5. Service Workers and Shop & Market Sales Workers 6. Skilled Agricultural and Fishery Workers 7. Craft and related Trades Workers 8. Plant and Machine Operators and Assemblers 9. Elementary Occupations; X. Workers not classified by occupation.

Table 5.22 shows the detailed picture of occupational classification of previous generation across gender among the surveyed communities. Males among the Malai Arayan community is the only spread across various other occupations mentioned in the table. From the table it is clear that more than 50 percent of the males in the communities like Malai Arayan, Muthuvan, Kurichchan and Kurumans were engaged in Market- Oriented Crop and Animal Producers.i.e.88.7 percent, 57.8 percent, 83.5 percent, 52.3 percent respectively followed by Agricultural, Fishery and Related Labourers except for Malai Arayan males. They were engaged in various occupations. Communities like Irular, Paniyan and Kattunayakan males were engaged more on Agricultural, Fishery and Related Labourers i.e. about 91 percent, 93.8 percent and 77.8 percent respectively.

The table 5.22 also shows the occupation wise classification of mothers of previous generation. According to the respondents, 60.7 percent of the females were engaged in

Agricultural, Fishery and Related Labourers followed by 22.6 percent was in Subsistence Agricultural and Fishery Workers and 12.2 percent in Market- Oriented Crop and Animal Producers. On the other hand only 0.2 percent were engaged as Domestic and Related Helpers, Cleaners and Launderers followed by 0.3 percent as Pre-Primary Education Teaching Associate Professionals. As against these 1.9 percent females engaged in Occupations Unidentifiable or Inadequately Described, 1.6 Workers Not Reporting Any Occupations and 0.5 percent don't know about their mother's occupation.

Community wise analysis shows that the females of Malai Arayan community (84.4 Per cent) and Kurichchan community are engaged more on Subsistence Agricultural and Fishery Workers followed by Market- Oriented Crop and Animal Producers (34 percent and 29.4 percent respectively) 20 per cent females of Kurichchan community were also engaged in Agricultural, Fishery and Related Labourers. Whereas the females of all other communities like Muthuvan (84.4 Per cent), Kattunayakan (95.6 percent), Paniyan (95.9 per cent), Irular (70.1 percent) and Kurumans (41.5 percent) were engaged more as Agricultural, Fishery and Related Labourers. A small deviation seen from this picture is on the females of Kurumans community, as these communities are also engaged more on Subsistence Agricultural and Fishery Work (38.5) and Market- Oriented Crop and Animal Producers (18.5) also.

Table 5.23: Occupation of Father of Third Generation (in Percentage)

Sample Communities	Grandfather's occupation				Total
	3	6	9	10	
Malai Arayan	0.00	87.60	4.10	8.20	100.00
Muthuvan	0.00	23.40	34.40	42.20	100.00
Irular	0.00	0.00	47.80	52.20	100.00
Paniyan	0.00	7.80	60.10	32.10	100.00
Kurichchan	1.20	67.10	4.70	27.10	100.00
Kurumans	0.00	61.50	20.00	18.50	100.00
Kattunayakan	0.00	22.20	51.10	26.70	100.00
Total	0.20	36.00	34.70	29.10	100.00

Source: Primary Survey

Note: 1.Legislators, Senior Officials and Managers; 2. Professionals; 3.Technicians and Associate Professionals 4. Clerks 5. Service Workers and Shop & Market Sales Workers 6. Skilled Agricultural and Fishery Workers 7. Craft and related Trades Workers 8. Plant and Machine Operators and Assemblers 9. Elementary Occupations; X. Workers not classified by occupation.

Table 5.23 shows the occupation of the G.Ps of heads of present generation as said by the respondents. From the table it is clear that 39.4 percent are Agricultural, Fishery and Related Labourers followed by 17.2 percent in Market- Oriented Crop and Animal Producers 14.2 percent 10.2 percent in Subsistence Agricultural and Fishery Workers. Whereas, 10.2 percent were Workers Reporting Occupations Unidentifiable or Inadequately Described as they were shifting cultivators. They can be considered as subsistence agricultural workers also.

5.3 Inter- Generational Occupation Mobility

Occupational mobility of first generation sample communities is analysed using the variables education of present generation and second generation, Land holdings of first and second generation and occupation of parents. The transformation matrix and the analysis is detailed below.

Table5.24: Occupational Mobility of Sample Communities (in Percentage)

Sample Communities	Mobility		Total
	Immobile	Mobile	
Malai Arayan	56.70	43.30	100.00
Muthuvan	59.40	40.60	100.00
Irular	50.70	49.30	100.00
Paniyan	82.90	17.10	100.00
Kurichchan	56.50	43.50	100.00
Kurumans	38.50	61.50	100.00
Kattunayakan	64.40	35.60	100.00
Total	63.10	36.90	100.00

Source: Primary Survey

Table 5.24 shows the mobility of first generation tribal workers compared to their parents and found out that only 36.9 percent of the tribal workers have moved from their parent's occupation. Among the tribal communities those who have moved more are Kurumans community followed by Irular community, Kurichchan, Malai Arayan and Muthuvan communities. Those who are same in the occupation as their fathers is or those who are immobile are Paniyan and Kattunayakan community

Table 5.25: Occupational Mobility Matrices for Tribal Communities in Kerala (in Percentage)

Father/Son Occupation	1	2	3	4	5	6	7	8	9
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	12.50	12.50	0.00	0.00	75.00	0.00	0.00	0.00
4	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	33.30	0.00	0.00	66.70
6	0.7	5.40	3.50	2.70	3.10	53.30	1.50	3.90	25.90
7	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	1.50	1.20	1.50	0.30	4.40	1.50	2.10	88.70

Source: Primary Survey

Note: 1.Legislators, Senior Officials and Managers; 2. Professionals; 3. Technicians and Associate Professionals 4. Clerks 5. Service Workers and Shop & Market Sales Workers 6. Skilled Agricultural and Fishery Workers 7. Craft and related Trades Workers 8. Plant and Machine Operators and Assemblers 9. Elementary Occupations; X. Workers not classified by occupation

Table 5.25 shows occupational mobility matrices. The diagonals highlighted in the table shows the tribal workers who follow their father's occupation. It is evident from the matrices that the children with fathers engaged in professional, clerical and craft and related works, children also follow the same occupation. The 53 percent children of father engaged in skilled agricultural and fishery works are also engaged in same occupation, but 1/4th of them moved to elementary occupations and remaining to higher occupations like professionals, clerks and the like. While 89 percent tribal workers whose fathers are engaged in elementary occupations follow the same occupation. This means that the majority of the tribal workers follow their parent's occupation. Only few become better off compared to their parents. This again shows that, if parents are in better off position, the children will be the like and vice versa.

It is also evident from the table that the mobility is higher among the children's of Technicians and Associate Professional fathers followed by Skilled Agricultural and Fishery Workers and lowest among the children's of professionals and clerks. Again we can see that the children of Technicians and Associate Professional fathers moved to Skilled Agricultural and Fishery Workers followed by professional's works, which can be treated as a positive movement.

In order to understand the most influencing factor for the mobility of tribal communities, we go for bi-nary logit regression model.

5.3.1 Determinants for occupational mobility of the first generation (in Percentage)

To find out the major determinants of occupational mobility of present generation (first generation) compared to their parents, binary logistic regression is used in the study. Binary Logistic Regression is an extension of simple linear regression which predicts the odds of being a situation based on the values of the independent variable. In this analytics approach, the dependent variable is categorical, dichotomous or binary in nature predicting the likelihood of an event happening or a choice being made. Here all predicted variables are tested in one block to assess their predictive ability while controlling for the effects of other predictors in the model.

From the logistic analysis we found that only 37 percentage has moved from the occupation of their parents. As far as tribal communities are concerned this cannot be a negligible percentage, so we tried to analyse the determinants of such mobility. For this, we have conducted chi-square test to analyse the association between the occupational of present generation mobility compared to their parents and the factors of second generation that influence their mobility. The results showed a strong association, so in order to get the direction of association, binary logit regression model was used. Here we analyse the probability of occupational mobility of present generation. The dependent variable is the number of workers who has mobility from their father's occupation. The fitted binary logit model is as follows

$$Y_i = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + U \dots \dots \dots (1)$$

Y_i = numbers of workers who has mobility (Mobility=1, Immobility=0)

X_1 = Education of mother (literate =1; not literate =0)

X_2 = Education of father (literate =1; not literate =0)

X_3 = education of present generation (above high school =1; below high school =0)

X4= Occupation of mother (elementary occupation=1; others=0)

X5 = Occupation of father (elementary occupation=1; others=0)

X6= Land holdings of parents

X7= Land holdings of present generation

Logit regression results – factors determining occupational mobility from second to first generation

The table 5.26 summarises the results of logit regression model. In a logit model, explanatory power of the model is expressed in terms of number of cases correctly predicted. Our model correctly predicted 64.9 percent of cases. Which implies that the independent variables used in the model correctly predicted the extend decision of 64.9 percent cases.

Table 5.26: Logistic Regression Results- Occupational Mobility of Present generation

Variables	Coefficient	Std. Error	z	p-value
constant	−1.14575	0.137942	−8.306	<0.0001***
Education of mother	0.140294	0.330489	0.4245	0.6712
Education of father	−0.107547	0 0.303945	−0.3538	0.7235
Education of present generation	1.09301	0.214318	5.100	<0.0001***
Occupation of mother	−0.122073	0.267305	−0.4567	0.6479
Occupation of father	1.50484	0.267718	5.621	<0.0001***
Land holdings of parents	−0.00125618	0.000666039	−1.886	0.05*
Land holdings of present generation	−0.00145429	0.00102846	−1.414	0.15
Number of cases 'correctly predicted' = 418 (67.9%)		Likelihood ratio test: Chi-square(7) = 85.9804 [0.0000]		
*** 1% significance level, ** 5% significance level, *10 % significance level				

Source: Calculated from primary data

In the binary logit models, what matters is the expected signs of regression coefficient and their statistical significance. Here the table (5.26) results shows that the chi-square value as $X^2(5) = 85.98$; $p < 0.0001$; it implies the overall significance of the model. This means that all the independent variables like land holdings of the household, education and occupation of parents, education of themselves and their land holdings can influence the occupational mobility of present generation. Table (5.26) also gives a clear picture of beta coefficient of each explanatory variable and its statistical significances. Explanatory variables like education of mother and their education and fathers occupation shows positive signs and

variables like fathers education and mothers occupation and land holdings shows negative signs. And only fathers occupation, land holdings of parents and their education are found to be significant which means that, occupational mobility of present generation is influenced only by the education the workers of present generation has attained, occupation of their father and land owned by their parents households. And the variables like education of parents and occupation of mother and their landholdings found to be statistically insignificant. This means that occupational mobility of present generation is independent of education of parents and mothers occupation.

Table 5.27: Odds Ratio for Mobility

Variable	Odds-ratio	95.0% confidence interval	
Education of Mother	1.1506	0.602	2.199
Education of Father	0.8980	0.495	1.629
Education of Present Generation	2.9832	1.960	4.541
Occupation of Mother	0.8851	0.524	1.495
Occupation of Father	4.85034	2.665	7.611
Land Holdings of Parents	0.9987	0.997	1
Land Holdings of Present Generation	0.9985	0.997	1

Source: Calculated from primary data

In our model, the odds ratios for all seven variables such as, occupation of father, education of mother, education of present generation and land holdings of the households of parents and present generation are one, education of father is near to one, while , is more than one, it describes a positive relationship. The highest odds ratio belongs to occupation of father, 4.85 which means that children of fathers who has engaged in elementary occupations has mobility in occupation, 5 times greater than those who are engaged in other occupations. The second highest odds ratio belongs to the education of present generation showing that the workers who has education above high school education has mobility in occupation, 3 times more than those who has education below high school. Likewise the odds ratio of landholdings of parent’s households is 0.9988 shows that the children whose households have more lands have occupational mobility than those with least landholdings. At the same time it also shows that the present generation who has more lands has also showed mobility in occupation. In short, the children (with above high school education and more land holdings) of parents engaged in elementary occupation with more land holdings has occupational mobility. Thus the hypothesis is validated.

Table 5.28: Binary Logit Marginal Effects

Variable	dp/dx	s.e	z	pval	xbar
Education of Mother	0.031193	0.074457	0.41894	0.67526	0.19318
Education of Father	-0.023366	0.065419	-0.35717	0.72097	0.27760
Education of Present Generation	0.25256	0.050449	5.0063	<0.0001***	0.27273
Occupation of Mother	-0.026622	0.058185	-0.45754	0.64728	0.39123
Occupation of Father	0.32786	0.053570	6.1203	<0.0001***	0.44643
Land Holdings of Parents	-0.00027529	0.0001	-1.9907	0.04651*	281.96
Landholdings of Present Generation	-0.000318	0.00022862	-1.3941	0.16329*	105.36

Source: Calculated from primary data

The table (5.28) the marginal effects of the factors influencing occupational mobility of present generation. The marginal effects of education of mother, education of present generation and occupation of father is positive while the marginal effects of education of father and occupation of mother land holdings of parents and present generation is negative. Which means that if father have better job and mother is educated and their children is educated, then the occupational mobility will be higher compared to others.

5.4 Factors determining intergenerational occupational mobility of individual communities

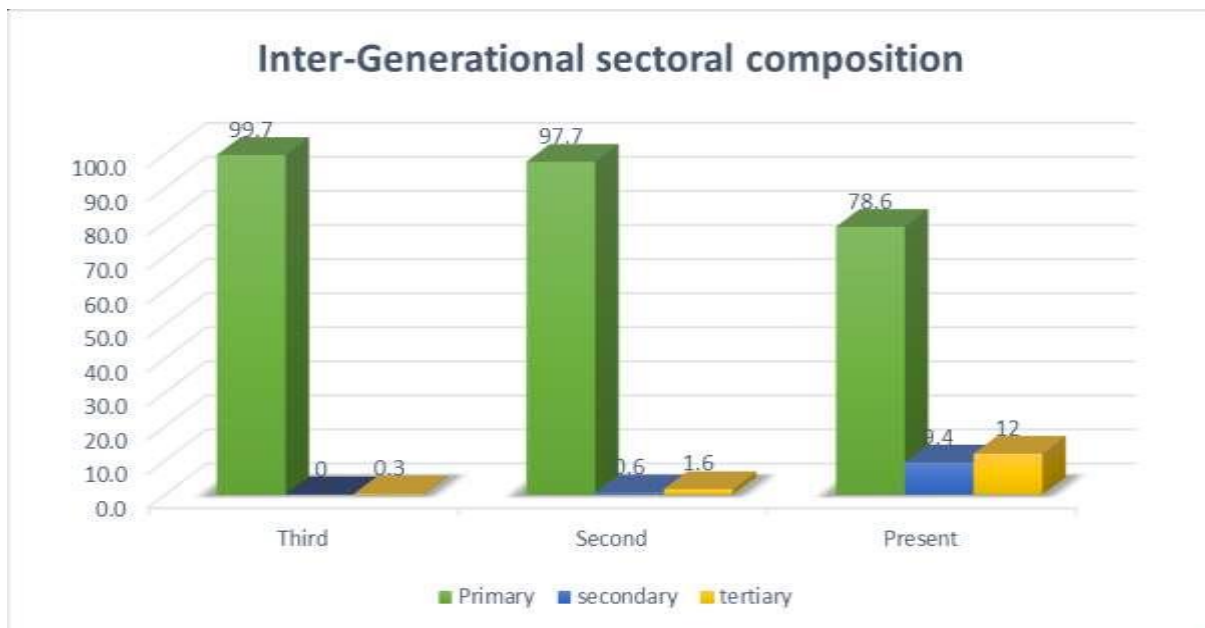
Factors determining Intergenerational mobility among individual tribal communities give a different picture. The chi-square value as $X^2(7) = 22.81, 8.97, 28.08, 56.83, 22.38, 38.58, 35.36$ for Malai Arayan, Muthuvan, Irular, Paniyan, Kurichchan, Kurumans, and Kattunayakan respectively at $p < 0.0001$; it implies the overall significance of the model. It is clear from the table (Ref. Annexure 5.2) that The factors significant for intergenerational occupational mobility among Malai Arayan community is education of the present generation, for Muthuvan community is occupation of father, Irular community is education of father and occupation of mother with odds ratio less than one, Paniyan community is land holdings of present generation, education and occupation of father with highest odds ratio being the occupation of father followed by education of father and landholdings of present generation. The factors significant for Kurichchan community are their land holdings, Kurumans community is their landholdings and parents land holdings, education of present generation and occupation of father. The odds ratio is highest for father's occupation

followed by their education and landholdings. For Kattunayakan community, the factors determining occupational mobility are education of present and fathers' and occupation of parents (both father's and mother's). But the odds ratio is not relevant. Which means that the intergenerational occupational mobility of different communities is determined by different factors showing there are wide differences exist among different communities.

5.5 Comparison of Sectoral and Occupational Distribution of Tribal communities in Kerala for Three Generations

Here a comparison is made among the three generations on the basis of sector of work and the occupations they were engaged in. the diagrammatic representation is used to make a comparison among three generations on the basis of their sector of wok and occupation.

Figure5.4: Inter- Generational Sectoral Composition (in Percentage)



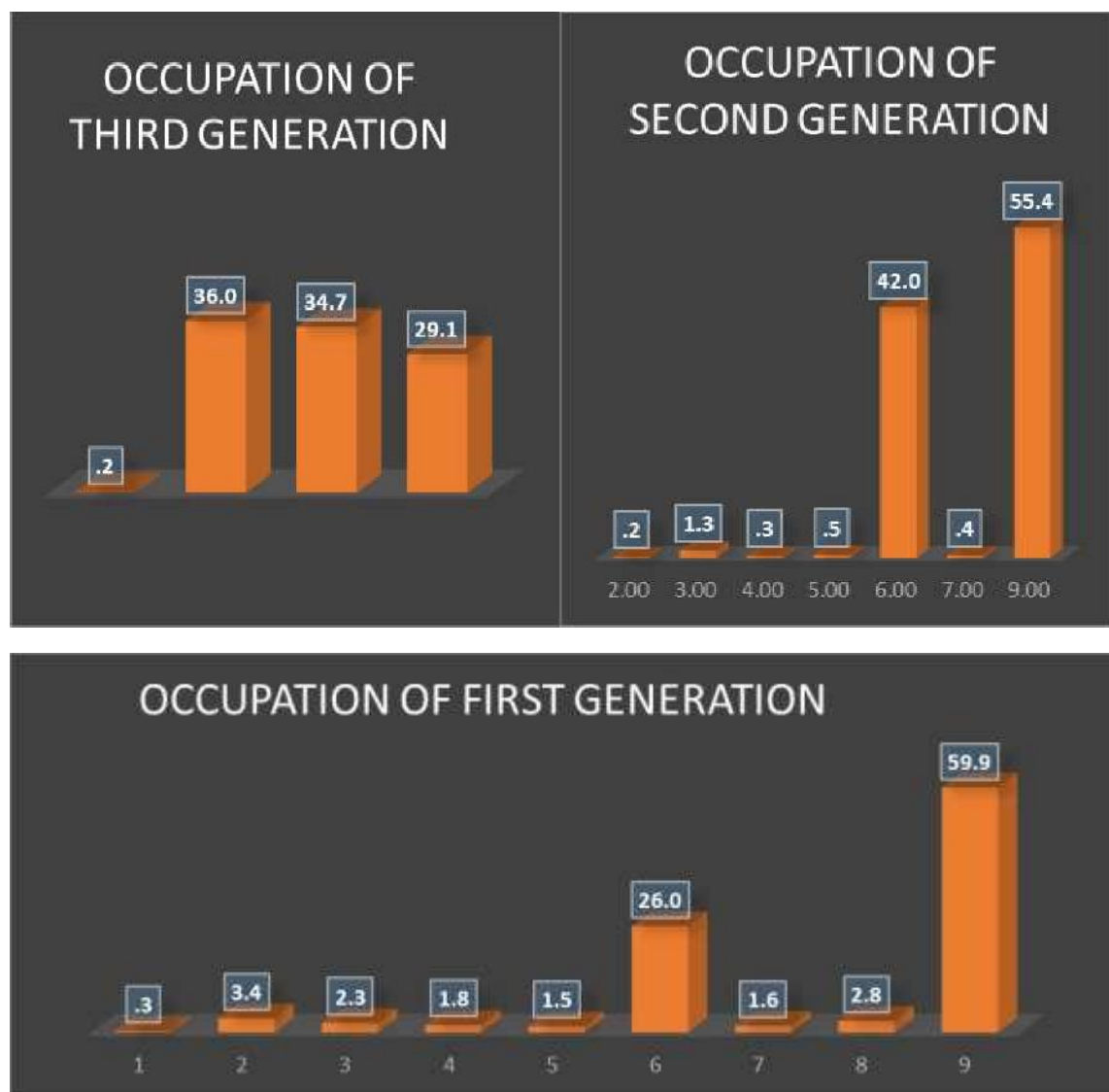
Source: Primary Survey

Inter- Generational Sectoral Composition is depicted in figure 5.4. Sector of work of three generations shows that there is a movement from primary to tertiary sector more than secondary sector. it is clear from the diagram that 99.7 percent of the third generation tribal were engaged in agriculture and allied activities which declined meagerly during the second generations but the decline was high as far as the present generation is concerned. Those who withdraw from primary sector has move to secondary and tertiary sector. The movement is more towards tertiary sector. This is evident from the diagram below. Community wise analysis shows that the movement is high among Malai Arayan community followed by

Kurichchan and Kurumans communities. A detailed picture of this shift among different tribal communities is detailed in table (Ref. Annexure 5.3).

As it is clear that there is withdrawal among the tribal communities from agriculture and allied activities, we have to know the occupational mobility of three generations also. This is detailed in the figure (5.5)

Figure 5.5: Inter-Generational occupational Distribution (in Percentage)



Source: Primary Survey

Note: 1.Legislators, Senior Officials and Managers; 2. Professionals; 3. Technicians and Associate Professionals 4. Clerks 5. Service Workers and Shop & Market Sales Workers 6. Skilled Agricultural and Fishery Workers 7. Craft and related Trades Workers 8. Plant and Machine Operators and Assemblers 9. Elementary Occupations; X. Workers not classified by occupation.

From the figures 5.5 we can interpret that there is both positive and negative inter-generational occupational mobility across communities. There is positive occupational mobility when they moved from low paid to high paid jobs and negative occupational mobility when moved from high paid self-sufficient jobs to lower one. From the figures we can see that the present generation is engaged in most of the occupations and not limited to few occupations. Heads of third generation were engaged either in elementary occupations or skilled agricultural households followed by others like shifting cultivation. Households of second generation were engaged more in elementary occupations followed by skilled agriculture while the present generation is engaged more in elementary occupations while the share of skilled agricultural workers declined compared to previous generations. This means that more than other two generations present generation were engaged more in low paid casual works. At the same time it is also noted that their participation in jobs with high pay and security also increased for the present generation compared to the previous generations. But skilled agricultural workers have declined compared to other generations. It is also noted that the percentage withdrawn from skilled workers are not fully engaged in high paid works. The few is moved to high paid works and more to low paid works. That is, there are positive movements among some tribes while negative movements among others which is evident from the figures. It is also clear from the above tables on first, second and third generation occupation tables that only tribes of Malai Arayan , Kurumans and Kurichchan communities and some Irular tribes has a positive movement in occupation while others has a negative movement.

5.6 Conclusion

From the above chapter we can see that most of the tribal workers are still engaged in agriculture. The communities like Malai Arayan, Kurichchan and Kurumans were comparatively better off than the communities like Muthuvan, Irular, Paniyan and Kattunayakan. Irular and Muthuvan are better off compared to Kattunayakan and Paniyan in terms of income and land holdings. It is also found from the survey that as the households possess large acres of land, there is a chance of being in agriculture than others. And those with small and marginal land holdings have a tendency to move to non- agriculture especially to low- paid casual works. So land plays an important role in the life of tribal communities which suggests immediate attention from the policy makers to have equal and proper land

distribution. The study also suggests ensuring agricultural land holdings among the tribal communities. Generation wise sectoral composition also reveals that there is sectoral transformation among the communities even though they are still engaged in primary and allied activities. Occupation wise distribution shows that there is meagre mobility among the tribals to various occupations which can be considered positive in terms that there is mobility while negative in terms that the mobility is towards elementary occupations more than high paid works. The determinants on inter- generational occupational mobility reveals that land holdings of parents, education of father along with their own (the present generation workers) education plays an important role in the occupational mobility of tribal communities.

Chapter VI

**DETERMINANTS OF OCCUPATIONAL CHOICE
ACROSS TRIBAL COMMUNITIES**

- *Introduction*
 - *Employment Characteristics*
 - *Monthly Income of the Household*
 - *Unemployment Aspects*
 - *Government Policies and Tribal
Employment*
 - *Migration Aspects*
 - *Factors Determining Choice of Occupation*
 - *Conclusion*
-

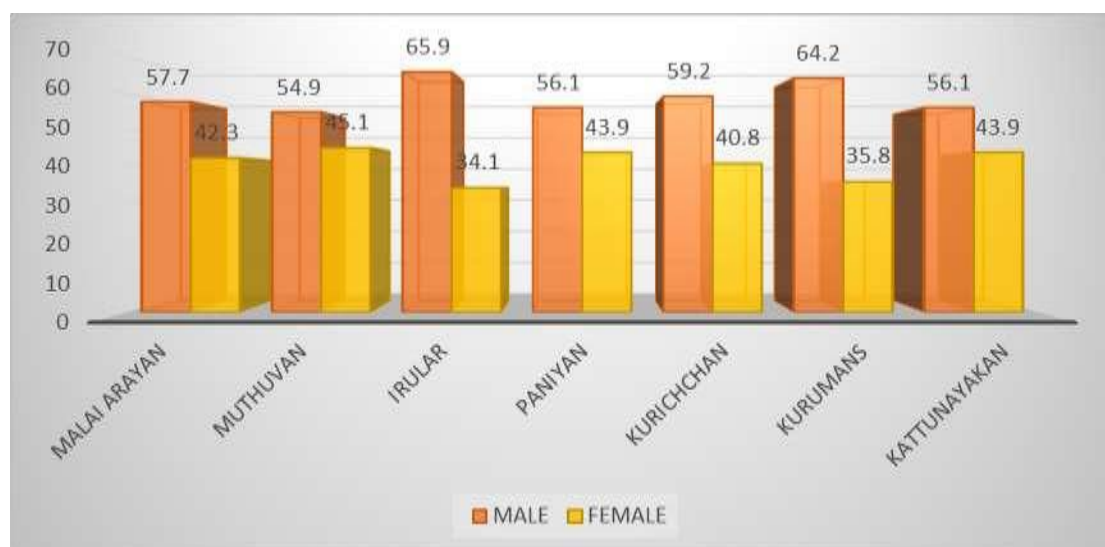
6.1 Introduction

The labour market of tribal communities is different from that of other social groups. This is evident from the previous chapters. This means that the factors that influence the tribal communities in selecting an occupation is also different. So in this chapter an attempt is made to analyse that major determinants that influence the choice of occupation of the tribal communities in detail. For this purpose, the chapter is divided into seven sections. After introduction in the first section Second section details the employment characteristics of the sample tribal workers. Third section deals with the monthly income of the house hold and inter community differences in income. Fourth section details the unemployment aspects of the sample workers. Skill development aspects, participation in various programmes are included in this section. Fifth section looks into the influence of government policies on tribal employment. Sixth section pictures the migration particulars of tribal workers. Seventh section is on the Factors determining choice of occupation among Sample Tribal Workers followed by conclusion in the eight section. In this chapter for a thorough analysis variables detailed in the previous chapter is also used here.

6.2 Employment Characteristics

Gender, age, marital status, employment status, working conditions are detailed below. For convenience of table generation and analysis, we have taken consolidated data of head and household members.

Figure 6.1: Gender of Sample Household Members (in Percentage)



Source: Primary Survey

This is the consolidated data for head and members of the household. Figure 6.1 shows the gender of the working population among the Sample Communities surveyed. From the figure it is clear that 58.2 percent males and 41.8 percent females are employed among the various tribal communities. Among the communities, females of Muthuvan community (45.1 percent) followed Kattunayakan and Paniyan (43.9 percent) were more employed than other communities. Whereas, females of Irular community (34.1 percent) followed by Kurumans community (35.8 percent) were least employed compared to other communities. Of this 89.1 percent surveyed households are male headed and 10.9 percent are female headed households. (Ref. Annexure 6.1)

Table 6.1: Age Group of Sample Tribal Communities (in Percentage)

Sample Communities	Age					Total
	15-25	26-35	36-45	46-55	>56	
Malai Arayan	9.30	19.50	32.10	29.30	9.80	100.00
Muthuvan	26.40	33.00	20.30	11.00	9.30	100.00
Irular	13.80	29.30	32.50	17.10	7.30	100.00
Paniyan	19.70	32.30	19.00	21.00	8.10	100.00
Kurichchan	9.40	31.40	30.90	15.20	13.10	100.00
Kurumans	6.70	29.20	30.80	25.80	7.50	100.00
Kattunayakan	21.40	19.40	26.50	25.50	7.10	100.00
Total	16.00	28.80	25.60	20.50	9.00	100.00

Source: Primary survey

Age Group of Sample Tribal Communities (in Percentage) is given in table 6.1. Age of sample workers is categorized into five groups, 15- 25 years, 26-35 years, and 36-45 years, 46-55 years and above 56 years. Age wise distribution of the tribal communities shows that 28.8 percent are 26-35 age group. 25.6 percent are 36-45 age group, 20.5 percent are 46-55 age group, 16 percent are 15-25 age group and 9 percent are greater than 56 age group. Among the surveyed communities Paniyan community is more in the age group more than 56. Malai Arayan community is more in the age group 46-55 and 36-45 followed by Irular in the age group 36-45. Muthuvan community followed by Paniyan community is in the age group 26-35. And Muthuvan community in 15-25 age group.

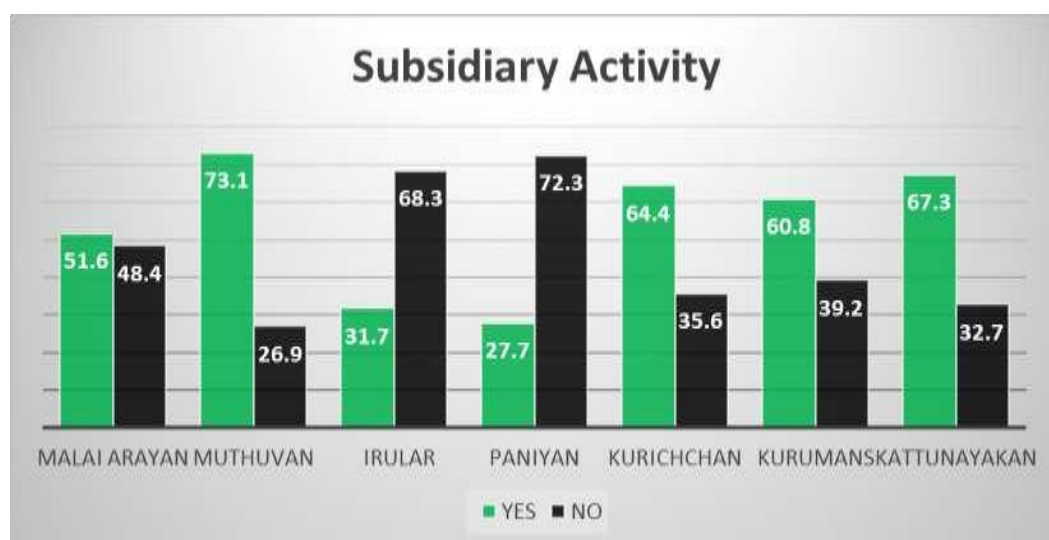
Table 6.2: Marital Status of Sample Household Members (in Percentage)

Sample Communities	Marital status				Total
	Married	Unmarried	Widowed	Divorced/ Separated	
Malai Arayan	75.30	17.20	6.00	1.40	100.00
Muthuvan	74.20	20.90	4.40	0.50	100.00
Irular	80.50	12.20	7.30	0.00	100.00
Paniyan	73.80	14.20	9.00	3.10	100.00
Kurichchan	84.30	13.60	2.10	0.00	100.00
Kurumans	82.50	14.20	3.30	0.00	100.00
Kattunayakan	83.70	9.20	6.10	1.00	100.00
Total	77.60	14.90	6.10	1.40	100.00

Source: Primary survey

Table 6.2 shows the marital status of the household members. From the table it is clear that 77.6 percent are married, 14.9 percent are unmarried, 6.1 percent are widowed and 1.4 percent are divorced/ separated. Divorced is more among the Paniyan community (3.1 percent) followed by Malai Arayan community (1.4 percent). Widowed members are high among Paniyan community (9 percent) followed by Irular community (7.3 percent). Unmarried are high among Muthuvan community (20.9 percent) followed by Malai Arayan (17.2 percent).

Figure 6.2: Sample Workers Engaged in Subsidiary Activity (in Percentage)



Source: Primary Survey

Figure 6.2 shows the distribution of tribal communities on the basis of subsidiary activity. It is evident from the figure that 48.4 percent are engaged in subsidiary activity and 51.6 percent are not in subsidiary activity. More than 50 percent of Muthuvan, Kattunayakan, Kurichchan and Kurumans and Malai Arayan communities are engaged more in subsidiary occupation and the communities' Irular and Paniyan are least in subsidiary activities.

Now we have to go through the subsidiary industry and occupation of the communities engaged in subsidiary activities. This is detailed below.

Table 6.3: Broad Industry of Work Sample Tribal Communities Engaged in Subsidiary Activity (in Percentage)

Sample Communities	Broad Industry of Work in Subsidiary Activity			Total
	Primary	Secondary	Tertiary	
Malai Arayan	92.80	2.70	4.50	100.00
Muthuvan	97.70	0.80	1.50	100.00
Irular	69.20	30.80	0.00	100.00
Paniyan	72.40	27.60	0.00	100.00
Kurichchan	83.70	6.50	9.80	100.00
Kurumans	94.50	5.50	0.00	100.00
Kattunayakan	93.90	6.10	0.00	100.00
Total	87.20	10.00	2.80	100.00

Source: Primary Survey

Table 6.3 shows the broad industry of work of the tribal communities engaged in subsidiary activity. It is observed from the survey that 87.2 percent are engaged in primary sector followed by 10 percent in secondary sector and 2.8 percent in tertiary sector. More than 90 percent of the Muthuvan, Kurumans Kattunayakan and Malai Arayan are engaged in primary sector. Irular followed by Paniyan are engaged more in secondary sector. Whereas, only Malai Arayan and Muthuvan are engaged in tertiary sector as their subsidiary activity.

Among them 62.5 percent are engaged in Skilled Agricultural and Fishery Workers followed by 33.8 percent in elementary occupations. Less than 10 percent of the Communities are engaged in other occupations. The community engaged more in Skilled Agricultural and Fishery Workers are Kattunayakan community followed by Muthuvan and Paniyan (more

than 70 percent). Whereas, Irular, Malai Arayan and Paniyan communities are more in elementary occupations (Ref. Annexure 6.2).

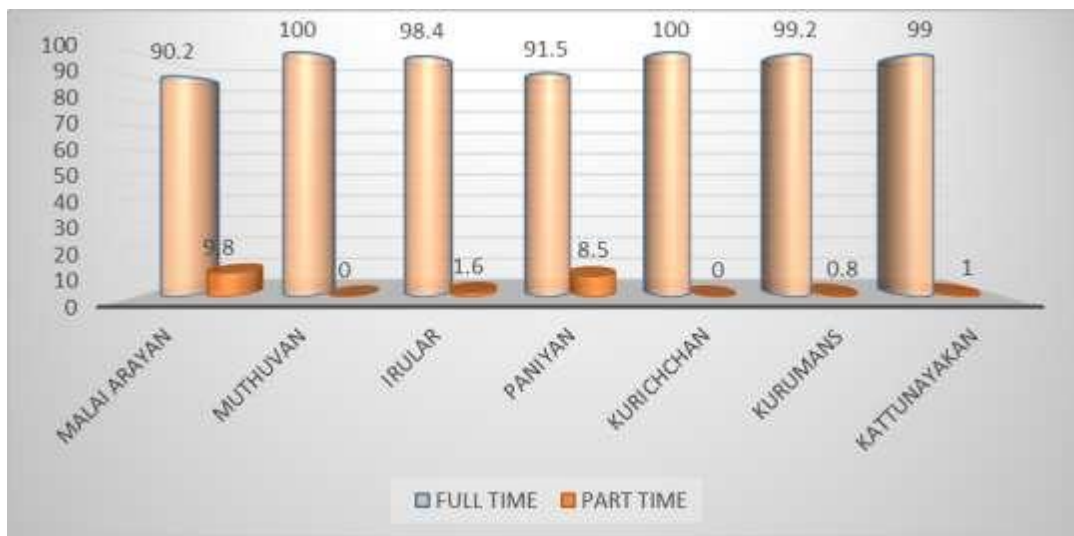
Table 6.4: Hours of Work of Sample Workers

Sample Communities	Hours of Work			Total
	<=8 hours	8-12 hours	>12 hours	
Malai Arayan	89.40	10.60	0.00	100.00
Muthuvan	82.60	17.40	0.00	100.00
Irular	80.70	17.50	1.80	100.00
Paniyan	79.60	20.00	0.40	100.00
Kurichchan	95.10	4.90	0.00	100.00
Kurumans	97.80	2.20	0.00	100.00
Kattunayakan	96.70	3.30	0.00	100.00
Total	85.10	14.50	0.40	100.00

Source: Primary Survey

Table 6.4 enumerates the hours of work of workers engaged in works other than self-employed. The workers who didn't reveal the exact / average time they work are not included in this table. It is clear from the table that 85.1 percent of the workers work less than or equal to 8 hours, 14.5 percent workers work between 8 to 12 hours and 0.4 percent more than 12 hours. 20 percent Paniyan community revealed that they work 8 to 12 hours followed by around 17 percent Irular and Muthuvan community. 10.6 percent Malai Arayan community, 4.9 percent Kurichchan, 3.3 percent Kattunayakan and 2.2 percent Kurumans are also of the same opinion. Irular community is engaged in works where they have to work more than 12 hours. From this it is clear that there are enterprises and work place which is not following labour laws and exploiting the tribal communities.

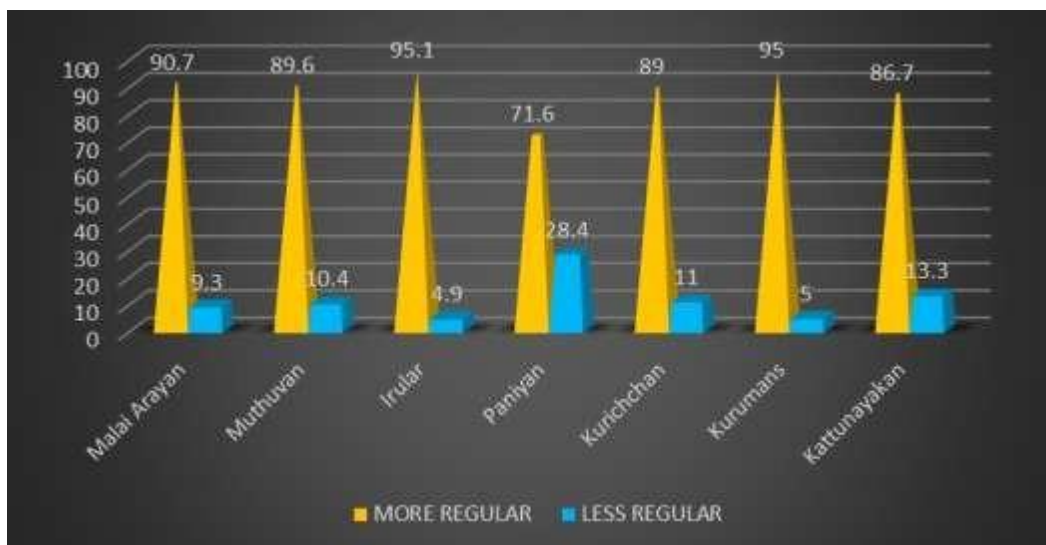
Figure 6.3: Type of Work of Sample Workers (in Percentage)



Source: Primary Survey

Figure 6.3 shows the type of work of the workers. From the figure it is clear that 95.4 percent are full time workers and 4.6 percent are part time workers. Among the communities, Paniyan community has highest percentage of part time workers. Among the Malai Arayan community most females are engaged in agricultural works for subsistence. They are considered part time workers.

Figure 6.4: Regularity in Work among the Workers of Sample Communities (in Percentage)



Source: Primary survey

Figure 6.4 depicts the details about the regularity of work of the workers. It is also evident from the figure that 54.5 percent are regular in their work and 15.5 percent are irregular in their work. Among the communities, Paniyan community (28.4 per cent) followed by Kattunayakan (13.3 percent) are more irregular in their work. It is found from the survey that their irregularity has adversely affected their opportunities. These irregularities made them difficult to find works when they are available for work.

Now we have to know why these communities are irregular and it is found in the survey that most are irregular because of illness/ aged. Most females are irregular as they opined that they have household works and others. This is given in the table below

Table 6.5: Reason for Irregularity in Work (in Percentage)

Sample Communities	Reason for Irregularity			Total
	Illness/Aged	Have H.H Work	Others	
Malai Arayan	100.00	0.00	0.00	100.00
Muthuvan	31.60	42.10	26.30	100.00
Irular	100.00	0.00	0.00	100.00
Paniyan	53.80	28.50	17.70	100.00
Kurichchan	100.00	0.00	0.00	100.00
Kurumans	66.70	33.30	0.00	100.00
Kattunayakan	84.60	7.70	7.70	100.00
Total	64.20	22.30	13.50	100.00

Source: Primary Survey

From the table 6.5 it is clear that among the communities' Malai Aryan, Kurichchan, and Kurumans communities all has opined that they are irregular because of illness or ageing. Whereas, the workers in other communities are irregular because of the household work and for taking care of children. Whereas, 26.3 percent Muthuvan, 17.7 percent Paniyan, 7.7 percent Kattunayakan has no reason for being irregular.

Table 6.6: Type of Job Contract of Sample Workers (in Percentage)

Sample Communities	Type of job contract				Total
	No Written Job Contract	Written Contract for One Year or Less	More Than Three Years	Not Applicable	
Malai Arayan	4.20	0.90	1.40	93.50	100.00
Muthuvan	0.50	0.50	0.00	98.90	100.00
Irular	7.30	0.00	0.00	92.70	100.00
Paniyan	6.10	0.40	0.00	93.40	100.00
Kurichchan	0.00	4.20	0.00	95.80	100.00
Kurumans	4.20	1.70	0.00	94.20	100.00
Kattunayakan	2.00	0.00	0.00	98.00	100.00
Total	3.90	1.10	0.20	94.80	100.00

Source: Primary survey

Table 6.6 provides a detailed picture of the type of job contract of the workers. It also shows the percentage picture of the workers for which the question is not applicable. This question is not applicable for those who are engaged in own agriculture, business and permanent jobs and for casual labours in agriculture and non- agriculture. For 94.8 percent of the Sample Communities this is not applicable as majority are casual labours followed by own agriculture.

Among the Sample Communities only 3.9 percent are engaged in job contract which is not written, it is high among the Irular community (7.3 percent) followed by Paniyan community (6.1 percent). About 1.1 percent is working in written contract for one year or less. Kurichchan community (4.2 percent) followed by Kurumans community (1.7 percent) are engaged more in such works. Whereas, only 0.2 percent is engaged in works with job contract for more than three years. Only Malai Arayan community seems to be found in such types of contract works.

Table 6.7: Availability of Paid Leave for Sample Tribal Workers (in Percentage)

Sample Communities	Eligibility of Paid Leave			Total
	Yes	No	Not Applicable	
Malai Arayan	27.00	3.30	69.80	100.00
Muthuvan	1.10	0.00	98.90	100.00
Irular	15.40	4.90	79.70	100.00
Paniyan	3.90	2.20	93.90	100.00
Kurichchan	11.50	0.00	88.50	100.00
Kurumans	26.70	0.00	73.30	100.00
Kattunayakan	5.10	0.00	94.90	100.00
Total	11.20	1.70	87.10	100.00

Source: Primary Survey

Table 6.7 indicates a clear picture of the eligibility of paid leave to the workers. It is clear from the table that 11.2 percent are eligible for paid leave. The communities Malai Arayan (27 percent) followed by Kurumans (26.7 percent) and Irular (15.4 percent) are high among these. Whereas, 1.7 percent are not eligible for paid leave in their work, it is also high among Malai Arayan community followed by Irular and Paniyan community. For 87.1 percent the question is not applicable.

Table 6.8: Availability of Social Security Benefits for Sample Workers (in Percentage)

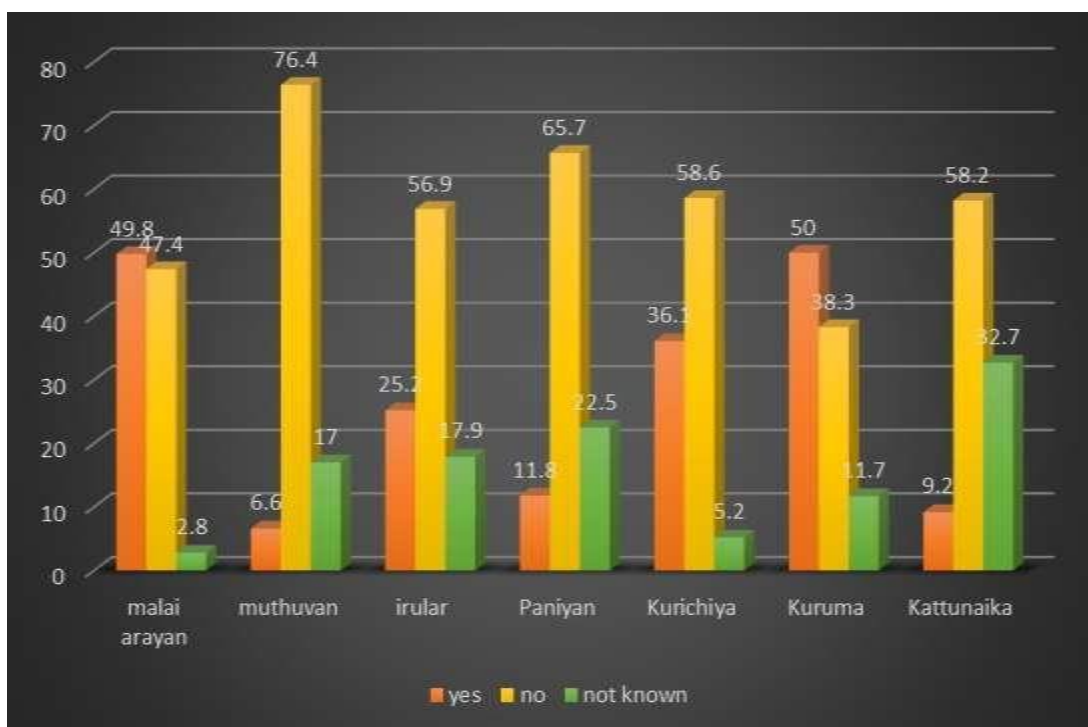
Sample Communities	Availability Of Social Security Benefits						Total
	Eligible For PF	Only Gratuity	Only Health Care And Maternity	Only PF/ Pension And Gratuity	Not Eligible	NA	
Malai Arayan	21.90	3.70	0.00	0.00	6.00	68.40	100.00
Muthuvan	0.50	0.50	0.00	0.00	0.00	98.90	100.00
Irular	10.60	4.10	0.00	0.80	11.40	73.20	100.00
Paniyan	0.40	2.40	0.00	0.00	5.50	91.70	100.00
Kurichchan	3.10	6.80	0.00	0.00	0.00	90.10	100.00
Kurumans	19.20	5.00	0.80	0.00	2.50	72.50	100.00
Kattunayakan	0.00	2.00	0.00	0.00	3.10	94.90	100.00
Total	6.60	3.30	0.10	0.10	4.20	85.70	100.00

Source: Primary survey

From the survey it is seen that 6.6 percent are eligible for PF and all SSBs (table 6.8). Malai Arayan community followed by Kurumans enjoy such benefits more in their works, 3.3 percent have only gratuity Kurichchan community followed by Irular and Malai Arayan are in this category, 3.9 percent are not eligible for such benefits in their work. The Irular community is engaged heavily in such works, 0.1 percent have only health care and maternity and Only PF/ pension and gratuity. Whereas, 0.3 percent are unaware of such benefits. This seems to be more pathetic situation in their work. This question is not applicable for about 85.7 percent, (for those in own works and casual labours) as mentioned earlier. This is detailed in table 6.8

Now we also have to know their participation in union/ association to understand their bargaining power which is a major factor for their betterment in employment and the benefits they received through the union/ association. This is given in the table below.

Figure 6.5: Distribution of Respondents on the basis of their Awareness about Union

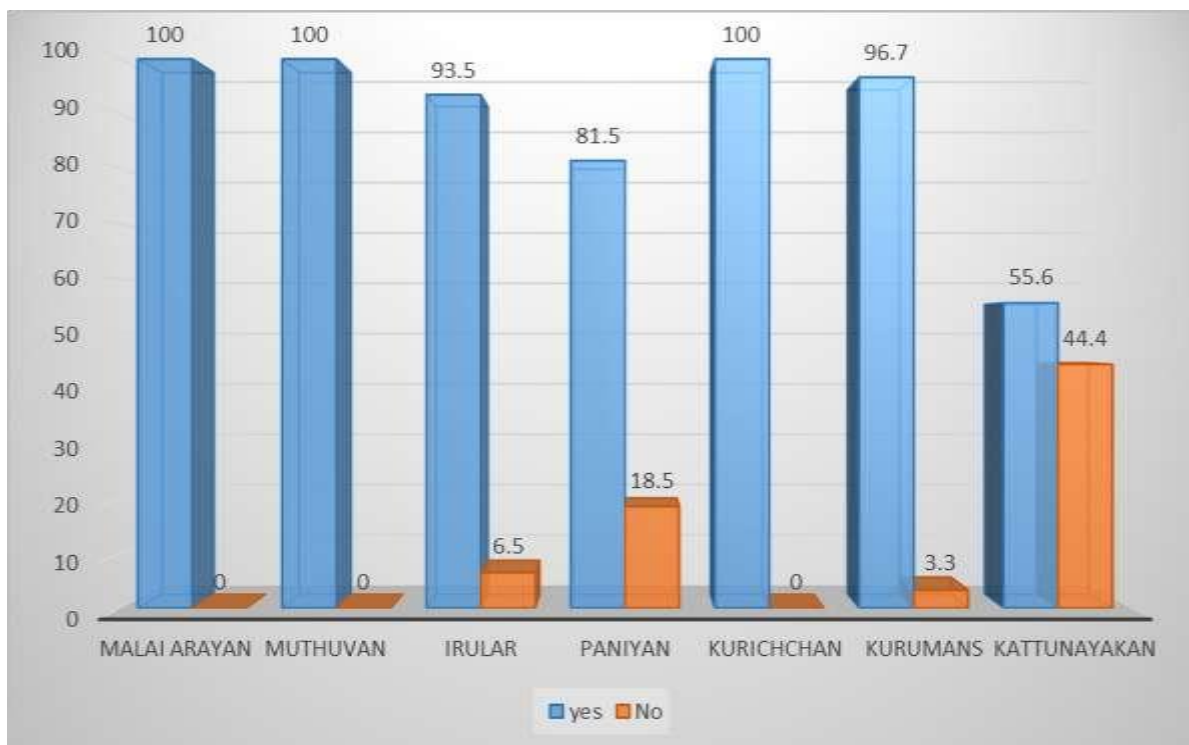


Source: Primary Survey

Figure 6.5 pictures out the information about the awareness of workers about the union or association in their work place. It is clear from the figure that 24.7 percent opined that they are members of union/ association, 59.6 percent are not a member of union or association. Whereas, 15.7 percent are not aware of any union or association.

It is more evident from the figure that Kuruman, Malai Arayan, Kurichchan and Irular communities are more aware of union/ association whereas, Muthuvan, Kattunayakan and Paniyan are least aware of the same. Among the communities, 32.7 percent kattunayakan and 22.5 percent paniyan community opined that they are unaware of union/ association in their work place. Another thing noticed among all communities is that most of the males are aware of union/ association and their female counterparts are not aware of union/ association. Now we also have to know their participation in union/ association to understand their bargaining power and the benefits they received through the union/ association. This is given in the figure below.

Figure 6.6: Participation of the Respondents in the Union / Association (in Percentage)



Source: Primary Survey

Figure 6.6 displays the participation of the tribal workers in different unions, among those who are aware of union in their work place. It is clear from the figure that 94.7 percent workers who are aware of union in their work place are members of the union whereas, 5.3 percent still lag behind in their participation in union/ association. It is more evident from the figure that Kurumans, Malai Arayan, Kurichchan and Irular communities are more aware of union/ association whereas, Muthuvan, Kattunayakan and Paniyan are least aware of the same. Another thing noticed among all communities is that most of the males are aware of union/ association and their female counterparts are not aware of union/ association.

Community wise analysis shows that all the workers in Malai Arayan community, Muthuvan and Kurichchan community are members of the union. Whereas, about 96.7 percent Kurumans are in the union and 3.3 percent are not in any union or association likewise, 6.5 percent Irular community workers are also not in any union/ association in their work place. While, about Kattunayakan and Paniyan community we get a different picture. 44.4 percent Kattunayakan and 18.5 percent Paniyan community are not in any association/ union in their work place. This means that they lag behind the other communities in bargaining power in their work place, which is considered a major reason why they lag behind the others in work and income. They can be easily exploited, which we realized from the survey, they are not aware of what is going around them. It is also observed from the survey that those who are members of union are very much benefitted from the associations in many aspects related to their employment. It plays an important role in job security, wage/ salary and other benefit issues, promotion related issues and working conditions. The union has very much helped the tribal communities to have bargaining power to an extent, while less than 20 percent who are members of trade union opined that they are don't benefitting from the union, or in another sense they are not helping the tribal workers in major issues related to their work, salary and promotions.

In short we can get the idea that most of the working places where the tribals are more does not have any union or association, and about 15 percent especially females are not aware of such thing and among the known people among different communities the participation is different. Only few communities are members of the union and getting benefit out of it some don't know about the importance of such a union or association especially among the excluded, deprived and exploited social groups. This made the employers exploit them more. The next section gives a clear picture of the same.

6.3 Monthly Income of the Household

Monthly income of the sample communities is analysed in the study, as it is difficult to get their annual income. It is observed from the survey that Malai Arayan community is better off compared to other communities in terms of monthly income followed by Kurichchan and kurumans community.

Table 6.9: Monthly income (in Rupees) of the Household

Sample Communities	Monthly Income					Total
	<5000	5001-15000	15001-25000	25001-35000	>35001	
Malai Arayan	2.10	9.30	29.90	27.80	30.90	100.00
Muthuvan	0.00	28.10	65.60	4.70	1.60	100.00
Irular	0.00	47.80	43.30	4.50	4.50	100.00
Paniyan	1.60	54.90	38.30	3.10	2.10	100.00
Kurichchan	1.20	14.10	35.30	18.80	30.60	100.00
Kurumans	1.50	15.40	36.90	18.50	27.70	100.00
Kattunayakan	8.90	53.30	33.30	2.20	2.20	100.00
Total	1.80	34.30	39.40	11.00	13.50	100.00

Source: Primary Survey

It is clear from the table 6.9 that 39.4 percent earns income between Rs. 15001 to 25000. Followed by 34.3 percent earns more than Rs. 5001-15000 income, 13.5 percent with Rs.>35001, 11 percent earns less than Rs.25001-35000, 1.8 percent earns Rs. <5000, Community wise analysis shows that Malai Arayan followed by Kurichchan and Kurumans community earns income above Rs. 35000 per month followed by. While, the Kattunayakan Paniyan, and Irular earns income between Rs. 5000-15000. On the other hand Muthuvan households are in the income category 15001-25000.

The community earning lowest income is Kattunayakan Paniyan community followed by Irular and Muthuvan community. The earnings given by Malai Arayan community is comparatively higher than other communities. To get a clear picture of the linear relationship between land holdings and monthly income of the tribal households along with magnitude and direction of the relationship, we use correlation coefficient between the two and the result is given below.

Table 6.10: Correlation Results: Land holdings and Monthly income

Model		Land Owned in Cents	Annual Income from Occupation
land owned in cents	Pearson Correlation	1	
	Sig. (2-tailed)	0	
	N	616	
Annual income from occupation	Pearson Correlation	.355**	1
	Sig. (2-tailed)	0	
	N	616	616
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: computed from primary survey

From the table (6.10) we can see that there is a linear positive relation between land holdings and monthly income. The correlation coefficient is .460 and is statistically significant ($p = .000$). The result revealed that land holdings possessed by the tribal communities positively influenced their household income. It is observed from the survey that those tribal households used their land holdings for agricultural activities can earn better income than others.

The correlation coefficient provides causal relationship between land holdings and income earned by the tribal households. Therefore, simple linear regression is used to check the degree of relation between the two variables. Linear regression helps us to find out what extend the variables are associated with each other.

Table 6.11: Regression result: Land holdings and Monthly Income

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.182	0.084		28.402	0.000
land owned in cents	0.372	0.022	0.355	9.411	0.000
R = .355 ; R Square = 0.126, adjusted R Square = .125, F =88.560 , p= .000					

Source: Calculated from Primary survey

Model: Monthly Income = 3.119 + 0.472 (Land Holdings)

A simple linear regression was carried out to predict dependent variable based on independent variable (Table 6.11). A significant regression equation was found with $F(1,615) = 88.560$, $P = .000$. The R^2 value is .126 it indicates that 12 percentage of variation in monthly income can be explained by the independent variable landholdings in cents of the tribal households. The slope coefficient of independent variable is .372. It reveals that even though the increase in land in cents positively contributed to monthly income of tribal households, but the influence on their income is very meagre. This gives us the idea that they depend on their occupation for income more than land holdings (Chacko, 2018)

6.3.1 : Kruskal -Wallis Test

To examine the community wise differences in monthly income Kruskal-Wallis test was conducted across seven tribal communities such as Malai Arayan, Muthuvan, Irular, Paniyan, Kurichchan, Kurumans and Kattunayakan. Kruskal-Wallis test is used with multiple groups Table 6.12. It is the non- parametric version of One-Way ANOVA. Kruskal –Wallis compares means of more than two independent groups. With, $\chi^2(6,616) = 191.802$, $p = .000$. The mean rank of Malai Arayan community (439.07) followed by Kurichchan community (423.18) followed by Kurumans community (409.34), Muthuvan community (281.75), Irular community (258.51), Paniyan community (211.17) and Kattunayakan community (194.70). Result means that the income is higher among Malai Arayan community followed by Kurichchan and Kurumans communities. The Post hoc tests are conducted to evaluate pair wise comparisons between 7 communities. Test found that 12 pairs are statistically significant. It implies that monthly income is not same across Paniyan- (Malai Arayan, Kurumans and Kurichchan communities), Kattunayakan- (Malai Arayan, Kurumans and Kurichchan communities), Irular- (Malai Arayan, Kurumans and Kurichchan communities) and Muthuvan- (Malai Arayan, Kurumans and Kurichchan communities). The results of this test concluded that monthly income of Malai Arayan, Kurichchan and Kurumans communities significantly differ from Paniyan, Kattunayakan, and Irular and Muthuvan communities. And there was no evidence for high significant differences among the communities' Malai Arayan, Kurichchan and Kurumans in terms of their income (Detailed table in Ref: Annexure 6.3).

Table 6.12: Kruskal- Wallis Test Result – Scheduled Tribe Communities and Monthly Income

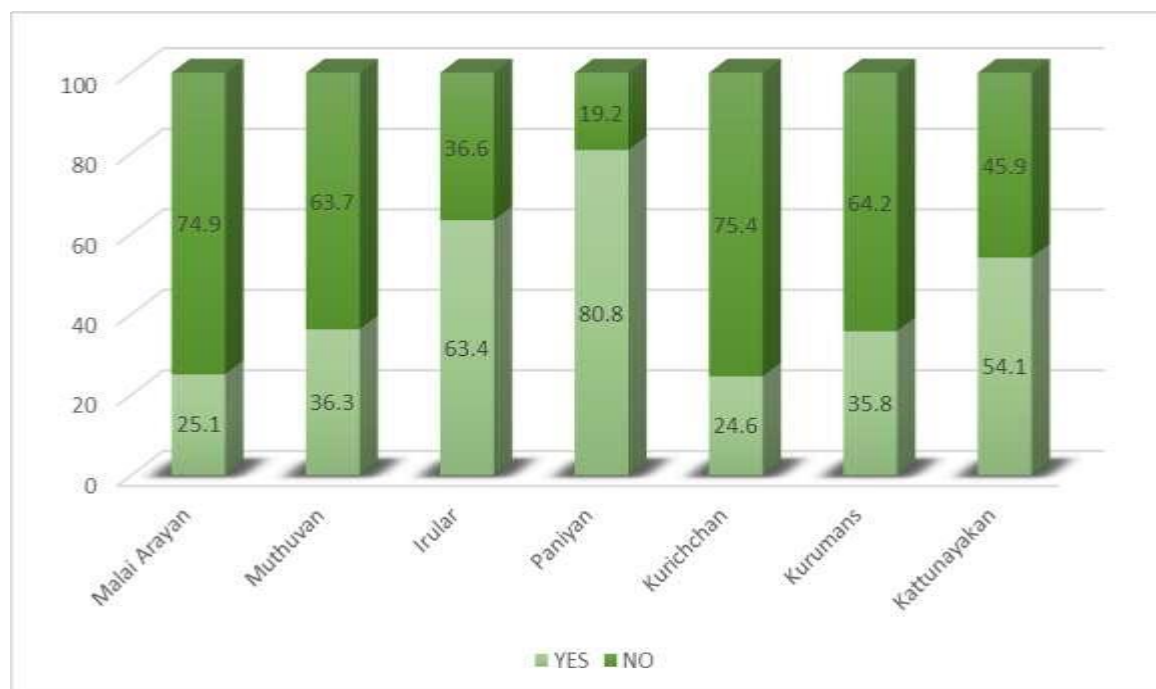
Sample Communities	N	Mean Rank	Pair- Wise Comparison	Test-Statistic	P- Value
Malai Arayan	97	439.07	Kattunayakan-Kurumans	214.638	0.000
Muthuvan	64	281.75	Kattunayakan-Kurichchan	228.482	0.000
Irular	67	258.51	Kattunayakan-Malai Arayan	244.372	0.000
Paniyan	193	211.17	Paniyan-Kurumans	-198.173	0.000
Kurichchan	85	423.18	Paniyan-Kurichchan	-212.017	0.000
Kurumans	65	409.34	Paniyan-Malai Arayan	227.906	0.000
Kattunayakan	45	194.70	Irular- Kurumans	-150.831	0.000
Total	616		Irular- Kurichchan	-164.675	0.000
$\chi (6,616)=162.740, P=0.000$			Irular- Malai Arayan	180.565	0.000
			Kattunayakan-Kurumans	-127.588	0.000
			Kattunayakan-Kurichchan	-141.432	0.000
			Kattunayakan-Malai Arayan	157.322	0.000

Source: computed from primary data

Next section deals with the unemployment aspects of the workers of principal status like the percent unemployed, reasons for unemployment and the like. Unemployment is low among Scheduled tribes in India while high among the Scheduled tribes in Kerala. So it is important to know the time span and reason for unemployment among them in Kerala.

6.4 Unemployment Aspects

Figure 6.7: Unemployment aspect of the Sample Tribal Communities (in Percentage)



Source: Primary Survey

Figure 6.7 provides the employment aspect of the tribal communities in Kerala in the last year prior to the survey. According to the respondents, 51.3 percent responded that they were unemployed in the current year prior to the survey and 48.7 percent opined that they were not unemployed. It is observed from the survey that the unemployed were higher among Paniyan (80.8 percent), Irular (63.4 percent) and Kattunayakan (54.1 percent) community and least among Kurichchan (24.6 percent) and Malai Arayan (25.1 percent). The Muthuvan and Kuruman community, the unemployed percentage is 36.3 per cent and 35.8 percent respectively.

In short we can say that the unemployment is high among the tribal communities. Now we have to know the spell of unemployment and the reason for unemployment to clearly understand the depth/ severity of unemployment among different communities and its impact on their livelihood.

Table 6.13: Spell of Unemployment of the Respondents (in Percentage)

Sample Communities	Spell of Unemployment						Total
	One week	More than one week to 2 weeks	2 weeks to 1 month	One month to 2 months	2 months to 3 months	3 to 6 months	
Malai Arayan	7.40	40.70	44.40	3.70	3.70	0.00	100.00
Muthuvan	9.10	36.40	39.40	12.10	3.00	0.00	100.00
Irular	7.70	37.20	32.10	19.20	3.80	0.00	100.00
Paniyan	6.80	31.10	21.60	17.30	22.70	0.50	100.00
Kurichchan	6.40	48.90	25.50	12.80	6.40	0.00	100.00
Kurumans	2.30	30.20	48.80	18.60	0.00	0.00	100.00
Kattunayakan	9.40	41.50	32.10	17.00	0.00	0.00	100.00
Total	7.00	34.90	28.80	15.80	13.20	0.30	100.00

Source: Primary Survey

Table 6.13 illustrates the spell of unemployment among different tribal communities. It is clear from the table that the tribal communities are unemployed more than one week to 2 weeks (34.9 percent) followed by two weeks to one month (28.8 percent), one month to two months (15.8 percent), 2 months to three months (13.2 percent), one week (7 percent) and three to six months (0.3 percent).

Among the communities the spell of unemployment is high among Paniyan community followed by Irular community, Muthuvan and Kattunayakan. Almost all communities are unemployed more than one week to one month. Whereas, about 22.7 percent Paniyan community are unemployed from 2 months to 3 months. It is noted in the survey that the unemployed are high among females than males. Especially among the Malai Arayan, Kurumans, Kurichchan and Muthuvan community the spell of unemployment is high among females than males whereas, a different picture is seen to some extent among Irular community and Kattunayakan community and more among Paniyan. The spell of unemployment is high among the males and females of Paniyan community.

Table 6.14: Reason for Unemployment of Respondent Workers (in Percentage)

Sample Communities	Reasons For Unemployment				Total
	Climatic Conditions	Illness	Lack of Work	Others	
Malai Arayan	3.70	16.70	74.10	5.60	100.00
Muthuvan	0.00	12.10	77.30	10.60	100.00
Irular	5.10	9.00	82.10	3.80	100.00
Paniyan	2.20	25.70	64.30	7.80	100.00
Kurichchan	0.00	21.30	70.20	8.50	100.00
Kurumans	0.00	7.00	83.70	9.30	100.00
Kattunayakan	0.00	24.50	73.60	1.90	100.00
Total	2.00	20.40	70.50	7.20	100.00

Source: Primary survey

Table 6.14 shows the reasons for unemployment of surveyed tribal communities in Kerala. It is evident from the table that 70.5 percent are unemployed due to lack of work or it is seasonal unemployment. 20.4 percent are unemployed due to illness and 2 percent due to climatic conditions and 7.2 percent due to other than above said reasons. The communities which are unemployed due to illness are Paniyan followed by Kattunayakan and Kurichchan community. Kurumans and Irular are more unemployed due to lack of illness. Irular community followed by Paniyan and Malai Arayan are unemployed due to climatic conditions.

Now we have to know the efforts taken by the communities during unemployment and it is seen in the survey that most of the communities are not taking any effort. They just wait someone to call them for work. They are of the opinion that, if there is work someone will call and no use of searching for work during off seasons. Only few of the tribals sought on some days during unemployment and only few sought work on most days during unemployment. This is given in detail (Ref. Annexure 6.4).

Skill development plays an important role in getting high paid employment. Tribal department is taking great effort for the skill development of tribal communities and their employment. But still so many tribals are not aware of skill development and not getting benefit out of it. Details on skill development of the workers are given in the following table.

6.5 Government Policies and Tribal Employment

Various government programmes and policies such as skill development programmes, Kudumbasree and MGNREGA activities, Influence of Government and NGO, awareness of education, employment, skill development and development programmes along with influence of institutional policies are analysed here

Table 6.15: Distribution of Sample Workers on the basis of Skill Development (in Percentage)

Sample Communities	Skill Development Training					Total
	Yes Formal	Hereditary	Training for Job	Others	None	
Malai Arayan	1.90	0.00	3.70	0.00	94.40	100.00
Muthuvan	1.10	0.00	0.50	1.60	96.70	100.00
Irular	0.00	0.80	1.60	1.60	95.90	100.00
Paniyan	2.20	0.00	2.80	1.30	93.70	100.00
Kurichchan	11.50	0.00	1.60	0.00	86.90	100.00
Kurumans	6.70	0.00	1.70	0.00	91.70	100.00
Kattunayakan	0.00	0.00	0.00	0.00	100.00	100.00
Total	3.30	0.10	2.10	0.80	93.70	100.00

Source: Primary survey

From the table 6.15 we can see that 93.7 percent of the workers did not receive any skill development. The major reason for this is that they cannot leave the job and go for skill development as their family is dependent on their income. Most of the workers in Paniyan, Irular and Muthuvan communities are not aware of such programmes provided by tribal department and other organisations for their upliftment. The community which did not receive any skill development is Kattunayakan community. Actually most of them are not aware of such programmes.

3.3 percent has received formal skill development programme, 2.1 percent received training for job, and 0.1 percent received training for hereditary activities.

Table 6.16: Field of Skill Development of Sample Workers (in Percentage)

Sample Communities	Field of Skill Development							Total
	Book Binding	Training For Government Exams	Printing Training	Tailoring	Construction	Driving	Others	
Malai Arayan	16.70	16.70	0.00	0.00	8.30	25.00	33.30	100.00
Muthuvan	0.00	16.70	0.00	0.00	16.70	33.30	33.30	100.00
Irular	0.00	33.30	0.00	33.30	0.00	33.30	0.00	100.00
Paniyan	13.80	0.00	13.80	48.30	10.30	0.00	13.80	100.00
Kurichchan	0.00	40.00	0.00	52.00	0.00	4.00	4.00	100.00
Kurumans	0.00	30.00	0.00	60.00	10.00	0.00	0.00	100.00
Total	6.80	20.50	4.50	39.80	6.80	9.10	12.50	100.00

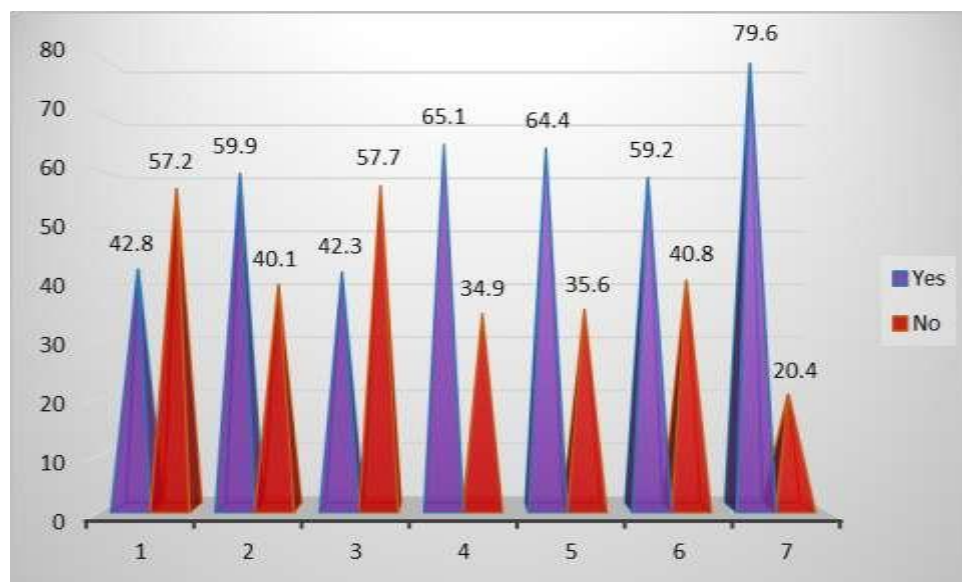
Source: Primary Survey

Table 6.16 demonstrates that 39.8 percent learned tailoring skill followed by 20.5 percent received training for government exams, 6.8 percent learned book binding and construction works training, 9.1 percent learned driving and 4.5 percent learned printing skill. 12.5 percent received other types of skills. Most Malai Arayan, Muthuvan and Irular community received driving skill. Most of the Kurumans and Kurichchan and Irular learned tailoring and received training for government exams. Skill development is fruitful only when the persons who received skill development will change or are placed in a better employment with the skill they learned so the study also go through the number of persons who changed their employment after skill development.

Employment aspect of the tribal communities those who received skill development are shown in the table (Ref. Annexure 6.5). 26.1 percent of the tribal communities opined that they have tried for employment but didn't have, 22.7 opined that they are utilising the skill development for subsidiary source of income. 15.9 are trying for job who just completed the skill training, 12.5 percent changed their employment after skill development. Those who have changed employment are mostly those who received training for government job and those who learned driving and construction. The community which changed their employment after skill development are Kurumans and Muthuvan and the community which not at all changed are Malai Arayan. 50 percent of Irular community not at all tried for a change, whereas, 50 percent tried for change but didn't have work. Most of the tribals opined

that they cannot get a high wage job according to the skills they receive. But most of them can use it for own purposes.

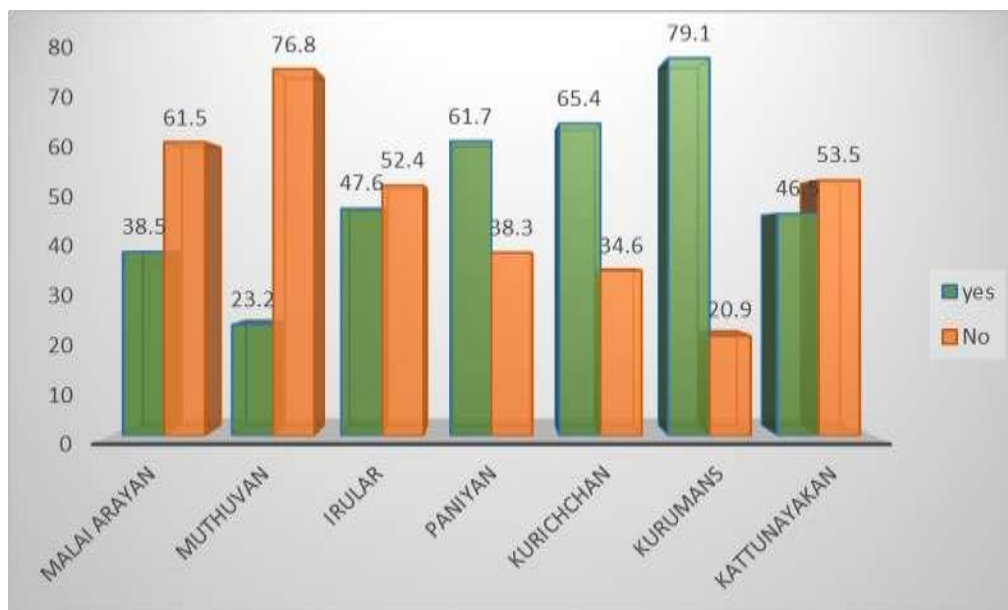
Figure 6.8: Participation of Sample Workers in MGNREGA (in percentage)



Source: Primary Survey

Figure 6.8 illustrates the participation of tribal households in MGNREGA. It is clear from the figure that 59.3 percent are engaged in the programme whereas, 40.7 percent are not participated in this programme. Gender wise classification in the MGNREGA programme during the survey showed that males are not interested in this programme, as it is not remunerative and lack of regular payment. Most of the tribals, especially the Paniyan and Kattunayakan and some of, Irular and Muthuvan males want daily income for their consumption. They will go for only such jobs. The respondents also opined that most females are in this programme so it is difficult to work with them so not going for work even though they are MGNREGA card holders. And some of the females among the Malai Arayan Kurichchan and Kurumans community work in MGNREGA, when the work is in their field. So it will be doubling beneficial for them. Among the Irular community most are engaged in their own house construction through MGNREGA, there also they feel beneficial in working in MGNREGA.

Figure 6.9: Membership of Sample Workers Kudumbasree or Ayalkootam (in percentage)



Source: Primary survey

The participation of female workers in kudumbasree or ayalkootam is shown in the figure 6.9. It is evident from the figure that 52.2 percent of the tribal females are engaged in kudumbasree or ayalkootam whereas, 47.8 percent are not in kudumbasree or ayalkootam. Among different communities, the communities in Wayanad district i.e. Paniyan, Kurichchan, Kurumans and Kattunayakan are more in kudumbasree or ayalkootam than the communities in Idukki and Palakkad. Another trend seen among the communities is that some of them were members earlier but has withdrawn from this, as there is clashes within the kudumbasree or ayalkootam or the dominance of some as main members.

Kudumbasree or ayalkootam in Wayanad district is more active compared to others. NABARD is also playing a major role in Wayanad. Among the communities in Wayanad, Kurichchan community in is more active (jack fruit food items production and supply) followed by Kurumans community (paddy cultivation). Here also we can see the dominance of educated community rather than the others.

Table 6.17: Distribution of Surveyed Communities on the basis of their Registration in Placement Agency (in percentage)

Sample Communities	Registered in Any Placement Agency					Total
	Employment Agencies	Private. Placement Agencies	Both	Other Efforts	No Effort	
Malai Arayan	49.80	0.50	0.00	0.00	49.80	100
Muthuvan	4.40	0.00	0.00	0.00	95.60	100
Irular	4.90	2.40	0.00	5.70	87.00	100
Paniyan	8.50	0.20	0.00	2.20	89.10	100
Kurichchan	35.10	3.70	0.50	0.00	60.70	100
Kurumans	54.20	1.70	0.00	0.00	44.20	100
Kattunayakan	10.20	1.00	0.00	0.00	88.80	100
Total	21.80	1.10	0.10	1.20	75.80	100

Source: Primary Survey

It is evident from the table 6.17 that 75.8 percent of the tribals are not registered in any placement agency. Whereas, about 21.8 percent has registered in government employment exchange, 1.1 percent in private Employment agencies, 0.1 percent in both one and 1.2 percent in others like to some person who has hold in their community.

Within the tribal communities, 54.2 percent of Kurumans, 49.8 percent Malai Arayan and 35.1 percent Kurichchan are registered in government employment exchange. 4.4 percent Muthuvan, 4.9 percent Irular, 8.5 percent Paniyan and 10.2 percent Kattunayakan has registered in the same. About 3.7 percent Kurichchan, 2.4 percent Irular, 1.7 percent Kurumans, 1 percent Kattunayakan, 0.5 percent Malai Arayan and 0.2 percent Paniyan has registered in private Placement agencies. Only 1 percent Kurichchan has registered in both and about 5.7 percent Irular and 2.2 percent Paniyan had made some other efforts for employment. The communities like Muthuvan, Paniyan, Kattunayakan and Irular are the communities which is taking least effort to get better employment through these channels. Another notable thing found in the survey is that the people of age group 15-35 of Kurichchan, Kurumans and Malai Arayan and the upcoming generations are more conscious

about better job and are compulsorily registering in employment exchanges and other placement agencies. This can be a positive sigh of their development.

Apart from skill development MGNREGA plays an important role in the development of tribal communities especially among Kattunayakan, Paniyan, Irular and Muthuvan community. It is observed from the survey that apart from the earnings from MGNREGA, this programme makes them more social and mingling with the society, the Kattunayakan community which is more introverts are now more social because of the programme as opined by the respondent. Apart from this they are now little bit aware of what is going on in the society and the opportunities available for them through the working together of other Sample Communities and other social groups. Which played an important role in their life and they are thankful to the programme. This is same with the kudumbasree/ ayalkootam activities. But here the limitation is that the members of kudumbasree/ ayalkootam are mostly from their communities. On the other hand, for MGNREGA the picture is different. So now we have to know the participation of tribal communities in MGNREGA. Now we have to know whether the government and the working of NGO helped the ST in their Employment selection and movement. This is pictured below

Table 6.18: Government Influence in Getting job/ job change (in percentage)

Sample Communities	Government Influence in Job				Total
	Not Known	Not At All Changed	Somewhat	Strong Influence	
Malai Arayan	1.00	8.20	52.60	38.10	100.00
Muthuvan	15.60	0.00	78.10	6.30	100.00
Irular	23.90	9.00	47.80	19.40	100.00
Paniyan	31.10	7.30	48.70	13.00	100.00
Kurichchan	3.50	3.50	55.30	37.60	100.00
Kurumans	3.10	3.10	50.80	43.10	100.00
Kattunayakan	20.00	11.10	62.20	6.70	100.00
Total	16.40	6.20	54.40	23.10	100.00

Source: Primary Survey.

Table 6.18 demonstrates the respondent's response to the question of government influence on the betterment of their living via occupational. From the table it is clear that only 23.1 percent have strongly agreed with the government influence in their betterment and it is high among the Kurumans (43.1 percent), Malai Arayan (38.1 percent) and Kurichchan (37.6

percent) whereas, 19.4 percent Irular, 13 percent Paniyan, 6.7 percent Kattunayakan and 6.3 percent Muthuvan opined strong influence of government in their occupation and upliftment. The communities' Malai Arayan, Kurichchan and some Kurumans were dissatisfied with the 2 percent reservation in the occupation. Whereas, Paniyan, Irular, Kattunayakan is fully dissatisfied with the land distribution which can play a major role in their occupation. As against all these Muthuvan community is fully satisfied with the land given to them by the government which changed their occupation somewhat from casual labours to self-employed. But they also opined that they are getting jobs like forest guard which is riskier.

54.4 percent of the surveyed Sample Communities are somewhat agreed with the influence of government in getting better job and upliftment in their community. It is high among Kurichchan (55.3 percent), Malai Arayan (52.6 percent) and Kurumans community (50.8 percent). And about 62.2 percent Kattunayakan, 78.1 percent Muthuvan, 48.7 percent Paniyan and 47.8 percent Irular are somewhat better off with the government policies on employment and upliftment. About 16.4 percent opined not known/ not responded to the question. Paniyan (31.1percent), Irular (23.9 percent), Kattunayakan (20 percent) and Muthuvan (15.6 percent), were high among these and about 6.2 responded that there is not much change in their employment and life with government effort and programmes.

Three- point likert scale on the tribal households on government influence on job through reservation and direct recruitment through employment exchanges, special recruitment and the like shows that all the communities agreed that government has some way or the other influenced in job selection and movement.

Table 6.19: NGO Influence in Getting job/ Job Change (in percentage)

Sample Communities	NGO Influenced in Getting Job /Job Change				Total
	Not Known	Not At All Changed	Neutral	Mild Influence	
Malai Arayan	8.20	79.40	11.30	1.00	100.00
Muthuvan	6.30	89.10	3.10	1.60	100.00
Irular	65.70	31.30	0.00	3.00	100.00
Paniyan	42.50	56.50	1.00	0.00	100.00
Kurichchan	49.40	23.50	27.10	0.00	100.00
Kurumans	50.80	35.40	13.80	0.00	100.00
Kattunayakan	60.00	40.00	0.00	0.00	100.00
Total	39.00	52.80	7.60	0.60	100.00

Source: Primary Survey

Table 6.19 shows the NGO s influence on occupational selection and upliftment of surveyed tribal communities in Kerala. From the table it is clear that 52.8 percent are not aware of NGOs it is high among all the communities. 39 percent opined that they don't know about NGOs and it is high among Paniyan, Irular, Muthuvan, and Kattunayakan community. 7.6 are benefitted from NGOs and it is high among Kurichchan community with 27.1 percent followed by Kurumans 13.8 percent and Malai Arayan 11.3 percent respectively.

From the table 6.19, it is clear that that government has a major role in the occupational selection of the tribal communities. Now we have to understand the impact/ influence of government policies in ST so the Next section is about the influence of government policies like their awareness of the policies like privatisation, globalisation, demonetisation, land reforms, green revolution and tourism and its impact on the employment of the tribal communities. As against the government role in job selection or movement, Three- point likert scale on the tribal households on NGOs influence on job through various skilled and unskilled employment activities showed that all the communities except Kurichchan community opined that NGOs has no way influenced in job selection and movement. They are not even aware of such organisations. This shows that the government is playing a huge and a great role among tribal households than the NGOs.

Apart from all these we have to know the participation of tribal communities in government job. Their awareness, their preference for government job by different communities gives a clear picture for the same.

Table 6.20: Sample Respondents Attempt for Government job (in percentage)

Sample Communities	Attempt for Government Job				Total
	Yes Trying	Tried for Some Time	Not At All Tried	Got But Didn't Went	
Malai Arayan	21.10	7.00	71.90	0.00	100.00
Muthuvan	0.60	0.00	97.20	2.20	100.00
Irular	4.50	1.80	93.60	0.00	100.00
Paniyan	4.80	3.10	92.10	0.00	100.00
Kurichchan	7.50	10.20	81.70	0.50	100.00
Kurumans	16.70	8.30	74.00	1.00	100.00
Kattunayakan	4.10	0.00	95.90	0.00	100.00
Total	7.60	4.20	87.80	0.50	100.00

Source: Primary survey

Table 6.20 indicates the distribution of tribal communities in government job. From the table it is clear that 87.8 person opined that they never tried for government job, 7.6 percent is trying for government job, 4.2 percent tried for some time but withdrawn as they got aged or busy with other works. Whereas, 0.5 percent opined that they got government job but didn't went.

Among the communities, Malai Arayan followed by Kurumans are trying more for government job whereas, Muthuvan community is trying least for government jobs. The communities which least tried for government job are high among Muthuvan, and Kattunayakan community. Whereas, the communities didn't went for the job even after getting is more among Muthuvan followed by Kurumans and Kurichchan community. According to them they didn't went as the job they got is riskier like forest guard. And they are given the duty of driving off elephants, which is riskier for their life.

As most of the tribal communities not tried for government jobs, we have to know the reason for their lack of participation in such jobs. It is clear from the survey that most of them don't know about the notification/ vacancies for various jobs. It is seen from the survey that 32.7 percent of the persons of Sample Communities are not aware of the information about notifications / registering for government job. 24.8 percent opined that they lack education to apply for government job. 14.5 opined that they even don't know about PSC/ government exams and 3.7 percent because of other reasons. Whereas, 24.3 percent opined that they are not interested in government jobs.

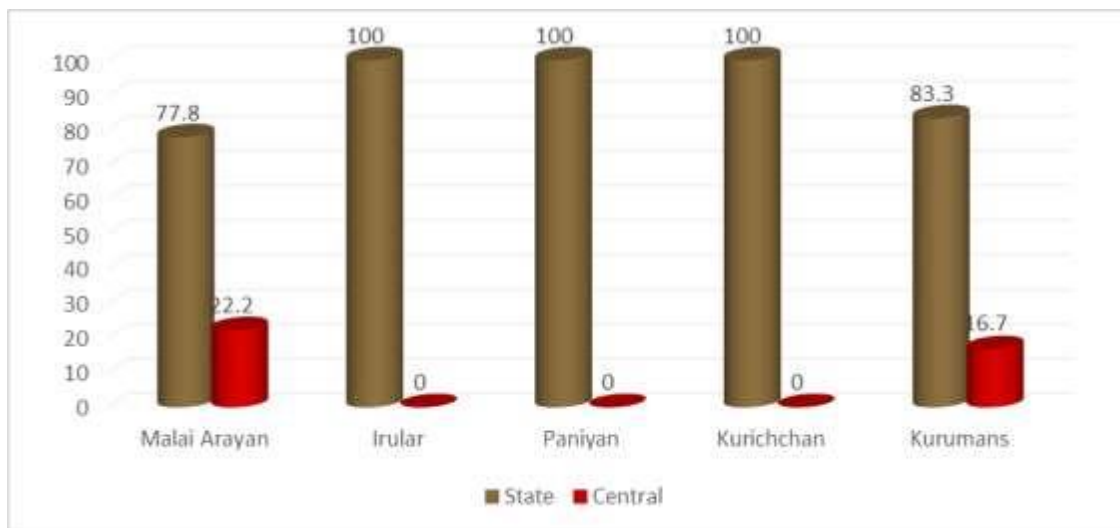
Among the communities, most of the persons of Kurumans community (52.1 percent) followed by Kurichchan community (43.4 percent) opined that they lack information about vacancies in government jobs as per their qualification, 23.4 percent Kattunayakan community followed by 22.7 percent Muthuvan community opined that they lack awareness about PSC and one time registration for government job the most. 41.2 percent Paniyan and 33 percent Irular community has mostly opined that they lack education for government jobs. 8.6 percent Kurichchan and 7.3 percent Malai Arayan community mostly opined that their land become unproductive and earnings from land will decline when they go for such jobs.

As against all these, 50.4 percent Malai Arayan followed by 39.2 percent Muthuvan opined that they don't have interest in government jobs. This is the case with those who never tried for government jobs, now we have known about the type of government job (i.e. whether

state government, central government or both) in which the persons tried or trying ? A clear picture of this is given (Ref. Annexure 6.6). It is evident from the survey that most of them tried / trying for state government job (69.2 percent), about 22 percent tried for central government jobs and only 8.8 percent are tried/ trying both. Among the communities, Kattunayakan (50 percent) and Malai Aryan (39.6 percent) are the communities which are trying mostly for central government jobs. All the Muthuvan community has tried only for state government jobs and highest percentage of Kurichchan are trying for both central and state government jobs.

Till now we talk about those who are not in government job. The following tables deals about those who are employed in government jobs. The job in which they are engaged in, the type of government in which they are employed and the way by which they got government job are analysed in the following section. From the above table the important we have to note is that none of the Kattunayakan and Muthuvan community is engaged in government job. So the next section is about the communities, Malai Arayan, Irular, Paniyan, Kurichchan and Kurumans.

Figure 6.10: Type of Government Job the Respondents Engaged in (in percentage)



Source: Primary Survey

Figure 6.10 depicts the type of government in which the government employees are engaged in. firstly. From the figure it is clear that 84.3 percent are engaged in state government whereas, 15.7 percent are in central government employees. Among the communities, Malai Arayan community (22.2 percent) and Kurumans community (16.7 percent) are the

communities engaged as central government employees. All other communities are engaged fully in state government jobs.

Table 6.21: Distribution of Government Employees on the basis of method of Appointment (in percentage)

Sample Communities	Method of Appointment					Total
	Appointment Through Main List	Appointment Via ST Quota	Special Recruitment	Camp/ Direct Appointment	Others	
Malai Arayan	17.80	42.20	26.70	13.30	0.00	100.00
Irular	0.00	7.70	23.10	69.20	0.00	100.00
Paniyan	0.00	100.00	0.00	0.00	0.00	100.00
Kurichchan	40.00	60.00	0.00	0.00	0.00	100.00
Kurumans	12.50	41.70	8.30	25.00	12.50	100.00
Total	16.90	37.10	19.10	23.60	3.40	100.00

Source: Primary Survey

Table 6.21 gives a detailed picture of the way in which they got the government job. About 37.1 percent has got government job through ST supplementary list, 23.6 percent got government jobs through the camps conducted by the military service, 19.1 percent got government job through special recruitment, and 16.9 percent get in to the government service through main list and 3.4 percent through other ways like employment exchanges. It is clear from the table that only Malai Arayan, Kurichchan and Kurumans got into government job through main list, whereas, most of the tribal communities got appointment in government services through ST quota and special recruitment.

Table 6.22: Awareness of Educational policies (in percentage)

Sample Communities	Awareness on Educational Policies			Total
	Not Aware	Somewhat Aware	Fully Aware	
Malai Arayan	2.10	7.20	90.70	100.00
Muthuvan	26.60	62.50	10.90	100.00
Irular	17.90	55.20	26.90	100.00
Paniyan	29.50	49.20	21.20	100.00
Kurichchan	2.40	11.80	85.90	100.00
Kurumans	3.10	6.20	90.80	100.00
Kattunayakan	28.90	48.90	22.20	100.00
Total	17.00	34.90	48.10	100.00

Source: primary Survey

Table 6.22 gives a detailed picture on the awareness of the tribal communities on educational policies by government which is an important stone to employment. From the table we can observe that 48.1 percent are fully aware of educational policies, 34.9 percent somewhat aware and only 17 percent are not aware of the same. Mainly, old age group and illiterates' falls in this category as per the survey. About 91 percent of the Malai Arayan and Kurumans were fully aware of the educational policies followed by 85.9 percent Kurichchan. Muthuvans are least aware of the educational policies. The main reason which we can notice from the survey is that they are not interested in education and other activities, and they would like to engage fully on agriculture. According to them education and migration will spoil their culture.

The communities which are least aware of educational policies are Paniyan (29.5 percent) and Kattunayakan (28.9 percent) community followed by Muthuvan community (26.6 percent). Community wise analysis shows that 90.7 percent Malai Arayan are fully aware of educational policies 7.2 somewhat aware whereas, 2.1 percent not at all aware of the educational policies. Within the Muthuvan community 62.5 percent somewhat aware of educational policies, 10.9 fully aware and about 26.6 percent are not aware of educational policies. Among the Irular, 55.2 percent has somewhat aware, 26.9 fully aware and 17.9 not at all aware of educational policies.

49.2 percent followed by 29.5 percent and 21.2 percent of the Paniyan are somewhat aware not aware and fully aware of educational policies respectively. Most of the Kurichchan i.e. about 85.9 percent fully aware of the educational policies, 11.8 percent are somewhat aware and 2.4 percent are not aware of educational policies. Like the Kurichchan and Kurumans community, 90.8 percent of the Kurumans are aware of educational policies, 6.2 percent somewhat aware and 3.1 percent not at all aware of the policies of government for education of ST. 48.9 percent Kattunayakan is somewhat aware of the educational policies of government, 28.9 percent not aware and 22.2 percent fully aware of this.

Three- point likert scale on awareness of educational policies shows that tribal households are somewhat aware of the educational policies of the government including stipend and hostelling facilities. Among the communities Malai Arayan, Kurichchan and Kurumans communities are fully aware of educational policies for the tribal students.

Table 6.23: Awareness of Employment Policies (in percentage)

Sample Communities	Awareness on Employment Policies			Total
	Not Aware	Somewhat Aware	Fully Aware	
Malai Arayan	12.50	16.50	71	100.00
Muthuvan	1.60	84.40	14.10	100.00
Irular	0.00	83.60	16.40	100.00
Paniyan	1.60	84.50	14.00	100.00
Kurichchan	1.20	18.80	80.00	100.00
Kurumans	0.00	13.80	86.20	100.00
Kattunayakan	2.20	62.20	35.60	100.00
Total	1.00	55.50	43.50	100.00

Source: primary survey

Table 6.23 shows the awareness of Sample Communities in employment programmes like Tribal Cooperative Marketing Development Programmes, Swarnajayanti Gram Swarozgar Yojana (SGSY), National Food for Work Programme (NFFWP) and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). It is clear from the table that 55.5 percent are somewhat aware of these employment programmes, 43.5 percent are fully aware and 1 percent not aware of these programmes. Peculiarity seen from the survey about the employment programmes is that almost all the ST households are aware of MGNREGA whereas, most of them are not aware of other employment policies.

It is also clear that the community's Kurumans, Malai Arayan and Kurichchan have highly aware of the educational policies. Other four communities are somewhat aware of the same. We can also observe from the table that 86.2 percent Kurumans, 43.5 percent Malai Arayan, and 80 percent Kurichchan are fully aware of the policies. Whereas, 35.6 percent Kattunayakan, 16.4 percent Irular, 14.1 percent Muthuvan and 14 percent Paniyan are fully aware of the employment programmes. Peculiarity about Kattunayakan community is that they are hugely dependent on government for employment and engaged in such activities. About 84.4 percent Muthuvan, 83.6 percent Irular, 84.5 percent Paniyan and 62.2 percent Kattunayakan are somewhat aware of the employment policies and about 18.8 Kurichchan, 16.5 Malai Arayan and 13.8 percent Kurumans are somewhat aware. Only 1 percent among Kattunayakan, Paniyan, Muthuvan and Kurichchan are not aware of any of the above mentioned programmes.

Three- point likert scale on awareness of employment policies also shows that tribal households are somewhat aware of the employment policies of the government. All communities are fully aware of MGNREGA while least aware of other employment programmes mentioned above. Among the communities Malai Arayan, Kurichchan and Kurumans communities are fully aware of employment policies for them.

Table 6.24: Awareness of Skill Development Policies (in percentage)

Sample Communities	Awareness Of Skill Development Programmes			Total
	Not Aware	Somewhat Aware	Fully Aware	
Malai Arayan	17.50	19.60	62.90	100.00
Muthuvan	68.80	21.90	9.40	100.00
Irular	64.20	26.90	9.00	100.00
Paniyan	80.80	11.90	7.30	100.00
Kurichchan	16.50	5.90	77.60	100.00
Kurumans	12.30	20.00	67.70	100.00
Kattunayakan	64.40	33.30	2.20	100.00
Total	50.50	17.40	32.10	100.00

Source: Primary Survey

Table 6.24 gives the awareness of tribal communities on skill development programmes provided by the tribal department of concerned districts, NGOs and NABARD especially in Wayanad. Which include tailoring, auto rickshaw driving, book binding, printing, training in construction and electrical works, PSC coaching, bank coaching and the like. And it is responded by the respondents that most of them, especially the backward communities (excluded among the excluded) are not aware of skill development programmes about (50.5 percent), 32.1 percent are aware and it is among the developed or better off communities like Malai Arayan, Kurumans and Kurichchan. And about 17.4 percent are aware of some of the programmes.

Promoters and animators had a major role in this. In those areas where they are efficient and active, the communities are aware of the programmes and vice versa. Along with that the communities who have close connection with tribal department and active in society are also fully aware of this and those in the interior regions are not at all aware of the programmes and promoters and animators. Along with that the communities complained that the promoters and animators are partial to some people. 80.8 percent Paniyan, 68.8 percent of the Muthuvan, 64.4 percent Kattunayakan and 64.2 percent Irular are not aware of skill

development programmes. 77.6 percent Kurichchan, 67.7 percent Kurumans, and 62.9 percent Malai Arayan are aware of skill development programmes. Only 9.4 percent Muthuvan, 9 percent Irular, 7.3 percent Paniyan and 2.2 percent Kattunayakan are fully aware of skill development programmes. And the remaining are somewhat aware of the same.

Three- point likert scale on awareness of skill development programmes by tribal department including tailoring, driving, construction works, making of jack fruit food products, teaching training, even PSC and Bank coaching and the like which differs from time to time and district to district also shows that tribal households are somewhat aware of the these policies of the government. Community wise scale point shows that only the communities Kurichchan and Kurumans are fully aware of these programmes on the other hand Malai Arayan has somewhat aware while most of the households of other communities are not at all aware of skill development programmes specially initiated for tribal communities by the tribal department of the concerned district

Table 6.25: Awareness of Upliftment Programmes (in percentage)

Sample Communities	Aware of Upliftment Programmes			Total
	Not Aware	Somewhat Aware	Fully Aware	
Malai Arayan	3.10	13.40	83.50	100.00
Muthuvan	17.20	65.60	17.20	100.00
Irular	7.50	73.10	19.40	100.00
Paniyan	5.70	88.60	5.70	100.00
Kurichchan	0.00	11.80	88.20	100.00
Kurumans	3.10	16.90	80.00	100.00
Kattunayakan	8.90	82.20	8.90	100.00
Total	5.80	54.10	40.10	100.00

Source: Primary Survey

Table 6.25 shows the awareness of surveyed tribal communities on the major and familiar upliftment programmes like IAY, MGNREGA, SGSY, PMEGA, and SJSRY and the like. It is found out from the survey that 54.1 percent are somewhat aware of these upliftment programmes, 40.1 percent are fully aware and only 5.8 percent are not aware. Most of them know AAY programme only as they got money for housing. Paniyan in the parakuni colony settlement and Kattunayakan community from the interior regions/ settlement even not got the amount fully and are living in a half built house by the contractor and not having

bargaining power to question the authority so living in a pathetic condition. They responded that they are getting benefits only during each election. Otherwise, they are excluded completely.

As in the earlier tables, the Communities Kurichchan (88.2 percent), Malai Arayan (83.5 percent) and Kurumans (80 percent) are fully aware of upliftment programmes by the government for ST while others are somewhat aware of these programmes and only a meagre percent is unaware among these communities. Whereas, 8.9 percent Kattunayakan, 19.4 percent Irular, 17.2 percent Muthuvan and 5.7 percent are fully aware of these programmes. 88.6 percent Paniyan, 82.2 percent Kattunayakan, 73.1 percent Irular and 65.6 percent Muthuvan are somewhat aware of upliftment programmes, but about 17.2 percent Muthuvan don't know about these programmes completely.

There lies the question of reachability of various programmes across all the ST communities. which should be studied in detail. From this section we can understand that those who have bargaining power and those are better off earlier and those who are more communicated and engaged or active in politics or social activities are aware of all the policies and getting benefit out of it. This has to be checked.

Three- point likert scale on awareness of employment policies also shows that tribal households are somewhat aware of the employment policies of the government. All communities are fully aware of MGNREGA while least aware of other employment programmes mentioned above. Among the communities Malai Arayan, Kurichchan and Kurumans communities are fully aware of employment policies for them.

6.5.1 Influence of Various Government Policies on Tribal Employment

The influence of privatisation on the employment of different tribal communities in Kerala showed that 51 percent opined that privatisation has somewhat influence on their employment and earnings. 20.1 percent are of the opinion that it has high influence on their employment. 5.8 percent opined that it has no influence in their occupation and earnings. And 0.8 percent are of the opinion that it has high influence on the employment pattern of their community. Among the communities, the communities less responded to this question are Paniyan community (47.7 percent), Kattunayakan (26.7 percent) and Irular community (22.4 percent).

The table shows the influence of industrialisation on the employment of different tribal communities in Kerala. From the table it is evident that 54.2 percent was of the opinion that industrialisation in their areas has not at all influenced in their employment pattern. As there are not many industries nearby their areas. The peculiarity of tribal communities is that their employment is most influenced by the factors nearby their settlement. Best example is the Irular and Muthuvan community. Among the Irular community, most are engaged in Malabar cements either as permanent employee or as casual labours. Likewise for Muthuvan community most of them collect kalpasam from the trees and sell it to the curry powder industries in Theni district from which they can earn 250 to 300rs per kg. 26 percent opined that industrialisation has somewhat influenced their employment while 11 percent was of the opinion that it has highly changed their employment and 1.8 percent with the opinion that industrialisation in their areas extremely influenced their occupational pattern. Community wise analysis gives the picture that more than 50 percent Irular and Muthuvan were highly benefitted from industrialisation.

Demonetisation has high impact on the tribal communities especially on the casual labours and self-employed. The least effected were the salaried class. 90 percent were casual workers and self- employed, they are more affected by demonetisation policy of the government. According to the respondents, 39.1 percent are highly influenced by demonetisation, 38.6 percent are somewhat affected, 1.5 percent are extremely influenced by the programme whereas, 19.2 percent opined that they were not affected by demonetisation. Only 1.6 percent are not known/ responded to the question. Community wise analysis shows that, demonetisation had least impact on Malai arayan community and Kattunayakan were highly affected by demonetisation.

On the impact of globalisation on the tribal communities 62.3 percent of the tribals opined that they don't know about globalisation.15.1 percent opined that it not at all changed the employment of tribal communities,14.1 opined that it has somewhat impact on their employment and 7.3 high impact on employment and 1.1 extreme impact on employment. Among the communities, Malai Arayan were opined that globalisation has positive impact on employment, around 30 percent Kurichchan and Kurumans opined that it has no impact on employment and the community's Muthuvan, Irular, Paniyan and Kattunayakan opined they don't know about such policies implemented by the government during 1991.

Opinion on influence of land reforms on employment pattern of the concerned communities in Kerala showed that 35.4 percent of them have opined that land reforms has somewhat influence on their employment selection. 27.4 percent has high influence and 8 percent extreme influence. Whereas, 22.4 percent opined that land reforms has no influence among their community's occupational selection and mobility. 6.8 percent not responded properly to the same. The table shows that about 90 percent of the Malai Arayan, Muthuvan and Kurichchan, Kurumans opined that land reforms have extremely influenced their community's occupation. Whereas, 30 percent of Kattunayakan, Paniyan and Irular opined that land reforms not at all influenced their community's employment pattern and around 30 percent that it has somewhat influenced their occupation. In short the most benefitted from land reforms are Malai Arayan followed by Kurichchan, Muthuvan and Kurumans community. And least benefitted are Kattunayakan, Paniyan and Irular community.

The influence of tourism policy of government among the tribal communities employment in Kerala is analysed in the table. It is clear from the table that 64.3 percent opined that tourism has somewhat influence in the occupational pattern of their community. Kurumans are highest in this opinion with 83.1 percent followed by Irular with 79.1 percent. Kattunayakan (46.7 percent) followed by Malai Arayan (47.4 percent) were the least in this opinion. 20.5 percent of the tribals opined that tourism policy has high influence in their occupational pattern. Malai Arayan was the highest in this opinion and Irular and Paniyan were the least in this opinion. Only 4.1 percent Malai Arayan and 3.1 percent Muthuvan together (i.e.1 percent) had opined extreme influence of tourism in their communities occupation.

Table 6.26: Discrimination Faced by the Sample Workers in Work Place (in percentage)

Sample Communities	Discrimination in Work Place				Total
	Not Known	No, Not At All	Mildly	Extreme	
Malai Arayan	6.50	93.00	0.50	0.00	100.00
Muthuvan	11.00	84.10	4.90	0.00	100.00
Irular	35.00	61.80	3.30	0.00	100.00
Paniyan	28.60	61.80	8.70	0.90	100.00
Kurichchan	0.00	88.00	12.00	0.00	100.00
Kurumans	3.30	80.80	15.80	0.00	100.00
Kattunayakan	11.20	77.60	11.20	0.00	100.00
Total	16.10	75.90	7.70	0.30	100.00

Source: Primary Survey

Table 6.26 shows the opinion of the respondents about the discrimination they have faced in their work place. From the table we can see that only 7.7 percent opined that they faced discrimination in the workplace mildly which is a big issue that mild or strong there are still facing discrimination especially in work place and 0.3 percent opined that they faced extreme discrimination from the work place. 75.9 percent opined that they didn't face any discrimination. 16.1 percent did not respond to the question properly (as they were afraid to respond). It is observed from the survey that Malai Arayan community, Muthuvan community, Kurichchan and Kurumans were very much conscious that discrimination and harassment towards tribal communities is punishable offence. The communities Paniyan, Kattunayakan, and the Irular communities are not much conscious and were afraid to reveal their problems. Some of them are not identifying that they are being discriminating in their work place. But from their talks we can understand that they are facing discrimination in work place and for the products they sale in the market as they will not bargain for high price for their products. Irular face discrimination in promotion and even appointment. The tribals with same qualification as non-ST are appointed as lower grade employees and others in better grade and their promotion is also lagged by the management. Some of the tribals opined that they are given appointment only because that they have no other options as the rules and agreements demand so. They are also appointed for risky jobs in the interior regions of forest where there are wild elephants. Kattunayakan community and Paniyan and Muthuvan community also opined the same that they are provided with risky jobs in various tea and coffee estates, in which they are reluctant to work. Above said facts are clear from the table that 35 percent of the Irular followed by 28.6 percent Paniyan, 11 per cent Muthuvan and Kattunayakan didn't responded or opined not known to the question. This shows that they are still afraid of revealing the real fact and have fear of being discriminated. Only 0.9 percent Paniyan community opined that they are facing extreme discrimination. About 15.8 percent Kurumans, 12 percent Kurichchan and 11.2 percent Kattunayakan opined that they are facing discrimination mildly.

It is clear from the above table that there are communities which are forward and backward (as mentioned by HDR, 2009). And it is observed from the survey that the backward communities faced discrimination from the forward communities. So we have to look into the problems separately the extent of the problems they face while working with non -tribes.

Table 6.27: Type of Discrimination Faced by Sample Tribal Communities (in percentage)

Sample Communities	Type of Discrimination			Total
	Racial	Gender	Discrimination Within the Tribes	
Malai Arayan	100.00	0.00	0.00	100.00
Muthuvan	33.30	66.70	0.00	100.00
Irular	50.00	50.00	0.00	100.00
Paniyan	2.30	45.50	52.30	100.00
Kurichchan	17.40	78.30	4.30	100.00
Kurumans	26.30	73.70	0.00	100.00
Kattunayakan	0.00	45.50	54.50	100.00
Total	14.40	58.60	27.00	100.00

Source: Primary Survey

From the table 6.27 it is clear that 58.6 percent opined that they are facing gender discrimination, 27 percent opined that they faced discrimination from other tribes like Kurichchan and Kurumans. This is seen especially in Wayanad. 14.4 percent was of the opinion that they faced racial discrimination. They were treated inferior by other social groups. Some others opined that the other social groups treated the tribals those who are in the superior post as the result of their social group.

Among the communities, Malai Arayan, Kurumans and Irular responded that they are racially discriminated in their work place. It is noted here from the earlier tables that they are the communities mostly engaged in regular wage/ salaried works. Muthuvan and Kurichchan community opined that they face gender discrimination in their work place. Especially, in terms of wage earnings. Kattunayakan and Paniyan opined that they face discrimination from other tribes than the non- tribes. The tribes like Kurichchan and Kurumans are dominated everywhere and they show superiority over these tribes.

Table 6.28: Problems Faced by Sample Workers while Working with Non- Tribes (in percentage)

Sample Communities	Faced Problems While Working With Non Tribes				Total
	Not Known	No, Not At All	Mildly	Extreme	
Malai Arayan	3.30	92.60	4.20	0.00	100.00
Muthuvan	0.00	96.70	2.70	0.50	100.00
Irular	0.80	79.70	19.50	0.00	100.00
Paniyan	2.20	90.00	7.90	0.00	100.00
Kurichchan	0.00	98.40	1.60	0.00	100.00
Kurumans	0.00	97.50	2.50	0.00	100.00
Kattunayakan	0.00	96.90	3.10	0.00	100.00
Total	1.30	92.60	6.00	0.10	100.00

Source: Primary Survey

Table 6.28 focuses on the distribution of tribal workers on the basis of the problems faced while working with non-tribes. It is seen from the survey that most of them opined they didn't face any problems while working with non-tribes. Their parents has faced such problems not them. Some of them opined that they faced problem before so many years, no they are not facing any problem. 0.6 percent opined that they are still facing problems mildly and 0.1 percent opined they are facing extreme problems while working with non-tribes which is not direct. It is more seen among in the MGNREGA works, where the Non-ST and within the ST, upper caste ST females attain the higher positions and more works. It is also common in ayalkootam and kudumbasree, which made so many ST females to withdraw from such programmes. 1.3 percent were unwilling to respond to this question in the fear of future issues and 92.6 percent opined that they didn't face any such problems. Now we have to know the type of problem they face while working with non-tribes, which is given in the table below.

Table 6.29: Type of Problems Faced by Sample Tribal workers with Non- Tribes (in percentage)

Sample Communities	Type of Problems in Working with Non-Tribe					Total
	Wage Difference	Price Difference for Agricultural Products	Promotion	Work Load	Others	
Malai Arayan	0.00	77.80	0.00	0.00	22.20	100.00
Muthuvan	0.00	33.30	0.00	33.30	33.30	100.00
Irular	4.20	0.00	41.70	41.70	12.50	100.00
Paniyan	13.90	5.60	5.60	58.30	16.70	100.00
Kurichchan	33.30	0.00	0.00	33.30	33.30	100.00
Kurumans	66.70	0.00	0.00	33.30	0.00	100.00
Kattunayakan	0.00	0.00	0.00	33.30	66.70	100.00
Total	10.70	13.10	14.30	42.90	19.00	100.00

Source: Primary Survey

Table 6.29 pictures the problems faced by the tribes with non- tribes in their work place. From the table we can see that 42.9 percent opined that they faced work load/ over work. All the communities except Malai Arayan opined the same, they face such issues in private firms, in construction field by giving them some heavy works not by all but by someone and in some agriculture works. According to the respondents, the non- tribes treat them as illiterates and who is not capable to react. About 14.3 percent opined that they faced issues in the promotion in work with non- tribes, the non-tribes interferes with the tribe's promotion especially among the Irular community in Malabar cements followed by Paniyan in the estates they work. Around 13 percent opined that they face problems with the sale of their agriculture products in the market. 77.8 percent Malai Arayan community and 33.3 percent Muthuvan community opined the same. 10.7 percent opined wage difference in their workplace. 66.7 percent Kurumans and 33.3 percent Kurichchan opined the same.

According to the respondents, now the practice has declined a lot compared to 10 years before. Now they have more or less equal with the non-tribes in all cases. At the same time the problems are not direct. But there is discrimination and facing problems with non-tribes. Another factor noticed is that most of the aged opined about discrimination, exploitation and all. Young ones didn't felt with such problems. Only 19 percent opined that the face other types of problems with the non –tribes.

Table 6.30: Distribution of Respondents on the basis of Exploitation Faced in Job (in percentage)

Sample Communities	Faced Exploitation or Abuse			Total
	Not Known	No, Not At All	Mildly	
Malai Arayan	4.20	94.90	0.90	100.00
Muthuvan	0.00	90.10	9.90	100.00
Irular	4.10	87.80	8.10	100.00
Paniyan	4.10	90.60	5.20	100.00
Kurichchan	0.00	98.40	1.60	100.00
Kurumans	0.00	97.50	2.50	100.00
Kattunayakan	0.00	93.90	6.10	100.00
Total	2.40	92.90	4.80	100.00

Source: Primary Survey

Table 6.30 shows the percentage of workers facing exploitation. It is opined by the respondents that with all the labour laws and tribal laws 4.8 percent of the tribal communities still face exploitation. 2.4 percent are not willing to respond to the question. They are afraid to reveal in the fearer that it will create some issues in the future after the survey report. Whereas, 92.9 percent opined that they didn't face any exploitation. But from the talks to the tribes indirectly about many factors we can see that they cannot understand that they are being exploited in the work place. For. Example instead of giving full wages they are offered alcoholic drinks. For these alcoholic drinks and chewing they offer their labour power.

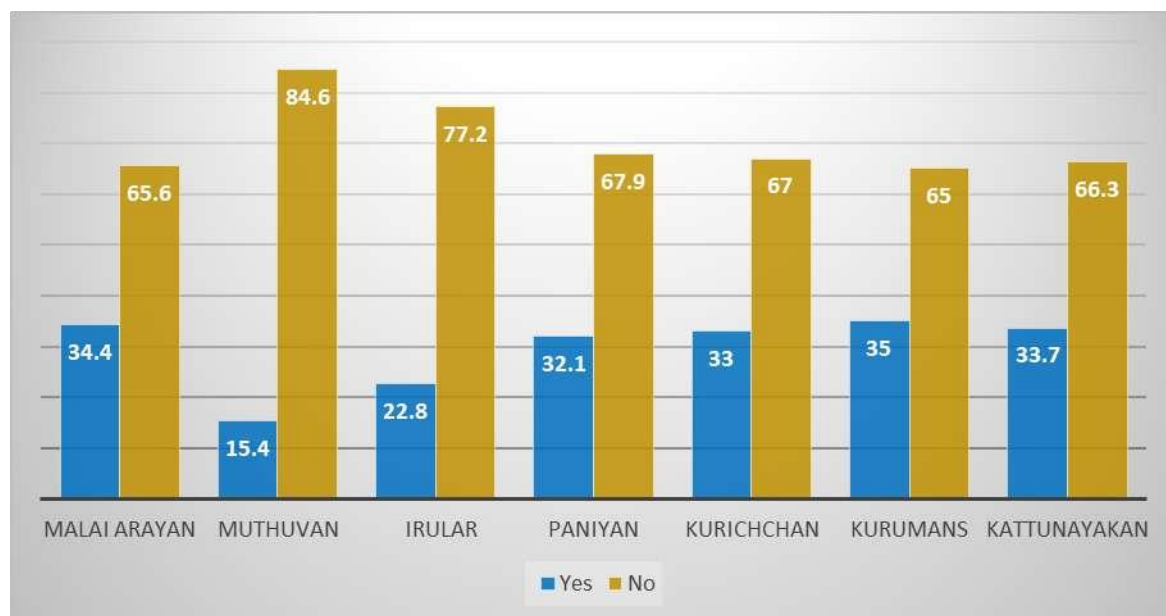
According to the respondents 1.5 percent opined that they face some type of slavery in the work place. About 10 per cent opined about slavery they are facing. Whereas, 98.5 percent opined that they are not facing slavery but facing exploitation in some other manner. Like the Paniyan has sold some of their lands to non- tribal at the cheapest rate and the non-tribals even didn't pay them the amount they offered. But the new laws helped them to overcome the exploitation. In so many ways they non- tribals are exploiting by making use of their ignorance.

6.6 The Migration Aspects Sample Workers

The migration particulars of sample workers shows that only 30 percentage has migrated from one their settlement area to nearby areas of kudak/ kudagu district of Karnataka,

Coimbatore and Theni of Tamil Nadu, especially as casual labourers by the tribals of Wayanad, Palakkad and Idukki respectively.

Figure 6.11: Distribution of the Workers on the basis of Migration (in percentage)



Source: Primary Survey

The Figure 6.11 shows the percentage of migrants among the workers of different tribal communities in Kerala. It is clear from the figure that 70.1 percent are not a migrant and only about 29.9 percent have migrated from their native places to some other places for various purposes. It is also evident that among the communities, Kurumans (35 per cent) community followed by Malai Arayan (34.4 per cent) has migrated the most and Muthuvan (15.4 per cent) community followed by Irular community(22.8 percent) has migrated the least and vice versa.

Among the migrants we have to know the purpose for which they have migrated. This is detailed in the table 6.31. From the table we can see that 62.2 percent of the tribes migrated for employment purposes followed by 32.1 for other purposes like for land holdings issued by the government and the like, 5.8 percent ST household members has migrated for education.

Among the communities of ST, we can see that Kurichchan community of Wayanad followed by Muthuvan community of Idukki has migrated more for education i.e. 17.5 percent and 14.3 percent respectively. The communities that has migrated more for employment are Kurumans community (92.9 per cent) followed by Malai Arayan community (81.1 per cent).

Whereas, Muthuvan community (67.9 percent) followed by Irular community (57.1 per cent) has migrated for various other purposes.

Table 6.31: Distribution of Migrant Respondents on the basis of Purpose of Migration (in percentage)

Sample Communities	Purpose of Migration			Total
	Education	Employment	Others	
Malai Arayan	2.70	81.10	16.20	100.00
Muthuvan	14.30	17.90	67.90	100.00
Irular	0.00	42.90	57.10	100.00
Paniyan	2.00	53.10	44.90	100.00
Kurichchan	17.50	79.40	3.20	100.00
Kurumans	7.10	92.90	0.00	100.00
Kattunayakan	3.00	42.40	54.50	100.00
Total	5.80	62.20	32.10	100.00

Source: Primary Survey

It is found from the survey that 73.3 percent has migrated temporarily whereas, 26.7 percent has permanent migration. Among the communities, Muthuvan community (67.9 percent) and Irular community (42.9 per cent) has migrated permanently. Whereas, Kurumans community (100 percent) and Kurichchan community (93.7 per cent) has highest number of temporary migrants among Sample Communities in Kerala (Ref. Annexure 6.7).

Table 6.32: Type of Migration of the Migrants among Sample Communities (in percentage)

Sample Communities	Place Of Migration					Total
	Rural to Semi-Rural	Rural to Urban	One Settlement to Other	Inter State	Intra State	
Malai Arayan	6.80	6.80	10.80	54.10	21.60	100.00
Muthuvan	0.00	10.70	64.30	3.60	21.40	100.00
Irular	7.10	14.30	21.40	14.30	42.90	100.00
Paniyan	4.80	1.40	33.30	15.00	45.60	100.00
Kurichchan	1.60	1.60	3.20	46.00	47.60	100.00
Kurumans	0.00	2.40	0.00	50.00	47.60	100.00
Kattunayakan	12.10	0.00	48.50	15.20	24.20	100.00
Total	4.60	3.90	23.90	29.40	38.30	100.00

Source: Primary Survey

Table 6.32 shows the type of migration of the tribal communities among the Sample Communities in Kerala. From the above table it is clear that 37.3 percent has inter- state migration followed by 29.4 percent has inter -state migration, 23.9 percent has migration from one settlement to other, 4.6 percent has rural to semi- rural migration, 3.9 percent has rural to urban migration and 1 percent has other types of migration. In short most of the migrants has intra state migration followed by inter-state migration. Whereas, least numbers has rural to urban migration and it is mainly for education. Among the communities most of the communities has intra state migration for casual works in agriculture Irular to TN and Wayanad communities to Karnataka. Malai Aryan community migrated more to inter-state and Muthuvan community from one settlement to other settlement for housing activities.

From the migration particulars of tribal households in Kerala, it is also evident that none of the respondents have moved to other countries for employment. The main source of turn - around for the state since reforms were the migration to other countries and remittances. (Chakravarthy, 2005; Kannan, 2005). Which changed paved way for huge social and economic development of the keralites and this opportunity is also unaffected among the tribal communities of Kerala and the above table makes it clear. The lack of human capital via education and skill are the factors that made them less competitive and in coping up with the development that was enjoyed by the other Social Groups.

It is also observed that 45 percent of the ST has migrated to primary sector followed by 39.1 to tertiary sector and 15.9 percent to secondary sector. it is also clear that all the communities except Malai Arayan, Kurumans and Irular were more engaged in primary sector after migration, whereas, Irular community migrated to secondary sector and Malai Arayan and Kurumans to the tertiary sector as a part of employment (Ref. Annexure 6.8). Apart from the sector of work we have to know the type of work in which they are engaged in. which is detailed in the table below.

Table 6.33: Type of Work of Migrants (in percentage)

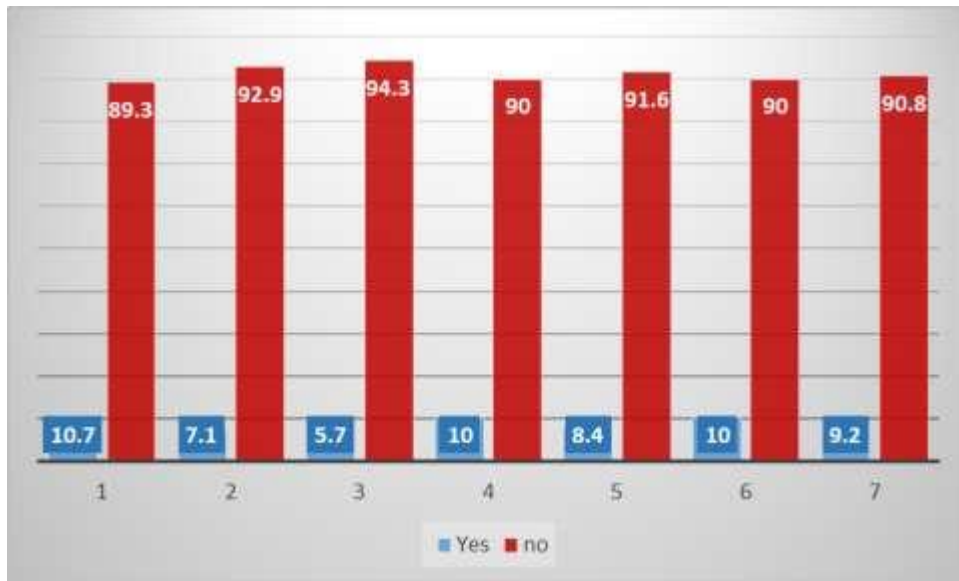
Sample Communities	Type of Work after Migration					Total
	Government Salaried	Private Salaried	Casual in Agriculture	Casual in Non-Agriculture	Others	
Malai Arayan	56.70	30.00	0.00	1.70	11.70	100.00
Muthuvan	0.00	0.00	100.00	0.00	0.00	100.00
Irular	0.00	33.30	33.30	33.30	0.00	100.00
Paniyan	2.60	17.90	66.70	12.80	0.00	100.00
Kurichchan	4.00	22.00	44.00	18.00	12.00	100.00
Kurumans	38.50	10.30	48.70	2.60	0.00	100.00
Kattunayakan	0.00	28.60	64.30	7.10	0.00	100.00
Total	20.50	21.30	43.00	10.10	5.00	100.00

Source: Primary survey

Table 6.33 provides the work for which the migrants have migrated. It is clear from the table that 43 percent has migrated has migrated for casual labour in agriculture. The communities in except Malai Arayan i.e., Muthuvan, Kattunayakan, Paniyan, Kurumans and Kurichchan and Irular community of Palakkad migrated as casual labours. About 21.3 percent migrated for private salaried job, among the community's Malai Arayan (30 percent), Irular (33.3 percent), Kattunayakan (28.6 per cent) and Kurichchan (22 percent).

Around 20.5 has migrated for government salaried works. Most of the malai Aryan community followed by Kurumans community has migrated for such types of work (56.7 per cent and 38.5 percent respectively), 10.1 percent for casual labour in non- agriculture. Among the communities, Irular (33.3 percent) followed by Kurichchan (18 per cent) and Paniyan (12.8 percent) are more who has migrated for such types of work. Whereas, 0.5 percent for other types of works Kurichchan and Malai Aryan falls more in this category. In short we can see that most of the migrants are for casual works in agriculture followed by private salaried and government salaried works.

Figure 6.12: Distribution of Respondents who wish to move to Other Job (in percentage)



Source: Primary Survey

Figure 6.12 depicts the wish of the workers to move to other job. The question, whether wish to move to other job in future if they got a chance was asked to the tribal communities, and for that 90.9 per cent opined that they are not interested in other works or in another way they are fully satisfied with the present job. 9.1 per cent like to move to other job. Among the communities Malai Arayan, Paniyan and Kurumans (about 10 per cent) followed by Kattunayakan (9.2 per cent) have the wish to move to other job. The thing found in the survey among the tribal communities while asking this question is that they have the feeling/ attitude that they will not or are not eligible for better job (both education wise and age wise), according to them they won't get a better job than this and only they have expectation about their children to get a better job. Among those who wish to move to other job wish permanent job. It is clear from the survey that 57.9 per cent wish to work in permanent job followed by 27 per cent in high wage/regular wage work, 10.3 per cent wants some other works than their current work and 4.8 wants salaried job.

Among the communities, more than 60 per cent Malai Arayan community followed by Kurichchan and Kurumans had high expectation as they seek permanent job. Whereas, about 30 per cent Muthuvan community wish salaried job and 30 per cent wish any other job than the current one, it is observed from the survey that they are only community which is not

interested to move from their place for a better job. Kattunayakan community followed by Irular and Paniyan community wish high wage/ regular wage work (Ref. Annexure 6.9).

It is also observed that the communities like Malai Aryan Kurichchan and Kurumans were very specific about the type of occupation they wish to move to so they are very conscious about the opportunities and the policies specifically for their upliftment and they are making better use of it than the other communities. Whereas, the other communities are not much specific, they just want more income and work which pays them daily and the like. We have to know the efforts that the communities take for movement of the work they wish. This reveals their attitude towards the betterment of their life.

It is also evident from the survey about 90 percent of the workers who wish to move to other job has taken different efforts. Like 55 percent were registered in employment exchanges, 31.3 percent has taken other efforts like writing PSC and attending interviews and the like, 1.5 percent has registered in private Placement agencies. Whereas, 12 percent has not taken any effort for the work they wish to work in future. Among them Muthuvan community (35.7 percent), Kattunayakan (33.3 percent), Irular (25 percent) and Paniyan community (13.3 percent) (Ref. Annexure 6.10)

Table 6.34: Method of Payment Preferred by the Sample Workers (in Percentage)

Sample Communities	Method of Payment						Total
	Regular Monthly Salary	Weekly Payment	Daily Payment	Piece Rate	Others	NA	
Malai Arayan	28.40	0.00	2.30	0.00	0.00	69.30	100.00
Muthuvan	1.10	14.80	46.70	0.00	1.60	35.70	100.00
Irular	23.60	21.10	48.80	0.00	0.00	6.50	100.00
Paniyan	8.50	19.90	69.90	0.00	0.40	1.30	100.00
Kurichchan	11.50	4.70	29.30	0.00	0.00	54.50	100.00
Kurumans	26.70	7.50	40.80	2.50	0.00	22.50	100.00
Kattunayakan	6.10	12.20	77.60	0.00	0.00	4.10	100.00
Total	13.80	12.50	46.90	0.20	0.40	26.20	100.00

Source: Primary survey

Table 6.34 examines the method of payment for the workers engaged in different occupation by their employer. It is not applicable for the self - employed in agriculture and non-agriculture. From the table 6.34 we can see that 46.9 percent receive income on daily basis, which means that they are casual labours, 13.8 percent have regular monthly salary, 12.5 percent gets a weekly payment, and 0.2 earns income in piece rate and 0.4 percent on other ways. As mentioned in the earlier tables, casual labours are more among Paniyan, Kattunayakan, Irular and Muthuvan community, they are high in the category of daily wages and weekly payment. The communities Malai Arayan, Kurumans, Irular and Kurichchan are getting monthly salary. Kurumans are engaged in works with piece rate payment and Muthuvan in others.

When the question is asked to the tribals about the most important factor that influence their job selection, most of them opined that income (59.6 per cent) followed by Place of work (18.3 per cent) as the major factor which influence their occupational selection. About 9.2 percent opined the nature/ stability of work as the major factor for their employment selection, 4.8 percent opined that working conditions is the major factor which influence their occupation selection, 2.8 percent responded that social security benefits is the major factor for job selection, 1.9 percent considered transportation facility as the major factor and the same percent considered dignity as the major factor. Only 1.4 percent considered other factors like entrepreneurship and the like as the major factor for employment selection. Apart from this, less conscious attitude towards their future and their children's future also made them to choose elementary occupation. They just want to earn for the days food and not for future. This is actually a negative factor which pushes them into low economic development. The above said details are detailed in the following table.

Table 6.35: Factors influencing the occupational selection of sample workers (in percentage)

Sample Communities	Factors Influencing Occupational Choice								Total
	Income	Social Security Benefits	Transportation Facilities	Place of Work	Dignity	Working Conditions	Nature Of Work/ Stability Of Work	Others	
Malai Arayan	40.50	7.40	2.30	13.00	4.70	2.80	26.50	2.80	100.00
Muthuvan	28.60	3.30	3.30	56.60	2.20	3.30	2.20	0.50	100.00
Irular	63.40	2.40	1.60	20.30	2.40	5.70	2.40	1.60	100.00
Paniyan	79.30	0.90	0.40	8.50	0.70	7.00	2.20	1.10	100.00
Kurichchan	57.60	3.70	3.10	17.80	1.00	4.70	9.90	2.10	100.00
Kurumans	56.70	0.80	2.50	7.50	1.70	4.20	25.80	0.80	100.00
Kattunayakan	70.40	2.00	2.00	16.30	3.10	2.00	3.10	1.00	100.00
Total	59.60	2.80	1.90	18.30	1.90	4.80	9.20	1.40	100.00

Source: Primary Survey

6.7 Factors Determining Choice of Occupation among Sample Tribal Workers in Kerala

From the above analysis we see that most of the tribal workers are engaged more in elementary occupations and there a large number of factors that influence the occupational selection of the tribal communities in Kerala. This made us to analyse the major determinants that influence the tribal workers in such elementary occupations. For this, we have conducted chi-square test to analyse the association between the occupation and the major factors that found to be relevant. The results showed a strong association between the selected factors, so in order to get the direction of association, binary logit regression model was used. Here we analyse the probability of tribal workers being in the elementary occupations. The dependent variable is the number of workers in elementary occupation and the independent variables are their age, gender, education, method of pay, type of work, income and other factors, whether engaged in subsidiary activity and their migration particulars. The fitted binary logit model is as follows

$$Y_i = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} + \beta_{12} X_{12} + \beta_{13} X_{13} + U \dots \dots \dots (1)$$

Y_i = number of persons in elementary occupations

X_1 = Age

X_2 = Gender (Male=1 and Female=0)

X_3 = Marital Status (married=1, divorced, separated, unmarried=0)

X_4 = Education (below secondary and below=1, Higher secondary and above=0)

X_5 = Subsidiary activity (yes=1, No=0)

X_6 = discrimination (mildly and extremely=1, not known and not at all=0)

X_7 = Problems with non-tribes (mildly and extremely=1, not known and not at all=0)

X_8 = exploitation (mildly=0, not known and not at all=0)

X_9 = Migration (migrated=1, non-migrant=0)

X_{10} = Hours of work (less than 8 hours =1, 8-12 hours, >12 hours and others=0)

X_{11} = Regularity in work (more regular=1, less regular=0)

X_{12} = Factors influencing occupation (Income=1, Others like Place of work, Social Security Benefits, Transportation facilities, Dignity, Working conditions, Stability of Work and the like =0)

X_{13} = Method of Pay (Daily Payment=1, monthly salary, weekly and piece rate payment =0)

In the logit model the predictability of the model is very important in the sense that the explanatory power of the variable is expressed in terms of 'number of cases the model correctly predicted'. From the analysis we found that our model correctly predicted 90.7 percent of cases. This means that the independent variables used in the model can correctly predict 90.7 percent cases. I.e. if we take 100 workers we can predict that 83 workers are influenced by the following variables.

Table: 6.36: Logit regression results – Factors determining occupational choice (in elementary occupation) of present generation

Variable	Coefficient	Std. Error	z	p-value	
Constant	-5.38114	0.545468	-9.865	<0.0001	***
Gender	0.681509	0.218518	3.119	0.0001	***
Age	1.06893	0.221751	4.820	<0.0001	***
Marital status	-0.453778	0.232185	-1.954	0.2656	*
Education	3.16710	0.349820	9.054	<0.0001	***
Subsidiary activity	-1.07070	0.204701	-5.231	<0.0001	***
Discrimination	1.02212	0.398453	2.565	0.0007	**
Problems with non-tribes	0.00874	0.313219	0.0279	0.9673	
Exploitation	1.4124	0.4447	3.176	0.0099	***
Migration	-0.1419	0.22041	-0.6441	0.2497	
Hours of work	2.72854	0.20846	13.09	<0.0001	***
Regularity in work	-0.451833	0.32633	-1.385	0.1203	
Income	0.780356	0.193340	4.036	<0.0001	***
Method of pay	3.61019	0.257697	14.01	<0.0001	***
Number of cases 'correctly predicted' = 1258 (90.7%)			Likelihood ratio test: Chi-square(13) = 1097.95 [0.0000]		
*** 1% significance level, ** 5% significance level, *10 % significance level					

Source: Calculated from primary data

In the binary logit regression models what matters is the expected signs of regression coefficient and their statistical significance, whereas, goodness of fit is of secondary importance. In this ground we have explained our model. Table (6.36) indicates the beta coefficient of each explanatory variable and its statistical significances. From the table we can see that the explanatory variables gender, age, marital status, education, engagement in subsidiary activity, faced discrimination, faced exploitation, hours of work, method of pay factors responsible for selecting job are statistically significant while variables like problems with non- tribes, migration, regularity in work are statistically insignificant. All the significant variables show positive signs except marital status and engagement in subsidiary activity. Variables like gender, age, education, engagement in subsidiary activity, faced exploitation, hours of work, factors responsible for job selection, method of pay are statistically significant at one percent level, discrimination faced at five percent level and marital status at one percent level respectively. And the chi square value is $\chi^2(13) 1097.95$; $P=0.000$; which implies the overall significance of the model. This shows that the occupational selection of the tribal workers is influenced by gender, age, education, engagement in subsidiary activity, faced discrimination, faced exploitation, hours of work,

facilities needed, marital status, problems with non- tribes, migration, regularity in work method of pay particulars.

A more meaningful interpretation can be given by the odds ratio, which are obtained by taking the antilog of various slope coefficients. The interpretation of odds ratio is different for binary and continuous variables. In the case of binary variables odds ratio greater than one implies a positive relationship and less than one a negative relationship. Whereas, in the case of continuous variables, the odds ratio is interpreted in terms of each unit increase on the scale from 1 to 2, 2 to 3, and the like. The following table (5.96) shows odds ratio for explanatory variables.

Table 6.37: Odds ratio for Factors Determining Occupation Selection of Workers

Variables	Odds ratio	95 % confidence interval	
Gender	1.9769	1.288	3.034
Age	2.9123	1.886	4.498
Marital status	0.6352	0.403	1.001
Education	23.7385	11.959	47.122
Subsidiary activity	0.3428	0.229	0.512
Discrimination	2.7791	1.273	6.068
Problems with non-tribes	1.0088	0.546	1.864
Exploitation	4.1060	1.717	9.818
Migration	0.8676	0.563	1.336
Hours of work	15.3105	10.175	23.037
Regularity in work	0.6365	0.336	1.207
Income	2.1822	1.494	3.188
Method of pay	36.973	22.312	61.268

Source: Calculated from primary data

In our model, the odds ratio for variables like gender, age, education, exploitation, and hours of work, method of pay and income and method of pay are greater than one, which describes a positive relationship. Those who are male with below higher secondary education and method of pay (daily payment) and job with more income rather than other factors like transportation facility, security in job, Other, allowances may decide the occupational selection of the tribal workers (table 6.37).

The highest odds ratio belongs to method of pay (36.97) followed by education (23.74) and hours of work (15.31). This implies that the job with daily pay is 36.97 times likely to prefer to the job with weekly or monthly pay. They prefer daily wages for the work they done than weekly or monthly income, so they prefer elementary occupations too. Likewise, the workers with education below and equal to higher secondary is 23.74 times likely to prefer elementary occupation than the workers with higher than higher secondary education. Income factor contributes 2.1822 times more in selecting job rather than factors like allowances, infrastructure facility, security in job etc. Likewise males are likely to be in elementary occupation by 1.97 times higher than tribal females. Exploitation (4.10 times) and discrimination (2.77 times) in the work place also prompt them to prefer elementary occupations rather than high paid and salaried works. According to them discrimination is comparatively low in elementary occupations while they are highly discriminated in shop and market sales and other high paid works. Those who are married and engaged in subsidiary activity are likely to be engaged in elementary occupation by 0.6352 and 0.3428 times among the significant variables In the case of continuous variables, younger generation is engaged more in elementary occupations than those who are aged by a factor of 2.91. Among the insignificant variables the odds ratio is high for problems in working place with non- tribes by 1.01 times, migrants by 0.87 times and regular workers by 0.64 times prefer elementary occupations. (Mohanty, 2006).

In the binary logit model, the odds ratio does not measure the marginal effects of explanatory variables on dependent variable. Like the odds ratio for discrete and continuous variables, marginal effects are computed differently for discrete and continuous variables. While Marginal effects for discrete variables show how $P(Y=1)$ is predicted to change as X_k change from 0 to 1 holding all other X_s equal. On the other hand, the marginal effects for continuous variables measure the amount of change in Y that will be produced by the one unit change in X_k . To make it more precise, we can say that in a binary regression model, the marginal effect is the slope of the probability curve relating to X_k to probability of $(Y=1/X)$, keeping all other variables constant. From the above analysis it is clear that the survey data validate the hypothesis.

Table 6.38: Binary Logit Marginal Effects

Variable	dp/dx	s.e	z	pval	xbar
Gender	0.12085	0.040886	2.9558	<0.0001***	0.58183
Age	0.20459	0.046609	4.3895	0.0001***	0.7044
Marital status	-0.07271	0.034828	-2.0878	0.0368*	0.77578
Education	0.65916	0.050653	13.013	0.2656 ***	0.88104
Subsidiary activity	-0.18572	0.036277	-5.1195	<0.0001	0.48378
Discrimination	0.13572	0.039359	3.4484	<0.0001	0.080029
Problems with non-tribes	0.0015031	0.0537410	0.027969	0.0007	0.12473
Exploitation	0.16405	0.033032	4.9662	0.9673**	0.047585
Migration	-0.024838	0.039147	-0.63449	0.0099	0.29921
Hours of work	0.51503	0.037780	13.632	0.2497***	0.62004
Regularity in work	-0.071120	0.046543	-1.5280	<0.0001	0.84283
Factors influencing job selection	0.56544	0.027948	20.232	0.1203***	0.46720
Method of pay	0.13972	0.035998	3.8813	<0.0001***	0.59625

Source: Calculated from Primary data

The table (6.38) shows the marginal effects of major determinants influencing the occupation selection of tribal workers. Like the beta coefficients and odds ratio marginal effects of gender, age, education discrimination, exploitation and problems in working with non- tribes, hours of work, method of pay, income are positive while marital status, engaged in subsidiary activity and migration particulars and regularity of work are negative. This means that the tribal male workers with below higher secondary education will prefer works with low exploitation, discrimination in which they can earn daily. And for them income is the major factor they consider in job selection than other factors.

6.7.1 Occupational Choice among individual sample tribal communities

While measuring individual sample communities we can see that none of the workers in Malai Arayan community is engaged in elementary occupations, they are engaged mostly in skilled agricultural works. While majority of other tribal workers are in elementary occupations followed by skilled agricultural and fishery workers. So a brief picture of the factors determining the choice of skilled agricultural and fishery workers is also analyzed and found out that all the explanatory variables except Problems with non- tribe and regularity are statistically insignificant while the explanatory variables gender, age, marital status, education, engagement in subsidiary activity, faced discrimination, faced exploitation,

migration, hours of work, method of pay factors responsible for selecting job are statistically significant. From the analysis we found that our model correctly predicted 91 percent of cases. And the chi square value is $\chi^2 (13) 820.668$; $P=0.000$; which implies the overall significance of the model. The highest odds ratio belongs to education (3.04) followed by marital status (2.50) and engagement in subsidiary activity (1.64). which means that the workers with education below and equal to higher secondary is 3 times likely to prefer skilled agricultural works, those who are married prefer 2 times such works than others and those who are engaged in subsidiary activity also prefer 1 times skilled agricultural works than others. Apart from this land holdings also influence their choice of skilled agriculture work. This is detailed in table (Ref. Annexure 6.11 and 6.12).

Table 6.39: Expectation of Present Generation on their Future Generation (in percentage)

Sample Communities	Expectation On Future Generation		
	Not At All Conscious	Somewhat Conscious	Highly Conscious
Malai Arayan	1.00	10.30	73.20
Muthuvan	18.80	29.70	12.50
Irular	17.90	35.80	20.90
Paniyan	35.20	18.70	26.40
Kurichchan	2.40	16.50	71.80
Kurumans	1.50	16.90	64.60
Kattunayakan	26.70	31.10	20.00
Total	17.50	20.80	41.60

Source: Primary Survey

Table 6.39 details the expectation of the present generation for future generation. The indicators taken here are education and employment. On the basis of that the respondents responses is given in the table and it is clear from the table that 41.6 percent of the tribals have highly conscious about the education and employment of their children. 20.8 percent are somewhat conscious about their children and 17.5 percent are not at all conscious about the education and employment of their children. This question is not applicable to 20.1 percent of the respondents as they have no children or the children's are grownup and employed. It is clear from the table that the communities like Malai Arayan (73.2 percent) Kurichchan (71.8 percent) and Kurumans (64.6 percent) are highly conscious about the future of their children

and the community Paniyan (35.2 percent) are least bothered about their children whereas, Irular (35.8 percent), Kattunayakan (31.1 percent) and Muthuvan (29.7 percent) communities are somewhat conscious about their children.

6.8 Conclusion

From the present chapter we can conclude that there is inter community differences among tribal communities. It is found that most of the tribal workers are engaged in elementary occupations and prefer to continue the same except Malai Arayan community. Method of pay and Education is an important determinant in the selecting elementary occupation. The tribal workers are more attracted towards the jobs with daily remuneration. Lack of consciousness about their future and future generation is one of the factors for preferring such jobs. They just want to earn for the daily necessities. Apart from that higher education, which other social groups attained the influence of the Christian missionaries in spreading English education, literacy and skill development made them less competitive over the years also made them to prefer such jobs. Migration and remittances, which plays an important role in the betterment of other SGs also have not been imparted any influence on tribals due to lack of education. To this lack of land holdings is also a curse to the tribal households in Kerala for preferring elementary occupations. Only highly qualified tribal workers are engaged in high paid jobs. Among the sample communities, the communities Malai arayan, Kurichchan, and kuruman communities are well off in all aspects and can be considered forward compared to Muthuvan, Irular, Paniyan and Kattunaikan. The community with highest population i.e. Paniyan community is comparatively worse off than other tribal communities.

Chapter VII

SUMMARY AND CONCLUSION

-
- *Introduction*
 - *Validity of Hypothesis*
 - *Policy Implication*
 - *Scope for Future Research*
 - *Conclusion*
-

7.1 Introduction

The present study focuses on the labour market in Kerala: choice, composition and mobility of occupation among scheduled tribes. The study tries to address the gaps in the empirical knowledge on the labour market participation, occupational choice among major tribal communities in tribal concentrated districts. The present study is based on the theoretical framework developed from Clark - Fisher hypothesis and Lewis Theory of Economic Development with Unlimited Supplies of Labour. These theories basically argue that with economic growth, the occupational structure of the economy shifts from primary sector to secondary sector and to tertiary sector. But in Kerala, with economic growth the structural change was from primary sector to tertiary sector bypassing the manufacturing sector. Most of the workers shifted from primary sector as their marginal productivity was low in that sector. But unfortunately they end up in low paid service sector jobs, thus not resulting in an improvement in their economic status.

The study has relied on both the primary and the secondary data. Secondary data have been obtained from the unit record data of NSSO the Employment and Unemployment Survey (EUS) 2011-2012 and NSSO reports (1999-2000 to 2011-12) according to the Usual status activity (UPS+USS) approach for different Social groups such as Scheduled Tribe (ST), Scheduled Caste (SC), Other Backward Classes (OBC) and others. Apart from this, the study relies upon Census reports published by the registrar general and census commissioner of India. The primary data at the individual and household level were collected through a face- to face –interview method using a semi- structured interview schedule. For the present study views the definition of tribes as given by the constitution of India. Out of the 36 tribal communities in Kerala, the study focuses on the labour market participation, occupational choice and inter-generational mobility among the major tribal communities in tribal inhabited districts of Kerala, namely Wayanad, Idukki and Palakkad. The present study progressed among the seven major tribal communities namely Kurichchan, Kuruman, Paniyan and Kattunayakan communities from Wayanad district, where the tribal population is highest in Kerala. Malai Arayan and Muthuvan from Idukki district, which has the second highest tribal population in the state and Irular from Palakkad, the district having third highest tribal population in Kerala. The study covered 616 households with at least one percent representation of the total households of the seven tribal communities under study.

Labour market participation of Scheduled tribes is assessed using LFPR and WPR from NSSO reports. Sectoral and occupational distribution is examined using NSSO unit level data. Census data were used to analyse the sectoral and occupational distribution of different individual tribal communities in Kerala. Transformation matrix is used to analyse inter-generational occupational transformation. Binary logistic regression is used to find out the major determinants for inter-generational occupation mobility. The determinants of choice of occupation among selected tribal communities are also analysed using Binary logit regression model.

At all India level, proportion of households depends on self-employment is highest among Others, OBC, ST and SC. During 1999-2000, the ST households in India and Kerala were depending more on casual works for their earnings. During 2011-12, majority of the ST households at all India level depend on self-employment in agriculture, whereas, in Kerala, the ST households earn their income from casual works. This means that the tribal households in India are getting better standard of living through landholdings compared to Kerala. In rural India even though, the LFPR for males and females has declined among all social groups, LFPR for ST males and females are higher than other social groups. The same pattern of LFPR among STs is seen in rural Kerala. This is true for both males and females. Growth rate of LFPR across social groups in Kerala shows an increase in ST and SC and decline in OBC and Others social group respectively. LFPR for females are lower than males across all social groups. The Worker Population Ratio of STs are higher for rural males and females in India and Kerala. The WPR for rural females have declined irrespective of all social groups during 2011-12 compared to 1993-94. The WPR for rural males is higher than rural females in India and Kerala. The WPR for rural males has increased meagrely in Kerala. But declined for OBC and Other category and increased for SC and ST. On the other hand, the WPR has increased for females of all social groups in Kerala.

Sectoral composition across various social groups is different at all India level and Kerala. In India, Even now, STs, SCs and OBCs are engaged more in primary sector works. Other social group are engaged more in tertiary sector. Among the social groups in Kerala, STs are engaged more in primary sector ,OBC and Others are engaged more in tertiary sector whereas SCs in secondary sector. Interesting finding from the present study is that even the graduates

among ST workers are engaged in primary. At all India level STs and OBCs are engaged more as skilled agricultural and fishery workers followed by elementary occupations. SCs are more in elementary occupations followed by skilled agricultural and fishery works. Kerala's ST and SC working populations is engaged in elementary occupations OBCs in craft and related trade works. And Others in skilled agricultural works. At all India level and in Kerala least workers among all social groups are employed in clerical and professional works. Other social groups in India and Kerala are engaged more in high paid works.

There exist an inter community variations in demographic, socio- economic characteristics and labour market outcome. Paniyan community of Wayanad has the highest population followed by Kurichchan community of Wayanad and Malai Arayan community of Idukki district. Kudiya and Koraga communities of Kasaragod district has the lowest population during 2011. The sex ratio is high for Adiyani community followed by Paniyan, while unfavourable among Kudiya community. Compared to 1981 the sex ratio has increased for all the communities and declined for Kudiya and Malai Arayan communities. The growth rate in workers shows that Kudiya community followed by Mannan community has highest growth in workers, while, Irular and Koraga community has the least growth rate in workers. The Work Participation Rate of individual tribal communities in tribal inhabited districts examined in the fourth chapter showed that the WPR for tribal males and females has increased over the period from 1981 to 2011. Mannan community has the highest WPR followed by Kuruma and Kurichchan communities during 2001-2011. The total main workers in Kerala have declined from 1981 to 2011. This is true for both males and females in Kerala. The decline is highest for Mannan community followed by Kattunayakan community. And the decline is comparatively low for Kuruman community followed by Adiyani community of Wayanad. Kattunayakan community followed by Kadar and Mannan community has the highest percentage of marginal workers and the communities' Urally, Adiyani, Kuruman and Malai Arayan has least marginal workers in Kerala.

During 1981, all tribal communities are employed in primary sector followed by tertiary sector and secondary sector except for Koraga and Kudiya community of Kasaragod district, while during 2011 all the tribal communities are engaged more in agriculture and allied activities followed by tertiary and secondary sector activities. The communities Irular, Koraga, Kudiya, Kattunayakan, Paniyan were engaged more in secondary sector activities

than tertiary sector activities. There is a decline in primary sector activities among the communities' Irular, Kuruman, Malai Arayan, and Mannan and Paniyan communities, while increased for all other communities. Secondary sector activities declined during 2011 compared to 1981 for Koraga and Kudiya communities. Tertiary sector activities declined for Koraga, Kudiya and Kattunayakan communities, whereas increased for all other communities during the year from 1981 to 2011.

During 2011 males of tribal communities are engaged more in agriculture and allied activities. The males of tribal communities like Irular, Kattunayakan, Koraga, and Urally are engaged more in secondary activities than tertiary activities. During 2011, females of Malai Arayan community of Idukki are engaged more in tertiary sector works. The employment of Kudiya females in primary sector increased during 2011, while Koraga was still engaged more in secondary activities compared to 1991. Most of the workers from ST community are engaged as farmers and fishermen during 1991, while during 2011 they are engaged more in elementary occupations, which mean that there is deterioration in their standard of living by moving from self- employed to casual labours. So within the primary sector and those who have moved to other sectors are employed more in elementary occupations as casual labours. This means that even though there is sectoral and occupational movement among the tribal communities, the movement is not a favourable one. Over the years there is a decline in their employment in clerical works and as farmers and fishermen. All the facts mentioned above draws to the conclusion that structural transformation is more prominent among Malai Arayan community.

Apart from these macro evidences from secondary data, primary data on scheduled tribe households in Kerala also supports the observations drawn out from the NSSO data that majority of the respondent households are casual labourers in agriculture followed by self-employed in agriculture. Kattunayakan and Paniyan households are engaged more as casual labourers whereas, Malai Arayan as self - employed households. There are differences in land holdings across different communities. Among the tribal households, nearly 40 percent has no landholdings or less than 3 cents of land. This shows that the land reforms initiated hardly have any impact on most of the tribal population in Kerala. 16 percent Irular community has no land at all. The least cents of land holdings is among paniyan followed by Kattunayakan and Irular community. The land holdings are more among Malai Arayan community followed

by Muthuvan community. The differences in Land holdings are statistically confirmed using ANOVA. Malai Arayan and Kurichchan community follows similar pattern of land holdings. Land holdings of Muthuvan community and Kuruman community follows similar pattern. Irular, Paniyan and Kattunayakan follows similar pattern of land holdings.

Inter- generational differences in education, employment and landholdings is examined by taking Present generation as first generation, their parents as second generation and forefathers as third generation. Like the present/ First generation, second generation and third generation Malai Arayan possess more land followed by Kurichchan community. On the other hand, Paniyan, Kattunayakan and Irular possess least cents of land. This means that over the generations, landholdings is more prominent among Malai Arayan Community. There is high association between landholdings and household type of three generations. Households with large land holdings (especially above 150 cents) are engaged mostly as self-employed in agriculture. While those household possess few cents of land are engaged mainly as casual labours for their income. Land holdings of households have least influence on their participation in regular wage or salaried works. That is, the households possess large acres of land; there is a chance of being in agriculture than others. And those with small and marginal land holdings have a tendency to move to non- agriculture especially to casual works. This means that landholdings play an important role in the income and employment of the tribal communities. As far as tribal communities are concerned those who possess large land holdings and those depending on agriculture are far better off than those away from agriculture. The movement of tribal communities towards non- agriculture employment is concentrating largely on low paid casual works than high paid works. That is, they end up in low paid service sector jobs, thus not resulting in an improvement in their economic status. So land distribution should be initiated, supported and encouraged to ensure the betterment of tribal communities. Among the first generation tribes, Higher education holders are more among Malai Arayan community and illiterates are high among Kattunayakan and Paniyan community. Gender wise analysis of education on three generations shows that males are more literate with better qualification than females among surveyed tribes. Compared to second and third generations, first generation is more literate, showing increase in the educational status of tribes.

Among the first generation, nearly $3/4^{\text{th}}$ of the workers are engaged in primary sector followed by tertiary sector and secondary sector. The first generations are engaged more in primary sector followed by tertiary sector except for Malai Arayan and Irular community. Malai Arayan community is engaged more in tertiary sector and Irular in secondary sector. And from the second and third generations, almost all workers are engaged in primary sector. Among the first generation tribal those who engaged in primary sector have education up to plus two and those who have educational qualification plus two and above are engaged in tertiary sector. Occupational distribution of three generation showed that among the first generation workers, more than half of the workers are engaged in elementary occupation and within the elementary occupation most are engaged as casual labour in agriculture. Paniyan community followed by kattunayakan are engaged more in such occupations. $1/3^{\text{rd}}$ workers are engaged in skilled agriculture and fishery workers. They are engaged more in market oriented crop and animal producers. The community which is more in this occupation is Malai Arayan community followed by kurichchan community. Least workers are engaged in Service Workers and Shop & Market Sales Workers. Among the second generation workers, more than half male workers are engaged as Agricultural, Fishery and Related Labourers for their subsistence followed by Market- Oriented Crop and Animal Producers. Third generation workers are engaged in skilled agricultural workers and elementary works. Inter- generational occupation mobility is analysed. Among the three generations, the children with fathers engaged in professional, clerical and craft and related works, children also follow the same occupation. Children with parents engaged in better paid employment follow the same pattern of work than others. This is examined and confirmed using transformation matrix. Occupational mobility of present generation is influenced only by the education, the present generation has attained, occupation of their father and land owned by their parents households. This is statistically examined and confirmed using Binary logistic Regression. The income levels also vary across communities, and it is mainly associated with landholdings. This has been statistically verified and confirmed using Kruskal –Wallis test. Monthly income of Malai Arayan, Kurichchan and Kuruman communities significantly differ from Paniyan, Kattunayakan, Irular and Muthuvan communities.

The workers across tribal communities are engaged in elementary occupations, followed by skilled agriculture and fishery works and the remaining more or less equally distributed in all occupations. However these are the occupational pattern of the workers among tribal

communities, occupational choice has been influenced by Demographic, income, employment factors. Most of the workers in the tribal communities are engaged in informal sector works, and hence hardly enjoy social security benefits, paid leave, work contract, regularity in work. About 76 percent of the tribals are not registered in any placement agency. Government plays an important role among the tribal communities. The skill development programmes provided by tribal department of sample districts is enjoyed by mainly Kurichchan and Kuruman community, while Muthuvan community is not interested for the same. The sample communities are actively participating in MGNREGA programmes and Kudumbasree activities. The activities of NGO's are also limited to certain communities like Kurichchan and Kuruman. Even though, there is no apparent discrimination, exploitation and problems with non- tribes, these may influence their job preferences. Discrimination, exploitation and problems with non- tribes is apparent, but they also opined that these influences their job preference. There are few communities which found job in the Central and state governments. Among which, majority belongs to Kuruman in the state government and Malai Arayan in the central government services. Still, more than half of the sample communities face unemployment, which is seasonal and due to lack of work. Even then, the efforts taken by the communities during unemployment are meagre.

Sample tribal households are least aware of different policies of state and central government except education and employment policies. Less than one third of the workers from ST community have migrated from their settlement areas for various purposes, out of this, majority of them had intra state migration for casual employment. None of them has migrated to foreign countries. This shows that overseas migration, which is one of the major factors that played an important role in improving the economic and social status of many communities in Kerala seem to have completely bypassed the tribal communities. Tribal communities was unable to achieve the initial education endowments attained by other social groups in Kerala was the major reason behind this situation. Macro level evidences can be found in the studies of Zachariah and Rajan (2004) that the tribal population is least in emigrants, return emigrants and non- resident Keralites.

Majority of the workers from ST community does not want to move to other occupations from their present occupation. And those who wish to move prefer permanent jobs and jobs with better income, which gave more earnings. Income is the most important factor that

influences their occupational selection. Apart from this, gender, age, marital status, education, engagement in subsidiary activity, discrimination, exploitation, hours of work and method of pay are more associated with employment selection. This means that those who are male with below higher secondary education and method of pay as daily payment, age and job with more income rather than other factors like transportation facility, security in job and other allowances may decide the occupational choice of the workers from ST community. This is statistically verified and confirmed using binary logistic regression.

Hence the study validate the hypothesis that Inter- generational occupational transformation has significantly taken place among the tribal communities in Kerala triggered by many factors including inter- generational characteristics, but the pattern of transformation and determinants may be different across different tribal communities. Second, it is hypothesised that compensation and education are the determinants that significantly influence the choice of occupation of tribal communities.

In short, On the basis of all these characteristics studied in the present work we can conclude that Compared to other social groups, they are engaged more in Agriculture and allied activities. Land holdings play a major role for such pattern. Structural transformation has taken place among the tribal communities. But this structural transformation is not favourable as the movement that has occurred is more towards low paid casual works. Lack of land holdings is the major reason for this, as those tribal communities possessing large area of land (such as Malai Arayan, Kuruman, Kurichchan and to some extent Muthuvan) are better off than other communities with less land (such as Irular, Paniyan and Kattunayakan) in terms of income and employment. This again proves that there is a marked difference in the tribal communities of Kerala. The communities who are better off in terms of education, landholdings, income and employment enjoy the benefits of reservation in government jobs, land distribution programmes and other policies and schemes offered by the government to tribal communities. This means that the programmes and schemes initiated and implemented by government and other organisations for the development of tribal communities are not equally distributed across communities, which calls for disaggregation of schemes for development at the individual community level.

7.2 Validity of Hypotheses

1. The first hypothesis to be tested was “Inter- generational occupational transformation has significantly taken place among the tribal communities in Kerala”. The primary survey data provided fifth chapter indicated that only 37 percentage tribal workers has inter- generational occupational mobility. But as far as this community is concerned this cannot be treated negligible. This also shows their positive approach towards occupational mobility as against their conventional practices. The factors determining such mobility is tested using binary logit model and found that education of present generation, occupation of their parents and landholdings of their parents influence the transformation. And the influencing variables vary for individual tribal communities. Hence, on the basis of the study and as far as the cultural and geographical traits of these communities are considered, the hypothesis is validated

2. The second hypothesis to be tested was “compensation and education are the determinants that significantly influence the choice of occupation of tribal communities”. The survey data presented in the sixth chapter validate this hypothesis. It is clear from the data and analysis using binary logit model that the variables method of pay and education along with the variables like gender, age, engagement in subsidiary activity, faced exploitation, hours of work, factors responsible for job selection, are statistically significant at one percent level.

7.3 Policy Implications

1. The study traces out wide disparity in landholdings among selected tribal communities and type of landholdings provided by the government. It is also evident from the survey that the land distributed to Irular communities is barren land. So land re distribution should be made more equal and effective to reach the most needed communities.

2. Despite the extensive coverage of educational institutions especially for tribal communities, the education attained by tribal communities is still backward. The major reason found from the survey for this is the illiteracy of parents and attitude and aptitude towards education. So measures to be taken to reduce poverty and hunger among these communities. A detailed counselling and awareness should also be given to the tribal population about the usage of tobacco and other chewing’s and alcohol drinking habits. This is found even among the children who interfere in attaining education among the socially and

economically backward communities. They started it as a substitute for food, but now it has become their habit.

3. It is also observed from the survey that the institutions near tribal settlement play an important role in changing their life. It is evident from the employment pattern of Irular tribes of Palakkad district near the Walayar Malabar cements. So initiatives are necessary especially from the government to establish environment friendly institutions at the reachable areas of tribal settlements.

4. It is also evident from the data sources that more Malai Arayan, Kuruman and kurichchan community is employed in government occupations. This shows the historical affirmative action plays an important role in tribal income and standard of living of tribal communities. This should be continued and revised to include the excluders among the excluded.

7.4 Scope for Future Research

The study is limited to seven communities and tribal dominated districts. As there are inherent differences among the tribal communities, it will be more enlightening to study about the occupational transformation and the factors responsible for such transformation differences among the other tribal communities taking into account the asset holdings. It is also illuminating to study the occupational transformation and poverty (deprivation) on tribal communities.

7.5 Conclusion

The study brought out the fact that the tribal communities are marginalised even in the labour market in Kerala. They are largely engaged in those works where the other social groups are reluctant to work. Lack of education, land holdings, accessibility to workplace in terms of distance and road connectivity and attitude plays hindrances in their economic development

thereby social development. There are also inter-tribal variations in the labour market participation of tribal communities. Malai Arayan, Kuruman and Kurichchan, the forward tribes, have shown better condition in the labour market compared to the backward tribes, Paniyan, Kattunayakan, Irular and Muthuvan. Regardless of the large number of programmes initiated by various governments to bring up the excluders among the excluded, the situations of tribal communities remain deplorable due to the inefficient implementation of the programmes. Even within the tribal communities, the sad reality is that the rich is becoming richer and the poor poorer. This backwardness is because of the lack of proper implementation of land reforms, educational policies and social development programmes. The situation is also due to the lack of accessibility to the opportunities which other social groups enjoyed in the mid 80's like migration and employment opportunities. Along with this, the skills they achieved did not seem to have any marketable value. They also rejected high paid works and other opportunities because of misbeliefs and lack of proper education. Apart from all these they like to follow their conventional practices and want to be in their interior/ forest areas. For them their beliefs customs and traditions are linked to the forest. Their god is in the forest or the forest is itself their god. So they do not want to be away from their native areas where they are now. But unfortunately the government policies are in such a way that they are forced to be away from their areas, which make the policies ineffective. This need to be corrected, initiate and implement policies which satisfy their needs along with protecting their customs, traditions and culture, to which they are very sensitive. In this context, the study reiterates the urgent need for overhauling the existing labour market mechanism of most marginalised communities like tribal folks. It is hoped that the findings of the present study would be able to help the policy makers to implement long term policies by understanding the real economic problems of tribal communities in Kerala, through the fair distribution of land and skill development to utilise the job opportunities the emerging labour market.

ANNEXURES

Annexure 4.1

Status of Scheduled Tribe Population in India and Kerala

Sl. No	Parameters	Kerala	India
1	Population (in lakh)	4.85	1042
2	Percentage to total Population	1.45	8.6
3	Decadal Growth Rate (%)	33.1	23.7
4	Mean household size	4	4.8
5	Child Population to the total population	11.2	16
6	Sex Ratio	1035	990
7	Literacy rate	75.81	58.96
8	Literacy rate-Female	71.1	49.35
7	Literacy rate-Male	80.76	68.53
8	Work Participation Rate (WPR)	47.49	48.7
9	Availing banking services (in %)	60.15	50.94
10	Television (in %)	61.17	39.15
11	Computer with Internet (in %)	1.93	1.27
12	Landline Phone (in %)	6.34	3
13	Two Wheeler (in %)	10.6	11.99
14	Car (in %)	2.31	1.82
15	None of these assets (in %)	11.46	22.6
16	Percentage of households having drinking water facility within the premises	44.3	19.7
17	Percentage of households having toilet facility	71.4	22.6
18	Percentage of households having bathing Facility	28.6	17.3

Source: Census Report

Annexure 4.2

Regional Distribution of ST Population in Kerala

Districts	ST population in Rural Areas				ST population in Urban Areas				ST population in Districts			
	1981	1991	2001	2011	1981	1991	2001	2011	1981	1991	2001	2011
Kasaragod		28924	29720	46094		359	618	2763		29283	30338	48857
Kannur	39400	17640	19417	36302	304	603	552	5069	39704	18243	19969	41371
Wayanad	95557	113759	134584	148215	0	2426	3128	3228	95557	116185	137712	151443
Kozhikode	3768	5141	5668	9555	120	465	527	5673	3888	5606	6195	15228
Malappuram	7937	10534	12138	18247	18	41	225	4743	7955	10575	12363	22990
Palakkad	28720	35139	39439	47023	74	566	429	1949	28794	35705	39868	48972
Thrissur	3195	3965	4600	5859	32	160	494	3571	3227	4125	5094	9430
Ernakulam	1855	3538	8369	8324	1696	2739	3438	8235	3551	6277	11807	16559
Idukki	38263	49859	50547	55243	449	738	845	572	38712	50597	51392	55815
Kottayam	15054	17794	18180	19698	173	414	366	2274	15227	18208	18546	21972
Alappuzha	2536	2274	2478	2961	737	1069	1254	3613	3273	3343	3732	6574
Pathanamthitta	0	6755	6409	7663	0	332	314	445	0	7087	6723	8108
Kollam	6812	3636	4952	7886	630	441	564	2875	7442	4077	5516	10761
Thiruvananthapuram	13388	15732	20223	20022	757	850	1474	6737	14145	16582	21697	26759

Source: Census, 1981, 1991, 2001 and 2011

Annexure 4.3

Population of Tribal Communities in Kerala

ST	Number of Households with at least one ST Member	Total Population			Literacy Rate	Sex Ratio	Household Size
Adiyan	2,668	11,526	5,515	6,011	66.78	1,090	4.32
Arandan, Aranadan	82	283	129	154	50.43	1,194	3.45
Eravallan	1,302	4,797	2,362	2,435	52.98	1,031	3.68
Hill Pulaya,	874	2,959	1,461	1,498	61.23	1,025	3.39
Irular, Irulan	6,710	23,721	11,766	11,955	62.80	1,016	3.54
Kadar,	769	2,949	1,454	1,495	71.17	1,028	3.83
Kanikaran,	6,463	21,251	9,975	11,276	87.96	1,130	3.29
Kattunayakan	4,500	18,199	9,039	9,160	57.47	1,013	4.04
Kochuvelan	11	38	22	16	91.43	727	3.45
Koraga	390	1,582	778	804	77.17	1,033	4.06
Kudiya,	169	785	403	382	80.78	948	4.64
Kurichchan,	8,583	35,171	17,643	17,528	83.60	993	4.10
Kurumansns,	6,330	24,505	12,148	12,357	84.14	1,017	3.87
Kurumbas,	723	2,586	1,302	1,284	56.25	986	3.58
Maha Malasar	65	154	71	83	53.13	1,169	2.37
Malai Arayan	9,749	33,216	16,622	16,594	96.32	998	3.41
Malai Pandaram	715	2,422	1,227	1,195	60.24	974	3.39
Malai Vedan, Malavedan	2,382	8,149	3,901	4,248	81.94	1,089	3.42

Malakkuravan	61	175	88	87	65.85	989	2.87
Malasar	850	3,195	1,607	1,588	48.70	988	3.76
Malayan,	1,679	5,917	2,890	3,027	64.38	1,047	3.52
Malayarayar	549	1,568	762	806	80.67	1,058	2.86
Mannan	2,804	9,780	4,792	4,988	69.25	1,041	3.49
Muthuvan,	6,404	23,746	11,931	11,815	56.90	990	3.71
Palleyan,	453	1,464	736	728	73.45	989	3.23
Paniyan	19,331	88,450	42,775	45,675	63.19	1,068	4.58
Ulladan, Ullatan	4,630	16,230	7,877	8,353	88.42	1,060	3.51
Urally	3,298	11,179	5,602	5,577	80.07	996	3.39
Mala Vettuvan	4,191	17,869	8,852	9,017	65.76	1,019	4.26
Ten Kurumban,	7	25	10	15	61.11	1,500	3.57
Thachanadan,	443	1,745	859	886	79.42	1,031	3.94
Cholanaickan	42	124	72	52	19.79	722	2.95
Mavilan	7,814	30,867	14,972	15,895	77.15	1,062	3.95
Karimpalan	3,786	14,098	6,902	7,196	83.98	1,043	3.72
Vetta Kurumans	308	739	346	393	70.09	1,136	2.40
Mala Panickar	259	1,023	474	549	83.50	1,158	3.95
All Schedule Tribes	1,40,468	4,84,839	2,38,203	2,46,636	75.81	1,035	3.45

Source: Census of India, 2011

Annexure 4.4

Occupational Classification of Tribal Communities (Persons)

ST communities	National Classification of Occupation for Persons	Year	
		1991	2011
		Total	
All ST	Total	32,877	66238
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	1,279	5254
2	Clerical Works	2,411	1856
3	Sales Workers	2793	4774
4	Farmers, Fishermen	18,252	7824
5	Production and Related Trades Workers	7,443	9710
6	Plant And Machine Operators, and Assemblers	759	2748
7	Elementary Occupations	3,669	31678
8	Workers Not Classified by Occupations	699	2394
Adiyan	Total	474	808
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	4	52
2.	Clerical Works	19	10
3.	Sales Workers	92	48
4.	Farmers, Fishermen	307	32
5.	Production and Related Trades Workers	39	92
6.	Plant And Machine Operators, and Assemblers	5	28
7.	Elementary Occupations	21	532
8.	Workers Not Classified by Occupations	13	14
Irular	Total	797	3336
1.	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	42	214
2.	Clerical Works	69	70
3.	Sales Workers	116	170
4.	Farmers, Fishermen	189	308
5.	Production and Related Trades Workers	372	420
6.	Plant And Machine Operators, and Assemblers	68	142
7.	Elementary Occupations	252	1856
8.	Workers Not Classified by Occupations	9	156
Kattunayakan	Total	2,074	1754
1.	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	16	34
2.	Clerical Works	7	2
3.	Sales Workers	72	48

4.	Farmers, Fishermen	1,676	288
5.	Production and Related Trades Workers	247	96
6.	Plant And Machine Operators, and Assemblers	35	14
7.	Elementary Occupations	175	1106
8.	Workers Not Classified by Occupations	56	166
Koraga	Total	521	326
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	3	6
2.	Clerical Works	3	0
3.	Sales Workers	18	6
4.	Farmers, Fishermen	48	0
5.	Production and Related Trades Workers	435	178
6.	Plant And Machine Operators, and Assemblers	4	0
7.	Elementary Occupations	328	134
8.	Workers Not Classified by Occupations	14	2
Kudiya	Total	200	228
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	0	6
2.	Clerical Works	7	8
3.	Sales Workers	11	10
4.	Farmers, Fishermen	92	74
5.	Production and Related Trades Workers	84	42
6.	Plant And Machine Operators, and Assemblers	3	8
7.	Elementary Occupations	11	78
8.	Workers Not Classified by Occupations	6	2
Kurichchan	Total	1,772	4342
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	90	452
2.	Clerical Works	166	110
3.	Sales Workers	232	470
4.	Farmers, Fishermen	1,029	374
5.	Production and Related Trades Workers	218	804
6.	Plant And Machine Operators, and Assemblers	22	290
7.	Elementary Occupations	134	1688
8.	Workers Not Classified by Occupations	37	154
Kurumans	Total	2,622	3888
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	110	514
2.	Clerical Works	156	230
3.	Sales Workers	162	512
4.	Farmers, Fishermen	1,918	298
5.	Production and Related Trades Workers	234	704
6.	Plant And Machine Operators, and Assemblers	38	228
7.	Elementary Occupations	156	1258

8.	Workers Not Classified by Occupations	42	144
Malai Arayan	Total	2,736	6336
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	402	1312
2	Clerical Works	685	628
3	Sales Workers	347	742
4	Farmers, Fishermen	937	1216
5	Production and Related Trades Workers	301	472
6	Plant And Machine Operators, and Assemblers	81	354
7	Elementary Occupations	160	1284
8	Workers Not Classified by Occupations	64	328
Mannan	Total	506	722
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	11	50
2.	Clerical Works	8	8
3.	Sales Workers	31	60
4.	Farmers, Fishermen	405	70
5.	Production and Related Trades Workers	33	106
6.	Plant And Machine Operators, and Assemblers	1	32
7.	Elementary Occupations	28	346
8.	Workers Not Classified by Occupations	18	50
Muthuvan	Total	1,296	2158
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	13	120
2.	Clerical Works	25	18
3.	Sales Workers	60	112
4.	Farmers, Fishermen	1,052	642
5.	Production and Related Trades Workers	119	140
6.	Plant And Machine Operators, and Assemblers	4	44
7.	Elementary Occupations	106	1036
8.	Workers Not Classified by Occupations	27	46
Paniyan	Total	6,622	8766
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	42	112
2.	Clerical Works	73	28
3.	Sales Workers	379	166
4.	Farmers, Fishermen	4,976	532
5.	Production and Related Trades Workers	1,036	708
6.	Plant And Machine Operators, and Assemblers	52	122
7.	Elementary Occupations	850	6750
8.	Workers Not Classified by Occupations	116	348
Urally	Total	850	1218
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate	28	92

	Professionals		
2.	Clerical Works	25	30
3.	Sales Workers	73	86
4.	Farmers, Fishermen	635	108
5.	Production and Related Trades Workers	71	254
6.	Plant And Machine Operators, and Assemblers	13	56
7.	Elementary Occupations	38	550
8.	Workers Not Classified by Occupations	18	42

Source: Census

Annexure 4.4.1

Occupational Classification of Tribal Communities (Males)

ST Communities	National Classification of Occupation for Males	Year	
		1991	2011
All ST	Total	21,835	44396
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	693	2770
2.	Clerical Works	1,984	1124
3.	Sales Workers	1870	3354
4.	Farmers, Fishermen	12,717	6054
5.	Production and Related Trades Workers	4,093	7672
6.	Plant And Machine Operators, and Assemblers	677	2588
7.	Elementary Occupations	2,610	19406
8.	Workers Not Classified by Occupations	478	1428
Adiyan	Total	302	470
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	3	18
2.	Clerical Works	18	6
3.	Sales Workers	44	34
4.	Farmers, Fishermen	200	26
5.	Production and Related Trades Workers	29	76
6.	Plant And Machine Operators, and Assemblers	3	26
7.	Elementary Occupations	19	274
8.	Workers Not Classified by Occupations	8	10
Irular	Total	527	2012
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	22	118
2.	Clerical Works	62	42
3.	Sales Workers	72	88
4.	Farmers, Fishermen	102	156
5.	Production and Related Trades Workers	262	308
6.	Plant And Machine Operators, and Assemblers	51	132
7.	Elementary Occupations	165	1096
8.	Workers Not Classified by Occupations	7	72
Kattunayakan	Total	1,360	1100
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	9	14

2.	Clerical Works	5	0
3.	Sales Workers	42	36
4.	Farmers, Fishermen	1,088	212
5.	Production and Related Trades Workers	180	84
6.	Plant And Machine Operators, and Assemblers	31	14
7.	Elementary Occupations	121	652
8.	Workers Not Classified by Occupations	36	88
Koraga	Total	252	168
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	3	4
2.	Clerical Works	3	0
3.	Sales Workers	14	2
4.	Farmers, Fishermen	22	0
5.	Production and Related Trades Workers	202	56
6.	Plant And Machine Operators, and Assemblers	2	0
7.	Elementary Occupations	173	104
8.	Workers Not Classified by Occupations	8	2
Kudiya	Total	114	166
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	0	6
2.	Clerical Works	6	8
3.	Sales Workers	6	10
4.	Farmers, Fishermen	69	54
5.	Production and Related Trades Workers	30	12
6.	Plant And Machine Operators, and Assemblers	3	8
7.	Elementary Occupations	11	66
8.	Workers Not Classified by Occupations	3	2
Kurichchan	Total	1,294	2946
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	40	258
2.	Clerical Works	159	74
3.	Sales Workers	172	320
4.	Farmers, Fishermen	756	228
5.	Production and Related Trades Workers	143	654
6.	Plant And Machine Operators, and Assemblers	20	280
7.	Elementary Occupations	85	1046
8.	Workers Not Classified by Occupations	24	86
Kurumans	Total	1,809	2556

1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	44	258
2.	Clerical Works	143	154
3.	Sales Workers	104	380
4.	Farmers, Fishermen	1,315	126
5.	Production and Related Trades Workers	168	628
6.	Plant And Machine Operators, and Assemblers	31	220
7.	Elementary Occupations	119	702
8.	Workers Not Classified by Occupations	35	88
Malai Arayan	Total	2,177	4468
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	212	674
2.	Clerical Works	519	318
3.	Sales Workers	255	568
4.	Farmers, Fishermen	876	1066
5.	Production and Related Trades Workers	255	424
6.	Plant And Machine Operators, and Assemblers	77	346
7.	Elementary Occupations	147	884
8.	Workers Not Classified by Occupations	60	188
Mannan	Total	326	470
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	11	26
2.	Clerical Works	8	6
3.	Sales Workers	25	40
4.	Farmers, Fishermen	245	52
5.	Production and Related Trades Workers	27	92
6.	Plant And Machine Operators, and Assemblers	1	32
7.	Elementary Occupations	22	190
8.	Workers Not Classified by Occupations	10	32
Muthuvan	Total	948	1416
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	7	56
2.	Clerical Works	21	12
3.	Sales Workers	50	58
4.	Farmers, Fishermen	804	452
5.	Production and Related Trades Workers	46	72
6.	Plant And Machine Operators, and Assemblers	3	42
7.	Elementary Occupations	37	696

8.	Workers Not Classified by Occupations	20	28
Paniyan	Total	4,113	5528
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	23	60
2.	Clerical Works	63	22
3.	Sales Workers	178	106
4.	Farmers, Fishermen	3,095	432
5.	Production and Related Trades Workers	687	586
6.	Plant And Machine Operators, and Assemblers	40	96
7.	Elementary Occupations	562	4026
8.	Workers Not Classified by Occupations	67	200
Urally	Total	611	794
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	11	30
2.	Clerical Works	18	22
3.	Sales Workers	43	44
4.	Farmers, Fishermen	484	88
5.	Production and Related Trades Workers	44	196
6.	Plant And Machine Operators, and Assemblers	13	50
7.	Elementary Occupations	24	342
8.	Workers Not Classified by Occupations	11	22

Source: computed from census reports

Annexure 4.4.2

Occupational Classification of Tribal Communities (Females)

ST communities	National Classification of Occupation for Females	Year	
		1991	2011
All ST	TOTAL	11,042	21842
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	,586	2484
2.	Clerical Works	427	732
3.	Sales Workers	923	1420
4.	Farmers, Fishermen	5,535	1770
5.	Production and Related Trades Workers	3,350	2038
6.	Plant And Machine Operators, and Assemblers	82	160
7.	Elementary Occupations	1,059	12272
8.	Workers Not Classified by Occupations	221	966
Adiyan	TOTAL	172	338
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	1	34
2.	Clerical Works	1	4
3.	Sales Workers	48	14
4.	Farmers, Fishermen	107	6
5.	Production and Related Trades Workers	10	16
6.	Plant And Machine Operators, and Assemblers	2	2
7.	Elementary Occupations	2	258
8.	Workers Not Classified by Occupations	5	4
Irular	TOTAL	270	1324
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	20	96
2.	Clerical Works	7	28
3.	Sales Workers	44	82
4.	Farmers, Fishermen	87	152
5.	Production and Related Trades Workers	110	112
6.	Plant And Machine Operators, and Assemblers	17	10
7.	Elementary Occupations	87	760
8.	Workers Not Classified by Occupations	2	84
Kattunayakan	TOTAL	714	654
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	7	20
2.	Clerical Works	2	2
3.	Sales Workers	30	12
4.	Farmers, Fishermen	588	76
5.	Production and Related Trades Workers	67	12
6.	Plant And Machine Operators, and Assemblers	4	0

7.	Elementary Occupations	54	454
8.	Workers Not Classified by Occupations	20	78
Koraga	TOTAL	269	158
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	0	2
2.	Clerical Works	0	0
3.	Sales Workers	4	4
4.	Farmers, Fishermen	26	0
5.	Production and Related Trades Workers	233	122
6.	Plant And Machine Operators, and Assemblers	2	0
7.	Elementary Occupations	155	30
8.	Workers Not Classified by Occupations	6	0
Kudiya	TOTAL	86	62
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	0	0
2.	Clerical Works	1	0
3.	Sales Workers	5	0
4.	Farmers, Fishermen	23	20
5.	Production and Related Trades Workers	54	30
6.	Plant And Machine Operators, and Assemblers	0	0
7.	Elementary Occupations	0	12
8.	Workers Not Classified by Occupations	3	0
Kurichchan	TOTAL	478	1396
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	50	194
2.	Clerical Works	7	36
3.	Sales Workers	60	150
4.	Farmers, Fishermen	273	146
5.	Production and Related Trades Workers	75	150
6.	Plant And Machine Operators, and Assemblers	2	10
7.	Elementary Occupations	49	642
8.	Workers Not Classified by Occupations	13	68
Kurumans	TOTAL	813	1332
1	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	66	256
2.	Clerical Works	13	76
3.	Sales Workers	58	132
4.	Farmers, Fishermen	603	172
5.	Production and Related Trades Workers	66	76
6.	Plant And Machine Operators, and Assemblers	7	8
7.	Elementary Occupations	37	556
8.	Workers Not Classified by Occupations	7	56
Malai Arayan	TOTAL	559	1868
1	Legislators, Senior Officials and Managers,	190	638

	Professionals, Technicians and Associate Professionals		
2.	Clerical Works	166	310
3.	Sales Workers	92	174
4.	Farmers, Fishermen	61	150
5.	Production and Related Trades Workers	46	48
6.	Plant And Machine Operators, and Assemblers	4	8
7.	Elementary Occupations	13	400
8.	Workers Not Classified by Occupations	4	140
Mannan	TOTAL	180	252
	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	0	24
1			
2.	Clerical Works	0	2
3.	Sales Workers	6	20
4.	Farmers, Fishermen	160	18
5.	Production and Related Trades Workers	6	14
6.	Plant And Machine Operators, and Assemblers	0	0
7.	Elementary Occupations	6	156
8.	Workers Not Classified by Occupations	8	18
Muthuvan	TOTAL	348	742
	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	6	64
1			
2.	Clerical Works	4	6
3.	Sales Workers	10	54
4.	Farmers, Fishermen	248	190
5.	Production and Related Trades Workers	73	68
6.	Plant And Machine Operators, and Assemblers	1	2
7.	Elementary Occupations	69	340
8.	Workers Not Classified by Occupations	7	18
Paniyan	TOTAL	2,509	3238
	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	19	52
1			
2.	Clerical Works	10	6
3.	Sales Workers	201	60
4.	Farmers, Fishermen	1,881	100
5.	Production and Related Trades Workers	349	122
6.	Plant And Machine Operators, and Assemblers	12	26
7.	Elementary Occupations	288	2724
8.	Workers Not Classified by Occupations	49	148
Urally	TOTAL	239	424
	Legislators, Senior Officials and Managers, Professionals, Technicians and Associate Professionals	17	62
1			
2.	Clerical Works	7	8
3.	Sales Workers	30	42
4.	Farmers, Fishermen	151	20

5.	Production and Related Trades Workers	27	58
6.	Plant And Machine Operators, and Assemblers	0	6
7.	Elementary Occupations	14	208
8.	Workers Not Classified by Occupations	7	20

Source: Computed from Census Reports

Annexure 5.1

Type of Land Possessed by the Household

Sample community	Type Of Land Possessed				Total
	Owned	Leased In	Neither Owned Nor Leased In /Settlement	Owned And Settlement	
Malai Arayan	1.00	2.10	96.90	0.00	100.00
Muthuvan	1.60	0.00	98.40	0.00	100.00
Irular	1.80	0.00	98.20	0.00	100.00
Paniyan	0.50	0.50	98.90	0.00	100.00
Kurichchan	0.00	2.40	94.10	3.50	100.00
Kurumans	1.50	3.10	95.40	0.00	100.00
Kattunayakan	0.00	0.00	100.00	0.00	100.00
Total	0.80	1.20	97.50	0.50	100.00

Source: Primary Survey

Annexure 5.2

Inter- generation Mobility among Sample Communities

Mobility among communities									
ST Communities		Determinants of Mobility							
		Land cents parents Second gen	land cents Present gen	Education of Mother	Education of Father	Education of Present	Occupation Mother	Occupation Father	Constant
Malai Arayan	Sig.	.401	.877	.586	.177	.001	1.000	.999	1.000
	Odds ratio	0.9988	1.0003	1.8918	0.1901	6.0692	0	0	0.3
Muthuvan	Sig.	0.213	0.512	_	0.999	0.509	.673	.049	.520
	Odds ratio	.996	.997	_	0	.532	1.401	4.006	.690
Irular	Sig.	.611	.234	.235	.024	.086	.019	.248	.706
	Odds ratio	.992	1.013	8.206	.122	6.618	.069	7.861	1.179
Paniyan	Sig.	.272	.036	.495	.046	.073	.812	.001	.000
	Odds ratio	.992	1.010	.333	15.683	4.136	.714	19.464	.078
Kurichchan	Sig.	.656	.006	.730	.192	.758	.154	.312	.408
	Odds ratio	1.000	.992	.771	2.296	1.183	2.662	2.799	.429
Kurumans	Sig.	.045	.000	.555	.230	.007	.220	.007	.011
	Odds ratio	.994	.958	.496	.200	16.720	3.952	36.588	14.182
Kattunayakan	Sig.	.478	.245	_	.999	.999	1.000	.998	.003
	Odds ratio	1.010	1.016	_	0.000	.000	.000	0.000	.044

Source: computed from Primary Survey

Annexure 5.3

Occupation of Workers who had Mobility from their Parent's Occupation (in Percentage)

Sample Communities								
NCO 2004	Malai Arayan	Muthuvan	Irular	Paniyan	Kurichchan	Kurumans	Kuttunayakan	Total
1	2.40 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	2.70 (0)	0.00 (0)	0.90 (0)
2	33.30 (0.00)	3.80 (0.00)	3.00 (0.00)	3.00 (0.00)	2.70 (0.00)	2.70 (0.00)	6.30 (0.00)	8.90 (0.00)
3	11.90 (4.80)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	10.80 (8.10)	10.80 (0.00)	0.00 (0.00)	5.80 (2.20)
4	11.90 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	16.20 (5.00)	0.00 (0.00)	4.90 (0.90)
5	9.50 (0.00)	3.80 (3.80)	0.00 (0.00)	0.00 (0.00)	5.40 (5.40)	5.40 (0.00)	0.00 (0.00)	4.00 (1.30)
6	19.00 (90.50)	30.80 (69.20)	9.10 (3.00)	6.10 (33.30)	13.50 (81.10)	5.40 (55.00)	12.50 (62.50)	13.40 (57.30)
7	0.00 (0.00)	0.00 (0.00)	15.20 (3.00)	9.10 (0.00)	2.70 (0.00)	0.00 (0.00)	6.30 (0.00)	4.50 (0.40)
8	11.90 (0.00)	11.50 (0.00)	12.10 (0.00)	6.10 (0.00)	2.70 (0.00)	5.40 (0.00)	0.00 (0.00)	7.60 (0.00)
9	0.00 (4.80)	50.00 (26.90)	60.60 (93.90)	75.80 (66.70)	62.20 (5.40)	51.40 (40.00)	75.00 (37.50)	50.00 (37.90)
Total	100.00 (100.00)	100.00 (100.00)	100.00 (100.00)	100.00 (100.00)	100.00 (100.00)	100.00 (100.00)	100.00 (100.00)	100.00 (100.00)

Source: Primary Survey

Note: Figures in Parenthesis shows Second Generation Father Occupation

Annexure 6.1

Gender of Head of the Household (in Percentage)

Sample Communities	Gender		Total
	Male	Female	
Malai Arayan	88.70	11.30	100.00
Muthuvan	93.80	6.30	100.00
Irular	92.50	7.50	100.00
Paniyan	81.90	18.10	100.00
Kurichchan	95.30	4.70	100.00
Kurumans	93.80	6.20	100.00
Kuttunayakan	91.10	8.90	100.00
Total	89.10	10.90	100.00

Source: Primary Survey

Annexure 6.2

Occupational of Sample Tribal Communities engaged in Subsidiary Activity (in Percentage)

Sample Communities	Occupation in Subsidiary Activity							Total
	2	3	5	6	7	8	9	
Malai Arayan	0.90	0.90	1.80	46.80	0.00	0.90	48.60	100.00
Muthuvan	0.00	0.00	0.80	72.20	0.80	0.80	25.60	100.00
Irular	0.00	0.00	0.00	48.70	0.00	0.00	51.30	100.00
Paniyan	0.00	0.00	0.00	55.10	0.00	0.80	44.10	100.00
Kurichchan	0.00	6.50	2.40	56.10	0.80	0.80	33.30	100.00
Kurumans	0.00	0.00	0.00	75.30	2.70	0.00	21.90	100.00
Kuttunayakan	0.00	0.00	0.00	89.40	0.00	1.50	9.10	100.00
Total	0.10	1.30	0.90	62.50	0.60	0.70	33.80	100.00

Source: Primary Survey

Annexure 6.3

Kruskal - wallis test on monthly income of ST communities

sample1- sample2	Test Statistic	Std.Error	Std.Test Statistic	Sig	Adj.Sig
Kattunayakan- Paniyan	16.466	29.418	0.56	0.576	1
Kattunayakan-Irular	63.807	34.251	1.863	0.062	1
Kattunayakan-Muthuvan	87.05	34.572	2.518	0.012	0.248
Kattunayakan-Kurumans	214.638	34.462	6.228	0	0
Kattunayakan-Kurichchan	228.482	32.761	6.974	0	0
Kattunayakan-Malai Arayan	244.372	32.052	7.624	0	0
Paniyan-Irular	47.342	25.199	1.879	0.06	1
Paniyan-Muthuvan	70.584	25.633	2.754	0.006	0.124
paniyan-Kurumans	-198.173	25.485	-7.776	0	0
paniyan-Kurichchan	-212.017	23.133	-9.165	0	0
paniyan-Malai Arayan	227.906	22.118	10.304	0	0
Irular-Muthuvan	23.243	31.061	0.748	0.454	1
Irular-Kurumans	-150.831	30.939	-4.875	0	0
Irular-Kurichchan	-164.675	29.032	-5.672	0	0
Irular-Malai Arayan	180.565	28.23	6.396	0	0
Muthuvan-Kurumans	-127.588	31.294	-4.077	0	0.001
Muthuvan-Kurichchan	-141.432	29.41	-4.809	0	0
Muthuvan-Malai Arayan	157.322	28.618	5.497	0	0
Kurumans-Kurichchan	13.844	29.281	0.473	0.636	1
Kurumans-Malai Arayan	29.734	28.485	1.044	0.297	1
Kurichchan-Malai Arayan	15.89	26.403	0.602	0.547	1

Source: Primary survey

Annexure 6.4

Distribution of Respondents on the basis Sought Work During Unemployment

St Community	Sought Work During Unemployment			Total
	Yes On Most Days	On Some Days	Not Sought	
Malai Arayan	18.50	7.40	74.10	100.00
Muthuvan	3.00	9.10	87.90	100.00
Irular	30.80	19.20	50.00	100.00
Paniyan	6.80	22.70	70.50	100.00
Kurichchan	8.50	19.10	72.30	100.00
Kurumans	27.90	23.30	48.80	100.00
Kattunayakan	1.90	13.20	84.90	100.00
Total	11.00	19.00	70.00	100.00

Source: Primary survey

Annexure 6.5

Employment after Skill Development

St Community	Changed Work After Training					Total
	Yes Changed as Main Source of Income	Yes Changed as Subsidiary Source of Income	No, Tried But Didn't Get	No, Trying	Not At All Tried	
Malai Arayan	0.00	25.00	16.70	25.00	33.30	100.00
Muthuvan	16.70	50.00	16.70	0.00	16.70	100.00
Irular	0.00	0.00	50.00	0.00	50.00	100.00
Paniyan	10.30	20.70	13.80	20.70	34.50	100.00
Kurichchan	8.00	28.00	40.00	16.00	8.00	100.00
Kurumans	50.00	10.00	30.00	10.00	0.00	100.00
Total	12.50	22.70	26.10	15.90	22.70	100.00

Source: Primary Survey

Annexure 6.6

Type of government job they have tried/ trying (in percentage)

Sample Communities	Type of Government Job Trying For			Total
	Central	State	Both	
Malai Arayan	39.60	52.10	8.30	100.00
Muthuvan	0.00	100.00	0.00	100.00
Irular	28.60	57.10	14.30	100.00
Paniyan	16.70	83.30	0.00	100.00
Kurichchan	17.60	58.80	23.50	100.00
Kurumans	0.00	96.00	4.00	100.00
Kuttunayakan	50.00	50.00	0.00	100.00
Total	22.00	69.20	8.80	100.00

Source: Primary Survey

Annexure 6.7

State Of Migration of the Migrants among Different ST Communities

ST Community	State of Migration		Total
	Temporary	Permanent	
Malai Arayan	86.50	13.50	100.00
Muthuvan	32.10	67.90	100.00
Irular	57.10	42.90	100.00
Paniyan	63.30	36.70	100.00
Kurichchan	93.70	6.30	100.00
Kurumans	100.00	0.00	100.00
Kattunayakan	63.60	36.40	100.00
Total	73.30	26.70	100.00

Source: Primary Survey

Annexure 6.8

Industry of Work of the Migrants (in percentage)

Sample Communities	Industry of Work after Migration			Total
	Primary	Secondary	Tertiary	
Malai Arayan	1.70	3.30	95.00	100.00
Muthuvan	100.00	0.00	0.00	100.00
Irular	33.30	66.70	0.00	100.00
Paniyan	69.20	20.50	10.30	100.00
Kurichchan	46.00	26.00	28.00	100.00
Kurumans	46.20	2.60	51.30	100.00
Kuttunayakan	78.60	7.10	14.30	100.00
Total	45.00	15.90	39.10	100.00

Source: Primary survey

Annexure 6.9

Distribution of Workers on the Basis of the Job which they wish to Move in Future

ST Community	Wish Working in Future				Total
	Permanent Job	High Wage/ Regular Wage Work	Salaried Job	Others	
Malai Arayan	95.70	4.30	0.00	0.00	100.00
Muthuvan	15.40	23.10	30.80	30.80	100.00
Irular	42.90	42.90	0.00	14.30	100.00
Paniyan	47.80	34.80	0.00	17.40	100.00
Kurichchan	75.00	18.80	6.30	0.00	100.00
Kurumans	66.70	25.00	8.30	0.00	100.00
Kattunayakan	44.40	55.60	0.00	0.00	100.00
Total	57.90	27.00	4.80	10.30	100.00

Source: Primary Survey

Annexure 6.10

Distribution of Workers on the basis of the Efforts taken to move Other Job

ST Community	Factors Doing to Move Other Works				Total
	Registered in Employment Agencies	In Private Placement Agencies	Other Efforts	No Effort	
Malai Arayan	79.20	0.00	20.80	0.00	100
Muthuvan	35.70	0.00	28.60	35.70	100
Irular	37.50	0.00	37.50	25.00	100
Paniyan	48.90	0.00	37.80	13.30	100
Kurichchan	68.80	6.30	25.00	0.00	100
Kurumans	66.70	6.70	26.70	0.00	100
Kattunayakan	22.20	0.00	44.40	33.30	100
Total	55.00	1.50	31.30	12.20	100

Source: Primary Survey

Annexure 6.11

Occupational Choice of Sample Communities (Skilled Agricultural Workers)

Variables	Coefficient	Std. Error	z	p-value	
constant	0.77795	0.62406	1.247	0.2125	***
Gender	-1.01817	0.23393	-4.353	<0.0001	***
Age	-0.557048	0.22202	-2.509	0.0121	**
Marital status	0.91738	0.24267	3.78	0.0002	***
Education	1.11507	0.46767	2.384	0.0171	**
Subsidiary activity	0.49784	0.2008	2.479	0.0132	**
Discrimination	-0.950441	0.44186	-2.151	0.0315	**
Problems with non-tribes	-0.159933	0.34279	-0.4666	0.6408	
Exploitation	-1.33444	0.45196	-2.953	0.0032	***
Migration	-0.549063	0.22366	-2.455	0.0141	**
Hours of work	-3.96487	0.28255	-14.03	<0.0001	***
Regularity in work	-0.384222	0.32808	-1.171	0.2416	
income	-2.61664	0.31063	-8.424	<0.0001	***
Method of pay	-0.498078	0.20211	-2.464	0.0137	**
Number of cases 'correctly predicted' = 1262 (91.0%)			Likelihood ratio test: Chi-square(13) = 820.668 [0.0000]		
*** 1% significance level, ** 5% significance level, *10 % significance level					

Source: computed from Primary Survey

Annexure 6.12

Odds Ratio for Skilled Agricultural Workers

Variables	Odds ratio	95 % confidence interval	
Gender	0.3613	0.228	0.571
Age	0.5729	0.371	0.885
Marital status	2.5027	1.555	4.027
Education	3.0498	1.219	7.627
Subsidiary activity	1.6452	1.11	2.439
Discrimination	0.3866	0.163	0.919
Problems with non-tribes	0.8522	0.435	1.669
Exploitation	0.2633	0.109	0.639
Migration	0.5775	0.373	0.895
Hours of work	0.019	0.011	0.033
Regularity in work	0.681	0.358	1.295
income	0.6077	0.409	0.903
Method of pay	0.073	0.04	0.134

Source: Computed from Primary Survey

APPENDIX-I

INTERVIEW SCHEDULE USED FOR FIELD SURVEY

Labour Market in Kerala: Choice, Composition and Mobility of Occupation among Scheduled Tribes

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1. General Detail of Household

- 1.1.** Study Area :
1.2. Place :
1.3. Ward No :
1.4. House Number :
1.5. Name of head of house hold :
1.6. Sub Caste : (1) Malai Arayan (2)Muthuvan (3) Irular (4)Paniya (2)
(5)Kuruma (6) Kurichya (7)Kattunayakan
1.7. Religion followed : (1) Hindu (2) Muslim (3) Christian (4) Others
1.8. Nature of Family : (1) Joint (2) Nuclear
1.9. Household Size : (1) 1-3 (2) 4-6 (3) 7-9 (4) >9
1.10. Type of ration card : (1) No Ration Card (1) APL (2)BPL (4) AAY

2. Demographic Particulars of H.H Members

SI :No	2.1 - Name	2.2- Relation to head	2.3 - Age	2.4 - Gender	2.5- Marital status
1					
2					
3					
4					
5					

6					
7					

2.2 **Relation to head:** (1) Self, (2) Spouse, (3) Grandchild, (4) Father/ Mother/ Father-In-Law/ Mother-In-Law, (5) Brother/ Sister/ Brother-In-Law/ Sister-In-Law/ Other Relatives, (6) Servants/ Employees/ Other Non-Relatives. **2.4 Gender:** (1) Male, (2) Female, (3) Trans gender **2.5 Marital status:** (1) Married, (2) Unmarried, (3) Widowed, (4) Divorced, (5) Separated

3. Household Type

Variables	Household Type		
	3.1- First Generation	3.2- Second Generation	3.3 -Third Generation
1. Self-employed in agriculture			
2. Self-employed non-agriculture			
3. Regular wage/Salary earning			
4. Casual Labour in agriculture			
5. Casual Labour in non –agriculture			
6. Others			

4. Land Holdings

4.1 Land in Cents : (1) No Land (2) <50 (2) 50-100 (4) 101-150 (5) 151-200 (6) 201-250 (7) 251-300 (8) >300

4.1.1. First Generation :

4.1.2. Second Generation :

4.1.3. Third Generation :

4.2. Type of land Possessed : (1) Owned (2) Leased (3) Settlement (4)

Settlement and Owned

4.3. purpose of land used for : (1) Agriculture (2) Residential (3) Barren (4) Others

4.4. Earnings from Land : (1) <5000 (2) 50001-10000 (3) 10001- 15000 (4)
15001-20000 (5) 20001-25000 (6) 25001 – 30000
(7) >30001 (8) No Earnings

5. Education

Variables	5.1- First Generation							5.2- Second Generation		5.3- Third Generation	
	5.1.1- Household Members							5.2.1- Male	5.2.2- Female	5.3.1- Male	5.3.2- Female
	1	2	3	4	5	6	7				
1. Not illiterate											
2. Primary											
3. Middle											
4. Secondary											
5. Higher Secondary											
6. Diploma											
7. Graduate											
8. PG & above											
9. Technical education											
10. Others (Specify)											

6. Occupation

SI :N o	6.1-Employment Status	6.2- Sector of work (broad NIC 2008)			6.3- Occup ation NCO (2004)			6.4-Subsidiary Activity (1-Yes, 2- NO	6.5-Sector of work in Subsidiary Activity	6.6-Occupation in Subsidiary Activity
		6.2.1-1 st Gen	6.2.2-2 nd Gen	6.2.3-3 rd Gen	6.3.1-1 st Gen	6.3.2-2 nd Gen	6.3.3-3 rd Gen			
1										
2										
3										
4										
5										
6										
7										

6.1. (1) worked as own account worker, (2) worked in own enterprise as employer, (3) worked in own enterprise as helper (4) worked as regular wage/ salaried employer, (5) casual labour in agriculture, (6) casual labour in public works other than MGNREGA, (7) Casual labour in non- agriculture (other types of work), (8) others. **6.2 and 6.5 Sector of Work:** (1) Primary (2) Secondary (3) Tertiary, **6.3 and 6.6 Occupation:** (1) Legislators, Senior Officials and Managers; (2) Professionals; (3) Technicians and Associate Professionals (4) Clerks (5) Service Workers and Shop & Market Sales Workers (6) Skilled Agricultural and Fishery Workers (7) Craft and related Trades Workers (8) Plant and Machine Operators and Assemblers (9) Elementary Occupations; (10) Workers not classified by occupation

7. **Monthly Income of Household (Rupees) :** (1) <5000 (2) 50001-10000 (3) 10001-15000 (4) 15001-20000 (5) 20001-25000 (6) 25001 – 30000 (7) >30001

8. Working Conditions

SI :No	8.1- Hours of Work	8.2 -Type of Work (1- Full time, 2-	8.3 - Regularity of Work (1- More Regular 2-	8.4 -If Less Regular, Reason	8.5- Type of job contract	8.6 - Eligibility of paid leave	8.7- Availability of Social	8.8 - Participation in Union (1-
1								
2								
3								
4								
5								
6								
7								

8.1: (1) \geq 8 hours (2) 8-12 hours (3) $>$ 12 hours **8.4 Reason for less regular:** (1) illness/ aged, (2) having household works (3) Others **8.5- Type of job contract:** (1) No written job contract, (2) Written contract for one year or less (3) More than 3 years (4) Not applicable **8.6- Eligibility of paid leave:** (1) Yes, (2) No, (3) Not applicable **Availability of Social Security benefits (SSB):** (1) Eligible for PF (2) Only gratuity (3) Only health care and maternity (4) Only PF/Pension and gratuity (5) Not eligible (6) not known (7) Not applicable

9. Unemployment Particulars

SI :No	9.1-Whether unemployed 1-Yes 2-No	9.2-Spell of unemployment	9.3-Reasons for unemployment	9.4- whether Sought work during unemployment
1				
2				
3				
4				
5				
6				
7				

9.2-Spell of unemployment: (1) one week (2) More than one week to two weeks (3) two weeks to one month (4) One month to two months (5)two to three months (6) More than three months, **9.3-Reasons for unemployment:** (1) Climatic conditions (2) Illness (3) Lack of work (4) Others, **9.4- whether Sought work during unemployment:** (1) yes on most days (2) on some days (3) Not sought.

10. Skill Training /Skill Development Programmes

SI :No	10.1- Whether received/receiving any vocational training/skill development programs	10.2- Field of Training	10.3 Changed Employment after skill development
1			
2			
3			
4			
5			
6			
7			

10.1- Whether received/receiving any vocational training/skill development programmes: (1) yes formal (2) hereditary (3) Training for job (4) Others (5) None, **10.2- Field of Training:** (1) Book binding (2) training for govt. exams (3) Printing (4) stitching/ tailoring (5) construction works (7) driving (8) others, **10.3 Changed Employment after skill development :** (1) Yes, as main source of income (2) as subsidiary source of income (3) Tried, but didn't get (4) still trying (6) Not at all tried

11. Other activities

SI :No	11.1-Whether engaged in MGNREGA (1- Yes, 2-No)	11.2-For female workers	11.3-Whether registered in any placement agencies
		Whether engaged in Ayaalkootam/ kudumbasree (1-Yes, 2- No)	
1			
2			
3			
4			
5			
6			
7			

11.3-Whether registered in any placement agencies: (1) in govt. employment exchanges (2) in Pvt. Placement agencies (3) both (1) and (2), (4) other efforts (5) No effort.

12. Influence of Institutions in Getting Job/ Job change

12.1. Government : (1) Not Known (2) Not at all (3) Somewhat (4) Neutral (5) Highly

12.2. NGO : (1) Not Known (2) Not at all (3) Somewhat (4) Neutral (5) Highly

13. Government Employment Details

SI :No	13.1-Whether made any attempt for govt. job	13.2- If No,	13.3- If yes,	13.4- For those employed in government jobs	
		Reason	Nature of government	13.4.1- Nature of government	13.4.2- Mode of Appointment
1					
2					

3					
4					
5					
6					
7					

13.1-Whether made any attempt for govt. job: (1) yes, trying (2) tried for some time (3) not at all tried (4) Got but didn't joined, **13.2. Reason for not trying:** (1) lack of knowledge about notification, (2) lack of awareness about PSC (3) Low education (4) Lack of interest (5) others, **13.3. Nature of government job trying for:** (1) Central (2) state (3) Both, **13.4.1-Nature of government job engaged in:** (1) Central (2) state, **13.4.2-Mode of Appointment :** (1) Appointment through main list (2) Appointment via ST quota (3) Special recruitment (4) Direct Appointment (5) Others

14. Opinion on Influence of Government Policies / Programs on Occupation

SI :No	(1) Not known/ responded	(2) Not at all changed	(3) Somewhat changed	(4) Highly changed	(5) Extremely changed
14.1. Privatisation					
14.2. Industrialisation					
14.3. Demonitisation					
14.4. Land Reforms					
14.5. Eco- Tourism					

15. Awareness of government policies and programmes

SI :No	(1) Not aware	(2) Somewhat aware	(3) Fully aware
15.1. Educational Policies			
15.2. Employment Policies			
15.3. Skill Development			
15.4 Upliftment			

16. Migration Profile

SI :No	16.1- Are you migrated? (1-Yes) (2-No)	16.2-If yes			16.3- If employment migration,	
		16.2.1- Type of Migration	16.2.2- State of Migration	16.2.3- Purpose of Migration	16.3.1- Sector	16.3.2- Occupation
1						
2						
3						
4						
5						
6						
7						

16.2.1-Type of Migration: (1) Rural to semi rural (2) Rural to urban (3) Inter state (4) intra state, **16.2.2-State of Migration:** (1) Temporary (2) Permanent; **16.2.3-Purpose of Migration:** (1) Education (2) Employment (3) Others, **16.3.1-Sector of migration :** (1) Primary (2) Secondary (3) Tertiary, **16.3.2-Occupation:** (1) Government salaried (2) Private salaried (3) Casual in Agriculture (4) Casual in non- agriculture (5) Others

17. Problems in Work Place

- 17.3. Discrimination** : (1) Not at all (2) Mildly (3) Extreme
- 17.4. Nature of Discrimination** : (1) Racial (2) Gender (3) inter community
Discrimination
- 17.5. Exploitation** : (1) Not at all (2) Mildly (3) Extreme
- 17.6. Nature of Exploitation** : (1) Slavery/ Servitude (2) physical (3)
labour exploitation (4) Others
- 17.7. Problems with non- tribes** : (1) Not at all (2) Mildly (3) Extreme
- 17.8. Nature of problems with non- tribes** : (1) Wage differences (2) Price
Differences for agricultural products (3)
Promotion (4) Work Load (5) others

18. Employment Preferences

SI :No	18.1. Wish to move other job (a) Yes /(b) No	If yes,
		Nature of job in future
1		
2		
3		
4		
5		
6		
7		

19. Most Factors preferred while selecting a job

SI :No	(a) Income	(b) Social Security Benefits	(c) Transportation facility	(d) Place of work	(e) Dignity	(f) Working Conditions	(g) Nature of work/Stability in work	(h) Others
1								
2								
3								
4								
5								
6								
7								

20. Method of Pay preferred

SI :No	(a) Regular monthly salary	(b) Weekly Payment	(c) Daily Payment	(d) Piece Rate	(e) Others	(f) Not Applicable
1						
2						
3						
4						
5						
6						
7						

21. Expectation about future generation : (a) No Expectations (b) Some What (c) High Expectations

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