Seasonal migration in tank irrigation communities of South India

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Master of Philosophy

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Acronyms

MuV1, MuV2, MuV3, MuV4, MuV5, MuV6, MuV7, MuV8 – Villagers from Muruganeri village
MuO1, MuO2, MuO3, MuO4, MuO5, MuO6 – Officials from Muruganeri village
MaM1, MaM4 – Migrants from Manickanenthal village
MaO1 – Officials from Manickanenthal village
PM1, PM2, PM3, PM5 – Migrants from Paphiapuram village
PV2, PV5, PV6 – Villagers from Paphiapuram village
PO2, PO4 – Officials from Paphiapuram village
VM1, VM3, VM4 – Migrants from Vembankudi village
VO, VO1, VO2, VO5 – Officials from Vembankudi village
BC - Backward Caste
FC – Forward Caste
MBC- Most Backward Caste
SC – Schedule Caste
N - Number of Households
n - Number of people
SM - Seasonal migrants, Seasonal migrations
NMR – Non migrants
RAP – Resident adult populations
Rs – Rupees (Indian currency)
Certificate of Authorship

I, Vijayakumar Kuttappan, hereby declare that this submission is my own work and to the best of my knowledge and belief, understand that it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at Charles Sturt University or any other educational institution, except where due acknowledgement is made in the thesis. Any contribution made to the research by colleagues with whom I have worked at Charles Sturt University or elsewhere during my candidature is fully acknowledged.

I agree that this thesis be accessible for the purpose of study and research in accordance with normal conditions established by the Executive Director, Library Services, Charles Sturt University or nominee, for the care, loan and reproduction of thesis, subject to confidentiality provisions as approved by the University.

Vijayakumar Kuttappan
19 November 2015

Name Signature Date
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Ethics Committee Approval

The Ethics in Human Research Committee of Charles Sturt University approved the research conducted in this thesis. The protocol number issued with respect to the project was 2012/107.
Abstract

This research explored the extent, drivers and impacts of seasonal migration in tank irrigation communities of South India. Given the conflicting information, dearth of data availability and increasing trends with regard to seasonal migration, this research is important and timely.

This research investigated seasonal migration in tank irrigation communities of South India. The data generated from this research contributes to a better understanding of seasonal migration in South India in general and tank irrigation in particular. The application of migration theories to the case study area was also explored.

This research is based on pragmatism and multiple methods, using four case study villages in Tamil Nadu, South India. Qualitative semi-structured interviews were conducted with 60 respondents including villagers, seasonal migrants and government officials. Quantitative data were also collected in the same period with 1640 household respondents across the four case study communities. An interview guide and survey guide were developed in order to guide the semi-structured interviews and collect data for the household surveys. To narrow the focus of the thesis, seasonal migration was explored in terms of three stakeholder groups: villagers, officials and seasonal migrants. These data were collected during the second field visit that was completed during March to July of 2013. The first field visit during December 2012 to January 2013 was devoted to scoping studies to locate the study area and develop relationships with the communities.

The findings indicated that seasonal migration is an important component of villagers’ livelihood strategies. Seasonal migrants have greater access to multiple sources of income than nonmigrants. Seasonal migration was practiced both as accumulative and coping strategies. To participate in seasonal migration, an individual needs to have access to resources. These resources could be either economic or social. The findings revealed that more small scale farmers and educated adults were participating in seasonal migration compared to landless and illiterate people. The study also found
that seasonal migration was a popular choice among young female seasonal migrants.

The findings indicated that government policies were ineffective in influencing seasonal migration and that a closer examination is required to develop better policies and implementation practices.

Seasonal migration could improve a villager’s livelihood however negative impacts were also found. One of the major negative influences was tank abandonment. Though tank irrigation was alienated for various reasons, seasonal migration seems to be having a greater impact more recently.

While this thesis will not make the life of the study communities easier nor provide concrete solutions to government, it provides a comprehensive framework of extent, drivers and impacts of seasonal migration that could be used by decision-makers to consider while developing policies for the betterment of rural population such as tank irrigation communities of South India.
Chapter 1: Introduction

1.1 Rationale

The objective of this research is to explore the role of seasonal migration in tank irrigation communities in Tamil Nadu, South India. There are no in-depth studies of seasonal migration within tank irrigation communities of South India; especially Tamil Nadu tank irrigation communities. This will be the first major examination of the extent, drivers and impacts of seasonal migration in tank irrigation communities of Tamil Nadu. The four villages identified for this case study are important because tanks irrigate 63% of the total irrigated area in south India (Balasubramanian & Selvaraj, 2003); in Tamil Nadu 74.3 percent of small and marginal scale farmers have limited access to irrigation sources except tank irrigation; most of these farmers are poor and tank water and agriculture play a very critical role for their livelihood. The selected villages are socio-economically poor. The majority of the villagers fall within the defined category of “Below Poverty Line” as defined by the Government of India. The map below shows the location of the study areas (Error! Reference source not found.).

Figure 1: Map of study area.
Tank irrigation has played a key role in agricultural development in South Indian villages. Here, agriculture is the main source of income for villagers with the importance of tanks in South Indian agricultural development mentioned in the ancient scripts of the 8th and 9th centuries (von Oppen & Rao, 1987). Tank irrigation remains important as a water resource in poor regions of South India with poor farmers more dependent on tank water for irrigation than non-poor farmers (Balasubramanian, 2003). However, a decline in tank maintenance during the 18th century, shortage of labour availability for agriculture and lack of alternative livelihood options for rural villagers has led to an increase in seasonal migration among Tamil Nadu tank irrigation communities.

This study is timely as recent studies have indicated increasing trends in seasonal migration (National Sample Survey, 1991). Unlike urban areas, rural villages are the main places practicing agriculture and acting as important centers of food grain production, thereby contributing to food security an increase in the trend of seasonal migration will have important impacts for food security. Also it is important to study the relationship between tank irrigation communities and seasonal migration because tank irrigation plays a critical role in the livelihoods of the South Indian farmers in general and Tamil Nadu in particular and these communities have not been studied before. The uniqueness of the tank irrigation communities relies on the fact that tanks are the ancient water harvesting systems. Due to erratic rainfall and undulating geography, tank irrigation plays a critical role in this region. Most of the tank irrigation communities are small and comprise marginal scale poor farmers. For these communities, agriculture plays a critical livelihood source. So far there are no studies on seasonal migration among these natural resource dependent communities and this research will fill a knowledge gap on seasonal migration among tank irrigation communities of Tamil Nadu and inform policy makers to formulate better seasonal migration policies for these communities.
1.1.1 Importance of seasonal migration in a global context

Seasonal migration is a type of temporary migration (Parida & Madheswaran, 2010). Seasonal migration is defined as migration for a short period with the intention of returning to the usual place of residence (Keshri & Bhagat, 2011). Deshingkar (2006) quoting Kuhn defines seasonal migration as a mutual agreement, and cooperation between migrants and the members of the seasonal migrant households. An agreement between seasonal migrants and their households helps seasonal migrants because urban markets do not offer assured employment. Much of the employment is in informal sectors such as stationary shops, construction and building companies, agricultural laborers and laborers in textile and brick kiln industries. Seasonal migration provides these migrants access to urban capital and supports their family. Being a seasonal migrant also allows for continued contact with their villages which provides a degree of security if they are not able to succeed in urban areas.

1.1.2 The importance and role of seasonal migration in India

The Indian government defines a seasonal migrant as a household member who has stayed away from the village/town for a period of one month or more but less than six months during the last 365 days, for employment or while in search of employment (National Sample Survey Organisation, 2010).

Seasonal migration of villagers has recently become an important part of the lives of rural villagers in India (de Haan & Rogaly, 2002). During the last few decades seasonal migration has been showing increasing trends (Deshingkar, 2008). For instance, the National Commission on Rural Labour for 1991 estimated that 10 million rural villagers in India were seasonal migrants. With a total adult rural population of 712 million, seasonal migrants represented one percent of the total rural population (0.7 million) and 3.5% of the rural workforce. For 2007-2008, the National Sample Survey Organization (NSSO) estimated that there were 12.58

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1 Daily and weekly commuting are usually excluded from the category of temporary/circular migration and the same practice is followed in this research
million seasonal migrants in India suggesting an upward trend in seasonal migration (National Sample Survey Organisation, 2010). However the role and scale of seasonal migration is often under-estimated because of a lack of availability of national level data. It is known there are more rural Indian villagers involved in seasonal migration than international migration (Deshingkar, 2006a), and that the poor, less educated and lower caste are less likely to migrate long distances because it requires greater assets, skills and social capital (Gardner and Osella 2003; Breman 1996; de Haan 1999; Skeldon 2003; Deshingkar 2008).

Even though seasonal migration involves poor villagers, the poorest of the poor do not migrate (Solinski, 2012). This is because seasonal migration requires capital to cover the costs of the journey and any other potential unforeseen problems (Skeldon, 1997; Deshingkar & Start, 2003; de Haan, 1999; Rogaly et al., 2003). Seasonal migration also requires social networks that connect migrants with the employer or people at the destination, access to information and availability of work opportunities (Skeldon, 1997; Deshingkar & Start, 2003; de Haan, 1999; Rogaly et al., 2003). Since this kind of information is inaccessible to the poorest people, the chances of them becoming seasonal migrants are very remote (de Haan 1999; Skeldon 2003).

Caste also plays an important role in seasonal migration as caste has important influences in rural Indian society (Deshingkar & Start, 2003). Caste plays a role in acquiring information about migration opportunities. The information on available employment opportunities will be spread only among the members of the same caste (Deshingkar & Start 2003; Mosse, 2007). In certain castes such as Scheduled Caste (SC) or Scheduled Tribe (ST) poverty and social exclusion play an important role. For these communities seasonal migration offers an opportunity to escape from the social and cultural imprisonment imposed by the village social norms (Desai & Dubey, 2011; Deshingkar & Start, 2003; Mosse, 2007).

Economic factors are the remaining important influences on the decision to migrate. The majority of the literature suggests economic factors are the
main drivers of seasonal migration (Harris & Todaro, 1970). The important economic factors mentioned are high wages and opportunities for regular employment. This economic motive may be either a coping strategy, otherwise known as distress migration, or an income accumulation strategy. There is disagreement among scholars as to whether seasonal migration is a risk taking or risk avoiding strategy (Stark, 1984; Massey, 1990; Rafique, 2006). There is a large body of evidence that seasonal migration in India helps villagers to escape from poverty and access alternative sources of income (Jacob, 2008; Deshingkar, 2008). However to some extent the economic rationale neglects the important role played by social factors.

The impacts of seasonal migration at individual, household and village levels are highly contested in the literature. For instance, it is unclear whether seasonal migration increases or reduces inequalities (Deshingkar, 2006b); influences village social norms (Rogaly, 2002; Massey, 1990); or influences family structure and family norms (Massey, 1990). There are also differences of opinion on the impacts of seasonal migration on agriculture such as whether remittances from seasonal migration were invested in agriculture or not (Arango, 2000; Rogaly, 2003; Adger, 2002; Stark, 1985).

In India, the two main sources of data on population mobility are the Census and the National Sample Survey Organization (NSSO). These surveys do not capture seasonal migration due to empirical and conceptual difficulties. For instance, the Census defines migration based on change in birth place and change in last usual place of residence; hence migration data is mostly focused on stocks of migrants instead of flow. The other major discrepancy in the Indian Census is the focus on who moves. For instance, seasonal migration was mostly occurring as people search for employment opportunities, however the census data focus is on population mobility and not on workers’ mobility for employment. This shortcoming with the national data suggests that seasonal migration could be better studied using village level surveys.

The unavailability of national-level data or the very limited information collected by national surveys on seasonal migration is another limiting
factor. For instance, the only data on seasonal migration is published by the National Commission on Rural Labour (General and Census Commissioner, 2001). However there is criticism from academic scholars that information provided by the NCRL is greatly under-estimated (Deshingkar, 2003). According to the NCRL the number of seasonal migrants was 10 million in 1999-2001 which included 4.5 million inter-state migrants and 6 million intra-state migrants. The NCRL reports that the majority of the seasonal migrants were employed in agricultural cultivation, plantations, brick-kilns, quarries, construction sites and fish processing. Deshingkar and Start (2003) found that a large number of seasonal migrants also work in urban informal manufacturing, construction, services or transport sectors employed as casual laborers, head-loaders, rickshaw pullers and hawkers.

There is limited literature on seasonal migration in South India (Deshingkar, 2006b). The limited number of regional studies on seasonal migration in India refer to conflicting information on the motives behind seasonal migration (Deshingkar, 2003; Deshingkar, 2008; Deshingkar, 2009). The research undertaken in this project will offer important insights to the existing perspectives and contribute to the theoretical perspectives of seasonal migration in the Indian context. This research also can inform policy makers on seasonal migration among tank irrigation communities. The drivers of seasonal migration observed in tank irrigation communities will be compared with existing migration theories.

1.1.3 Importance of tank irrigation for the Tamil Nadu, South Indian farming communities

Tanks are earthen bund structures that capture and store rainwater (Figure 2). There are 120,000 communally owned tanks in southern India (Palanisami, Giordano, Kakumanu, & Ranganathan, 2012) irrigating 60% of the total agricultural land (Anbumozhi, Matsumoto, & Yamaji, 2001). Tank irrigation plays a critical influence on the livelihoods of South Indian farmers where 66% of the tank irrigation dependents are small and marginal farmers (Gunnell & Krishnamurthy, 2003). Tanks also play a key role in maintaining the traditional socio-cultural norms of villages through systems
developed by the villagers for tank management and equal distribution of water (Balasubramanian, 2003; Bardhan, 1999; Palanisami, 2011).

Particularly in Tamil Nadu, tank irrigation plays a critical role in the development of agriculture given the undulating topography and unpredictable nature of monsoons. There are 39,200 tanks in Tamil Nadu irrigating 32% of the total irrigated agriculture (Sakurai & Palanisami, 2001). Tank irrigation has a critical influence on the livelihoods of the poor small-scale farmers who comprise 55% of the tank irrigators (Palanisami, Meinzen-Dick, & Giordano, 2006) in this region. The incidence of poverty is very high and the tanks are the only source of water during the dry season in the dryland regions of Tamil Nadu (Balasubramanian & Selvaraj, 2003).

Figure 2: An example of a tank from Muruganeri village in India.

The importance of tank irrigation for the small and marginal farmers is highlighted by many researchers (Balasubramanian, 2003; DHAN Foundation, n.d.; Easter, 1977). However, successive Indian governments have focused on big dams and canal irrigation systems and neglected the traditional tank irrigation systems. Government policies such as free electricity to agricultural irrigation prompted more affluent farmers to have their own energized well to provide water to their crops (Jegadeesan & Koichi, 2011; Keiko, 2011; Sato, 2007). This resulted in non-participation of tank management from affluent farmers (Jegadeesan & Koichi, 2011). As
a result, tank structural integrity and efficiency has been compromised by poor maintenance of tanks, leading to a decline in the contribution of tank irrigation to agriculture (Jegadeesan & Koichi, 2011). The neglect of tanks resulted in less water storage, less ground water recharge leading to loss of productivity of agriculture, particularly for less affluent farmers. This encourages poor rural villagers to look for non-agricultural work elsewhere and therefore seasonal migration becomes one of their livelihood strategies (Keiko, 2011). Seasonal migration, particularly of young people and farmers seeking off-property work has important social, environmental and economic impacts for the tank irrigation communities that this research aims to address.

1.2 The research questions
To understand seasonal migration in tank irrigation communities, four villages were purposively selected against predetermined criteria such as: the size of the tank system (area of the water body), location of the villages with respect to cities, influence of caste, and influence of government policies on reducing/encouraging seasonal migration.

The three research questions developed to guide the research were;

1. To what extent is seasonal migration occurring in tank irrigation communities in Tamil Nadu?
2. What factors explain trends in seasonal migration in tank irrigation communities in Tamil Nadu?
3. What have been the impacts of seasonal migration in tank irrigation communities in Tamil Nadu?

1.3 Research methodology and case studies
The research employed a mixed method, interpretivist, and case study approach to explore seasonal migration in the tank irrigation communities. The interpretivist approach gave the researcher an opportunity to examine and compare the existing/observed phenomenon of seasonal migration with the literature.
Case studies are an effective way to investigate social phenomena in real life contexts (Yin, 2009), especially those related to socio-cultural aspects of communities (Berg, 2001). Case studies offer opportunities for researchers to get immersed in particular settings, observe people as they go about their daily activities, and explore the influence of community, family and caste on the way people think and behave (Yin, 2009). Many of the people living in India’s rural villages are illiterate, and semi-structured interviews and observations offered the best way to elicit information. Four villages were selected during the researcher’s three months extended field immersion where the researcher lived in the villages in order to observe and understand village life that addresses the research questions.

Multiple methods were employed to collect data in the four case study villages. Qualitative research methods included rapid rural appraisal, observation and semi-structured interviews. The quantitative research method employed was household surveys. The interviews were taped, transcribed verbatim and qualitatively analyzed for the emerging themes. For the qualitative analysis the software NVivo 10 was employed in order to facilitate the process of qualitative coding. This process helped to identify key themes, ideas and patterns that emerged from the field data (Dunn, 2000; Rossman & Rallis, 2003).

1.4 Thesis outline

In Chapter 2 a review of seasonal migration literature at both a global and Indian level is presented. Chapter 3 describes the research methodology including justification of the paradigm and research methods employed in order to answer the research questions. The data collection methods, use of case studies and the approach for data analysis are also outlined in this chapter. Chapter 4 addresses the first research question on the extent of seasonal migration. Chapter 5 explores research question 2 on the drivers of seasonal migration. Chapter 6 presents research on question 3 on the impacts of seasonal migration. Chapter 7 discusses the field findings in relation to existing literature on seasonal
migration and livelihoods. This Chapter also provides conclusions and suggestions for future research and developmental policies in India.
Chapter 2: Theoretical perspectives on seasonal migration around the world, Asia and India

2.1 Introduction

The main purpose of this chapter is to review key findings on seasonal migration in the literature. I will examine the extent, drivers and impacts of seasonal migration. Then I will explore existing theories on seasonal migration. I will finish this chapter by identifying existing knowledge gaps in the literature and justify the need for the research.

The review is based on the examination of the peer reviewed journals, grey literature and policy documents from international organization such as United Nation Development Program (UNDP), World Bank, Organization for Economic Co-operation Development (OECD), and International Organization for Migration (IOM).

2.2 Types of Migration

Based on the distance travelled, migration can be classified as international and internal migration and divided into permanent, semi-permanent and temporary, based on duration. The internal migration is again divided into short duration, long duration, step migration, seasonal/circular migration. Based on the pattern of movement the internal migration is classified into rural to rural, rural to urban, urban to rural and urban to urban migration (Petersen, 1966) (Figure 3)
Based on the spatial and temporal factors, Parnwell (1993) classified migration as permanent, step, circular, cyclical, return, refugee, evacuees, and resettlement. The spatial dimensions included factors such as distance, direction and patterns (Table 1).

There are various push and pull factors which explain why rural Indians undertake seasonal migration. The pull factors include employment opportunities, good living conditions and entertainment (Lipton, 1980; Tacoli, 1998). Economists like Todaro argue that migrants respond to employment and incentives offered in the cities (Harris & Todaro, 1970; Todaro, 1980). The wage differential and lack of employment in rural areas act as major push factors (Bhattacharya, 2006; Mitra & Murayama, 2009). The urban bias or the tendency of Indian governments to promote and invest in cities instead of rural areas is also cited as a reason for the difference in the growth rates of rural and urban areas (Lipton, 1980; Scarlett Epstein & Jezeph, 2001). The inequalities in rural areas also act to push rural people to migrate (de Haan, 1997b; Kainath, 2009). The other major pull factors are marriage and accompanying family members (Bhagat, 2005), education and bright lights offered by the cities (Todaro, 1980).
Table 1: Typology of migration based on duration.

<table>
<thead>
<tr>
<th>Time</th>
<th>Span type of movement</th>
<th>Characteristics</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short term</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A few hours</td>
<td>Oscillation</td>
<td>Collecting fuel wood, water</td>
<td>Daily commuting</td>
</tr>
<tr>
<td>Daily</td>
<td>Commuting</td>
<td>Journey to work, education, Market</td>
<td>Weekly commuting</td>
</tr>
<tr>
<td>Weekly</td>
<td>Commuting</td>
<td>Away during the week; entertainment, worship</td>
<td></td>
</tr>
<tr>
<td>Season</td>
<td>Seasonal circulation</td>
<td>Nomadism, pastoralism, transhumance; seasonal employment</td>
<td>Seasonal migration</td>
</tr>
<tr>
<td>Periodic</td>
<td>Sojourn</td>
<td>Hunting, gathering, trading, visiting</td>
<td></td>
</tr>
<tr>
<td>Once in a lifetime</td>
<td>Pilgrimage</td>
<td>Pilgrimage, marriage, displacement by natural disaster</td>
<td></td>
</tr>
<tr>
<td><strong>Yearly</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yearly</td>
<td>Contract labour migration</td>
<td>Target migration</td>
<td></td>
</tr>
<tr>
<td>Several years</td>
<td>Shifting cultivation</td>
<td>Shifting cultivation, frontier settlement</td>
<td></td>
</tr>
<tr>
<td>Working life</td>
<td>Temporary circulation</td>
<td>Urban-bound employment related migration</td>
<td></td>
</tr>
<tr>
<td><strong>Long term</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifetime</td>
<td>Permanent migration</td>
<td>Emigration, resettlement, refugee movement</td>
<td>Permanent migration</td>
</tr>
</tbody>
</table>

(Source: adapted from Parnwell 1993)

Although economic theories of migration are widely accepted, they fail to capture the social dimension of the migration process. Seto (2011) argues that migration decisions are taken at family level and not at individual level. However Todaro (1980) argues that seasonal migration is an individual decision where the migrant decides to become a seasonal migrant.

2.3 Theories on migration

In this section broad theories on migration are examined in order to understand migration in general and seasonal migration in particular. With the use of migration theories, the motive to become seasonal migrants will be explained. Error! Reference source not found. below depicts different migration theories
Migration theories can be broadly divided into colonial era and neo-colonial era. The main theories under colonial eras are Ravenstein’s law of migration and Marx theories on labour movement. The neo-colonial migration theories are broadly classified into neoclassical and new economics of labour migration. The neoclassical approach gave importance to economics as the motivating factors whereas new economics focused on factors other than economics.

### 2.4 Migration theories during colonial era

The issue of migration began to receive attention after the seminal work of Ravenstein (1885). In 1834, Ravenstein published theories on migration based on his observation from census data collected during 1871-1881. The main idea was to explain migration patterns and predict future migratory patterns within England and between nations during industrialization. Ravenstein in his laws of migration argued that migration is an individual decision. Here migration is seen as an individual’s free choice to maximize opportunities from the economy. Economic behavior was given as the prime reason for the migration of people from rural areas (Ravenstein, 1885).
The industrial revolution of the 18th-19th centuries changed the working and living patterns of people. The fast growing cities and improved transport network allowed rural people to search for better livelihoods in the cities.

This migration of rural villagers was viewed negatively by Marx. In his view seasonal migration of rural villagers was a brutal process in response to capitalistic modes of production. In Marx’s view displacement of labour was made possible by “expropriation of agricultural producers, of the peasants, from the soil” (p.716) (Marx & Engels, 1979). The segmentation of society into rural (agriculture) and urban (manufacture), in other words the uneven patterns of “proletarianisation and depeasantisation” resulted in seasonal migration of rural laborers (Breman, 1996; de Haan & Rogaly, 2002). The other argument for seasonal migration was given by the neo-Malthusian variant of structural analysis. Here the seasonal migrants were seen as ecological refugees. They were pushed out from the rural areas because of natural calamities such as drought, crop failure, declining agricultural production, land fragmentation, increasing cost of agricultural inputs. This labour migration is mostly viewed as distress migration (Deshingkar & Start, 2003). Marx’s observation on labour migration may still apply to contemporary seasonal migration in developing countries such as India (Shrestha, 1988). For instance, 52% of the Tamil Nadu population still live in rural areas. The segmentation of the economy into rural and urban sectors where agriculture plays an important role in rural areas, and manufacturing and service industries play an important role in urban areas, means more employment opportunities occur in urban areas. The failing agriculture and low wages induces villagers to migrate to urban areas. This segmentation of the economy into rural and urban areas, and migration of villagers from rural areas to urban areas, confirm Marx’s view on the displacement of labourers.

The Indian government’s policies on investing mostly in cities resulted in more infrastructural development and employment creations in the cities, neglecting rural villages. These regional disparities are one of the important drivers of seasonal migration that I will explore in the subsequent chapters. The importance given to the capitalistic mode of economy resulted in
farming as a less attractive option. This in turn encouraged rural laborers especially young adults to undertake seasonal migration to urban areas. Lately the Indian government is investing more for rural areas as compared to urban areas (Planning Commission, 2011).

2.5 Migration theories during neo-colonial era

The two broad theories which explain migration in the neo-colonial era are neoclassical economics and new economic theories. Both theories examine migration at the micro level decision making process. The chief differences between the two theories are that in neoclassical theory individuals try to increase income potential while in new economic theory families try to minimize risk.

2.5.1 Neo classical economics

Neo classical economics argues that people migrate because of the differences in wage and employment conditions in rural and urban areas. If the differences in wages are equalized migration would stop. The neoclassical theory argues that the main aim of a villager’s migration is to increase income earning potential. The chief proponents of neoclassical theories are Harris & Todaro (1970), Lewis (1954), Ranis & Fei (1961) and Todaro (1980). Here migration decisions are made at individual levels (Arango, 2000). Individuals are treated as rational actors who migrate because they expect to increase their net income by moving to urban areas (Harris & Todaro, 1970). The movement is not only for monetary benefit but also to enhance their skills (education, training etc) and access new opportunities. The movement is considered as a form of human capital investment for a bright future (Sjaastad, 1962).

2.5.2 Dual economic theory, dependency theory, dual labour market theory, world systems theory

These theories can be grouped together because the four theories discuss similar concepts. In the dual economic theory proposed by Lewis and dependency theory proposed by Raul Prebisch (Love, 1980) both models argue that the modern economy created two sectors in the developing world; rural and urban, with rural areas depending on urban areas. In the Lewis model, wage differences and opportunities are seen as the main
reason for migration. This theory was later expanded by Fei and Ranis (1961). Thus the theory is commonly called Lewis – Fei – Ranis or LFR model (Todaro, 1980).

The dual labour market theory views migration as an indispensable part of the new economy. The labour surplus in low productive rural areas act as a supply of cheap labour which is pulled to the more productive industrial areas in cities. This theory found support from Piore (1979).

The world systems theory proposed by Wallerstein (Skocpol, 1977; Wallerstein, 1979) was similar to the dependency theory in that the world system proposed that the modern economy created three societies – core, semi-periphery and periphery. People move from periphery and semi-periphery to core due to inequalities. The Lewis model of dual economy could also be applied to Indian seasonal migration. The liberalized Indian economy created more employment opportunities in cities neglecting rural areas which were dominated by subsistence agriculture.

2.5.3 Push and Pull theory

Lee (1966) divided the forces influencing migration into push and pull factors. The push factors are considered to be negative factors which induce migrants to leave the area. The pull factors are positive factors which attract migrants. Lee proposed that push factors are more important than pull factors. Lee also proposed intervening obstacles like transport costs, migration control etc which reduce or stop migration (Lee, 1966).

Lee’s theory found grounding in seasonal migration in the Indian context. Some of Lee’s suggestions are still valuable today such as the volume of migration varies depending on the economic variability; migration volume is inversely related to intervening obstacles; the rate and volume of migration increases over time; migrations are selective; the educated young adults respond positively to pull factors where as those who respond to push factors such as poor and less educated people will be negatively selected.
2.5.4 Human investment theory

In the human investment theory, migration decisions are seen as a future investment decision. The costs and returns include both monetary and non-monetary components. Monetary costs include transportation cost, training for a new job, property disposal etc. The non-monetary costs include psychological costs of leaving friends and families, leaving familiar surroundings, adopting new dietary habits and social customs. In this context, migration is seen as an investment strategy for a bright and better future. The theory argues that migrants try to maximize their net income during their productive life period (Sjaastad, 1962).

The Sjaastad theory will be applicable to the educated young adults and those who are above the poverty level. One of the common features of rural Indian parents is to send their children to urban areas for a good education and possibly to find urban based employment after the studies are completed.

2.5.5 Todaro’s model of rural–urban migration

Todaro’s model is widely cited in the migration literature to explain the driving forces behind seasonal migration in developing countries. Todaro suggests that decisions to migrate are based on the expected income which in turn depends on the probability of finding a job at the destination and prevailing urban wages. Todaro also suggests that migration will continue even if the urban job opportunities are less and that is known to potential migrants. This is because the migrant expects that the low wages or unemployment will be compensated in the long run by higher income as a result of enhanced urban contacts. In Todaro’s view, the labor force in developing countries is distributed between modern sectors which are relatively smaller and a traditional sector which is relatively larger. The migration is due to higher wage rates in the modern sector compared to the traditional sector.

Todaro also argues that internal migration is not a desirable process and it would not solve the inequalities in the allocation of labor supply and demand. According to Todaro “migration today is being increasingly
looked on as the major contributing factor to the ubiquitous phenomenon of urban surplus labor and as a force which continues to exacerbate already serious urban unemployment problems caused by growing economic and structural imbalances between urban and rural areas” (Todaro, 1980). Todaro observes that in the developing world the rate of migration will be higher than the rates of employment availability (Harris & Todaro, 1970; Todaro, 1969). This observation explains the reasons for the formation of urban poverty and urban slums.

2.5.6 New economics

Oded Stark (1980) developed the new economic theory on labour migration. New economics views migration as a household strategy for the diversification of income. Jacob Mincer (Mincer, 1978) proposed the idea that family plays a key role in internal migration decisions. The main aim of the family is to ensure household income is from more than one source: that is agriculture. Here, the household will diversify their household income in order to reduce the risk where remittances play a key role. The remittances are used to support family members left in the rural areas. New economics draws its inspiration from rural household villages of Mexico (Arango, 2000).

Thus the main differences between neoclassical and new economics are such that in new economics the analysis of migration is at the family or household level. In the new classical approach the analysis is at the individual level. The other major difference was on wage differentials. In new economics, wage differential is given less importance. The importance is for income diversification by the rural households.

New economics is applicable to the seasonal migration of rural communities. Rural societies are structured around family/kinship groups and households send one of the household members to urban areas to diversify the household income sources. This diversification strategy is mainly noticed among farming families. Here the strategy is to reduce the risk of depending only one source of income such as agriculture. The alternative income will be used for household consumption and also for
investing in the agriculture. The general trend will be males undertaking seasonal migration and females looking after children, agriculture and farm animals.

2.5.7 *Survival migration*

Population mobility in the developing world is seen as a survival strategy (Parnwell, 1993). Survival theory argues that migration is a way of minimizing risk and a way to alleviate poverty. Here, the members of the household work in agriculture and also in the cities. Here the strategy is to maximize the production and income of the family and reduce the risk of depending on only one source – agriculture.

Hugo (1983) also argued that temporary and circular migration in developing countries could be understood from the perspective of families attempting to minimize the risk. For a rural family, sending one or two of its household members to urban areas is more cost effective than moving the whole family (Hugo, 1983). Thus both survival migration and new economics of labour migration view migration as a family/household decision as opposed to individual decisions proposed by Todaro and the neoclassical economists.

Migration as a family survival strategy might be applicable to my research on seasonal migration of tank irrigation communities. Families are an important part of the village norms and they play a very critical role in deciding who migrates.

2.5.8 *Network theory*

Network theory analyses the influence of networks on individual decision making (Arango, 2000). Social networks with friends and family who are already in the cities form a strong inducement for rural migrants to migrate (Nelson, 1959). The network helps new migrants to settle in to the new place and helps them to get information on job availability and other information.

Network theory might be very relevant in the Indian context. De Neve (2000) reported that social networks such as friends helped future migrants to find employment in the garment factories.
2.5.9 Cumulative causation

The Myrdal’s (1957) cumulative causation theory was applied to migration by Massey in order to describe the process and dynamics of migration. According to him each action of migrants has an effect on future migrants (that is causation is cumulative). For example, the six socio-economic factors that influence migration in a cumulative manner are: distribution of income, distribution of land, organization of agriculture, culture, regional distribution of capital and work culture (Massey, 1990; Massey et al., 1993). Distribution of income is often suggested by social scientists as an example. Migrants will be motivated to move not only to increase their income or diversify risk but to enhance their relative income compared to their neighbor and also to enhance their social status. There is concern among some researchers as to whether the motivations for wealth and social status increases inequalities in the villages however it is likely that this view is highly context specific.

2.5.10 Theory of relative deprivation

According to this theory the chances of sending one household member to an urban area will be higher if their sources of income are less than the reference communities in the area. That is, the greater the economic inequalities, the greater the migration to cities. It should be noted that relative income is given higher importance than absolute income (Stark & Taylor, 1989).

2.5.11 System application to migration

For this theory migration is seen as part of a system linking rural and urban areas. The system approach addresses why people migrate and its impacts. The system approach views migration as a complex, self – modifying, interdependent and circular system. The effect on one part can be traced back to the whole system. This theory emphasizes that internal migration is occurring all over the world but at different complexities.

This model is shown in Error! Reference source not found.. The model essentially consists of four components, the environment, control subsystems, adjustment and feedback mechanism. The feedback can be either negative or positive. Positive feedback induces migration and
negative feedback vice versa. The rural control subsystems are family and household influences. The adjustments involve a migrant’s task of reallocating responsibilities while away. The urban subsystems include social networks, means of accessing a job, nature of job and housing availability (Mabogunje, 1970)

![Diagram of System Application to Migration](image)

Figure 5: System application to migration. Source (Mabogunje, 1970).

One of the important features of this theory is that it gives importance to external factors such as the influence of cities and industries in influencing rural migrants to migrate to urban areas. The other consideration is that the theory specifically mentions seasonal migration.

2.6 Summary

After examining various theories of migration, this research aims to incorporate parts of these theories to explain seasonal migration among tank irrigation communities of South India. In order to explain seasonal migration, both neo classical and new economics theories of migration need to be applied due to their approach in explaining migration behavior. For instance, the neo classical theory of migration focuses on individual
decisions to maximize incomes as a result of wage differentials between rural and urban areas.

Other reasons for migration such as education, improving skills and involvement of families in decision making could be explained by analyzing migration from the family point of view. In this context, the main motivations for families to support migration is to diversify their income sources. This involvement of family strategy can be explained by the new economics labor migration.

There are however some aspects not covered by the existing migration theories due to the multifaceted nature of the migration phenomenon. As Fielding (1989) suggests migration is a “chaotic concept” that needs to be unpacked so that the role played by each factor can be viewed from its historical and social context that helps us to realize each factor’s contribution to the migratory process (Gazdar, 2003).

2.7 Types of Internal migration in India

There are four streams of internal migration in India; rural to rural, rural to urban, urban to rural and urban to urban migration. The rural – rural refers to in migration from other rural areas to other rural areas or out migration from one rural area to another rural area. The same holds for urban to urban streams. Urban to rural refers to migration from urban areas to rural areas. And rural to urban denotes the reverse streams. The rural to rural migration is the most dominant form constituting 53.3 million followed by rural to urban migration, 20.5 million. The other two are, urban to urban (14.3 million) and urban to rural (6.2 million). There are informal reports which suggest that seasonal migration accounts for 30 million (General and Census Commissioner, 2001).

The villagers who undertake internal migration are mostly from agriculturally backward areas (i.e utilising more traditional rather than modern practices). Lately most labour migration is moving to non – farm employment sectors because of the greater return from manufacturing
sectors. Internal migration, especially seasonal migration, is dominated by illiterate people (Deshingkar, 2006b)

2.7.1 Importance of Internal migration

Unlike developed countries, most people in Asia still continue to live in rural areas (Tacoli, 2009) however this is rapidly changing. Studies show that internal migration accounts for around two-fifths of the total urban growth in the developing world (Mitra & Murayama, 2009). In line with this global trend, internal migration is gaining momentum in India (Lusome & Bhagat, 2006). For example, the 1971 census data indicated that 159.6 million of India’s people had moved from rural areas to urban areas. In 1981 that number had increased to 201.6 million, in 1991 it rose to 225.9 million and in 2001 it reached 309.4 million (Parida & Madheswaran, 2010) (Figure 6).

Internal migration in India is a major contributor to the population growth in cities and is showing an increased trend over the time period 1971-2001 (Harris & Todaro, 1970; Kuznets, 1967; Palagummi, 2011; Parida & Madheswaran, 2010). Among the various types of internal migration, seasonal migration by adult males and females and other household members of the family has assumed special importance in the recent past (Breman, 1985; Racine, 1997; Rogaly, 1998; Rogaly et al., 2001).
2.7.2 Definition of seasonal migration

The Indian government defines a seasonal migrant as a household member who has stayed away from the village/town for a period of one month or more but less than six months during the last 365 days for employment or in search of employment (National Sample Survey Organisation, 2010). Whereas OECD defines seasonal migrant as a person employed by a country other than their own for only part of a year because the work they perform depends on seasonal conditions. They are a subcategory of foreign migrant workers (National Sample Survey Organisation, 2010). Some other definitions of seasonal migrations are; type of temporary migration (Parida & Madheswaran, 2010); migration for a short period with the intention of returning to the usual place of residence (Keshri & Bhagat, 2011); repetitive or cyclic short-term movement usually having the common motive of a temporary change of residence. Mostly the movements are circular in nature (Zelinsky, 1971) in which migrants follow a circular path and maintain a continuous but temporary absence from their place of origin for more than one day (Hugo, 1983). Nelson (1976) defines seasonal migration as characteristically short term, repetitive or cyclical in nature, and adjusted to the annual agricultural cycle.

Figure 6: Scale of migration. Source: data from Census
2.7.3 Importance of seasonal migration

The term seasonal migration was coined in the seminal work of Walter Elkan. He observed circular migration patterns of laborers in East Africa and described it as “combined with the familiar pattern of migration there is another movement back to the countryside” (Elkan, 1967). Deshingkar & Start (2003) observed that the formal definition of seasonal migration was suggested by Nelson (1976) who suggested such laborers as ‘sojourners’. This seminal work gained attention among scholars examining the causes and consequences of temporary urban based migration in developing countries. Nelson argued that a major proportion of rural to urban migration in Africa and Asia is temporary in nature. Based on this observation Zelinsky (1971) defined seasonal migration as short-term, repetitive or cyclic in nature.

Breman (1996) defined seasonal migration as “circulation” in that movements are of short duration from one place to another place or from one sector to another or from one season to another or within the same season with regular returns to the native village. Here the migration turns into circulation when the employment is of limited duration. The motive behind seasonal migration according to Breman is to escape the agrarian crisis (Breman, 1996). Although these forms of circular migration have existed before, it is growing in the last decades because of the improvement in transport and communication facilities, changes in the modes of agricultural production and the development of industrialization. Breman also noted that there are no exact data existing about seasonal migration making it impossible to quantify the magnitude of seasonal migrations. The only available data was from the National Commission on Rural Labour (NCRL) however they are greatly underestimated (Breman, 1996; Deshingkar & Start, 2003).

In India, seasonal migration became prominent during the 1970’s, although seasonal migration was first observed more than a century ago in the Bhojpur region of Bengal jute mill (Parry, 2003). Seasonal migration was an important component of the lives of poor people across the country (de Haan & Rogaly, 2002; Gardner & Osella, 2003) and contrary to
expectations it is showing increasing trends (Bhagat & Mohanty, 2009; Breman, 1996; Desingkar, Sharma, Kumar, Akter, & Farrington, 2008; Gardner & Osella, 2003; Rogaly & Rafique, 2003). For instance, the National Commission on Rural Labour for 1991 estimates 10 million rural villagers in India are seasonal migrants. With a total adult rural population of 712 million, seasonal migrants represent one percent of the total rural population and 3.5% of the rural workforce. While for 2007-2008, the National Sample Survey Organization (NSSO) estimated that there were 12.58 million seasonal migrants in India suggesting an upward trend in seasonal migration (National Sample Survey Organisation, 2010). However the role and scale of seasonal migration is often under-estimated because of the lack of national level data. For instance there are more rural Indian villagers involved in seasonal migration than international migration (Deshingkar, 2006). The poor, less educated and lower caste are less likely to migrate longer-distances that require greater assets, skills and social capital (Breman, 1996; de Haan, 1999; Desingkar, et al., 2008; Gardner & Osella, 2003; Ronald Skeldon, 1987). Not all seasonal migrants who move to urban areas find regular employment. The majority of migrants find employment in informal sectors. Thus migrants have to find an alternative source, if the urban market fails. Seasonal migration offers an alternative livelihood strategy allowing the maintenance of close contacts with family and friends in the villages. Seasonal migrants can return to rural areas whenever there was difficulty in finding employment in urban areas. The other major advantage of seasonal migration is such that it offers the much needed capital for investing in farming. Thus the availability and access to farms are one of the major criteria influencing seasonal migration.

Seasonal migration is often identified as an important contributor to the social and economic development of a country (Lall, Selod, & Shalizi, 2006). Seasonal migration provides cheap labour forces for cities. This helps in generating employment opportunities and increased overall per capita income. International organizations such as the United Nations encourage seasonal migration as a way to reduce rural poverty to meet the Millennium Development Goal (MDG) (United Nations Development Program, 2011).
However there can be negative impacts too, for example, when rural areas lose young adults, leading to depopulation and leaving mostly older people in rural areas. This skewing of the normal demographic profile can have impacts on many aspects of rural life. For example, there can be changes in cropping patterns as older people won’t be able, or willing, to perform the hard labour involved in intensive cropping. The depopulation of young adults puts pressures on older people and women to seek off-property work (daily, seasonally or permanently). Conoll et al (1976) reported that the depopulation of young adults has reduced fertility rates in rural areas. The other significant impact of rural outmigration is increased pressure for the women and children to take care of the village affairs. In some instances, farmers have abandoned dry land cropping and shifted from paddy to less intensive enterprises such as livestock or tree crops (Vasimalai, 2012). Understanding these trends, drivers and impacts of seasonal migration is an important research gap that this research will address.

2.7.4 Conflicting information about seasonal migration

Often the literature on seasonal migration provides conflicting information. For instance, seasonal migration is seen as a survival strategy of poor rural villagers who cannot escape from poverty (Breman, 1996). As Breman (1985) argued “seasonal migration is a matter of survival or, at best consolidation, and hardly ever results in an accumulation or re-investment in the home area”. However there is evidence from other parts of India that seasonal migration leads to economic amelioration and a potential route to escape from poverty and wealth accumulation. This strategy of the villagers is called an accumulative strategy (Deshingkar & Start, 2009; Haberfeld, et al., 1999; Krishnaiah, 1997; Rogaly, et al., 2001).

This economic amelioration can lead to permanent migration. That is people move permanently from seasonal migration to permanent migration. For instance, Rogaly, Harriss White, & Bose (1999) reported the seasonal migration of agricultural laborers from the Indian state of Bihar and West Bengal to southern central region was temporary in nature. However the spread of high yielding varieties of agricultural crops and improvements in
agricultural technologies resulted in long duration employment for transplanting and harvesting (Rogaly, Harriss White, & Bose, 1999) leading to permanent migration and consequently loss of interest in agriculture (Choudhuri, 1998; A. de Haan & Rogaly, 1994; Krishnaiah, 1997). This leads Chaudhuri (1998) to describe seasonal migration by agricultural workers as “a blessing for the agricultural laborers”.

2.7.5 Failure of national census to capture seasonal migration

Internal and international migrations are measured by the national censuses. However these national censuses have their drawbacks in capturing seasonal migration. The population censuses collect data on permanent migration (International Organization for Migration, 2005). Seasonal migrants are very difficult to detect and they are normally excluded from national surveys (Shonchoy, 2008).

The Indian census does not capture all types of migration. It fails to capture short term, temporary and seasonal migration (Palagummi, 2011). It also fails to record unregistered migrants in urban areas. A case study conducted by the Institute of Rural Management in Panchamahals in Gujarat showed the inaccuracy of census reporting. The census reports Panchamahals as an agriculturally dominated area with little scope for diversified income generation. However the Institute study found that the village is fully diversified with 90 percent of the village households were involved in nonfarm activities (Shylendra & Thomas, 1995).

It also seems likely that some young adults move to cities for reasons other than those identified by the census, such as to pursue entertainment, and/or to break away from caste, political violence and other social and cultural restrictions associated with village life (Kainath, 2009). However Indian censuses fail to capture these phenomenon. According to the Indian census rural Indians migrate due to seven identified reasons. This research will attempt to address the limited attention given to the social influences on seasonal migration in general and tank irrigation communities in particular.
2.8 Extent of seasonal migration

There are studies indicating that internal migration is increasing in Asia especially temporary and circular movements. Although there are more people moving permanently from rural areas, a growing number of villagers are also migrating temporarily or circulating between the villages and other destinations. Seasonal migration appears to be the dominant pattern of movement among the poorer sections of rural villagers. Seasonal migration gives rural villagers an opportunity to remain connected to the village either by choice or necessity (Deshingkar, 2006a).

The International Organization for Migration estimated that every year 20 million people migrate temporarily in India (International Organization for Migration, 2005). However others report that there are 30 million seasonal migrants in India (Deshingkar, 2006a), while the Indian government sponsored National Commission on Rural Labour for 1991 estimated that 10 million rural villagers in India were seasonal migrants. The National Sample Survey Organization (NSSO) estimated that there were 12.58 million seasonal migrants in 2007-2008 suggesting the complexity and lack of proper information about seasonal migration in India.

2.8.1 Village level studies of seasonal migration in India

Temporary migration is reported in a number of village level studies. For example, Wandschneider & Mishra (2003) reported that 60,000 people moved from Bolangir district of Orissa alone during 2001 drought season. Rogaly, et al. (2002) reported that 500,000 people move seasonally during the rice growing areas of West Bengal. Similarly increases in seasonal migration was observed in the villages of Madhya Pradesh (Deshingkar & Start, 2003); Andhra Pradesh (Rao, 2001); Rajasthan (International Organization for Migration, 2005); Jharkhand. In these villages seasonal migration was popular among poor and illiterate villagers (Dayal&Karan, 2003). In the states of Rajasthan, Madhya Pradesh and Gujarat, 65% of the households have members who are seasonal migrants (Mosse, Gupta, Mehta, Shah, & Rees, 1997), it was again confirmed by Virgo et al (2003).
2.9 Drivers of seasonal migration

In this section drivers of seasonal migration will be described. The drivers of seasonal migration vary from place to place and from migrant to migrant. The drivers of seasonal migration offers an opportunity to understand the reason behind seasonal migration though it is very difficult to generalize given the complexity of the issues involved (Shonchoy, 2008).

2.9.1 Inequalities of growth and development

Uneven development and inequalities act as push factors while improvement in communication and transport facilities act as pull factors. Liang and White (1997) reported that rural areas are showing an increased tendency for outmigration.

The inequalities in growth were cited as major drivers of seasonal migration in India. For instance, developed states such as Punjab, Gujarat and Maharashtra attract seasonal migrants from poor regions of central and eastern parts. Seasonal migration within the states of Tamil Nadu, Andhra Pradesh was also observed due to regional inequalities. There are also incidences of a large number of seasonal migrants migrating to sand mining areas in Rajasthan and Madhya Pradesh. The coastal areas of Andhra Pradesh attract seasonal migrants for fish and prawn processing. The urban areas in the state of Gujarat attracted seasonal migrants for the diamond polishing industry (Deshingkar, 2006b).

2.9.2 Unemployment and underemployment

In Asian countries there are more laborers than agriculture can support (high person to land ratio). For example, Vietnam has the highest population density per hectare of cropland in South – East Asia (11 persons) with 80 percent of the rural population depends on agriculture and natural resources where the profitability is very low. Agriculture is unable to support the whole rural population. In Cambodia landlessness is increasing at a rate of two percent per year. The landless laborers were migrating towards urban areas and other areas for employment. Thailand also shows similar phenomenon where internal migration is showing an increasing trend (International Organization for Migration, 2005).
2.9.3 *Wage differentials and informal employment sectors*

The urban and rural wage difference is another important driver of seasonal migration. John Hicks (1963) argued in “The Theory of Wages” that the main cause of migration is the wage differential. Classic migration theories also greatly emphasize that one of the important reasons for migration is wage differentials between rural and urban areas (Harris & Todaro 1970). The informal sectors in cities offer attractive alternative employment opportunities to rural migrants. The availability of employment and low entry barrier offered attractive nonfarm employment opportunities to the rural migrants. In the state of Gujarat, Shylendra (1995) observed that urban incomes are very attractive such that government intervention schemes such as Jawahar Rozgar Yojana and irrigation schemes fail to stop seasonal migration.

Migrants prefer urban employment compared to rural employment (Thanh, Anh, & Tacoli, 2004). Even if the urban wage is low migrants prefer urban employment because of the employment availability throughout the year. In rural areas most of the rural works are seasonal in nature and are mostly tied to crop season.

2.9.4 *Drought and Low productivity of agriculture*

One of the drivers of seasonal migration is agricultural failure due to droughts. Famine and crop failures are common occurrences in India. The first great famine occurred during 1876-1878 that saw mass death and mass exodus of rural people to urban areas (Roland, 1985). During drought prone periods an estimated 200,000 people undertook seasonal migration from the drought prone districts of Dharmapuri and Salem of Tamil Nadu to brick kiln industries in Kerala (Mitra & Murayama, 2009).

Two –thirds of the arable lands in India are semi – arid and drought prone. These areas show high rates of seasonal migration. It is reported that nearly 60,000 people from Bolangir district in Orissa undertook seasonal migration to urban areas during drought in 2001. High levels of outmigration were reported from drought prone and forested tribal areas. According to Deshingkar & Start (2009) households members migrated in more than half
of the households in the state of Madhya Pradesh. The proportion rose as high as 75 percent in areas with infertile soil. Mosse et al (1997) reported that in the state of Madhya Pradesh, Gujarat and Rajasthan 65 percent of the households had at least one household member as a migrant. A similar trend was observed in the state of Jharkhand (Dayal & Karan, 2003)

2.9.5 Agricultural land ownership

Connell et al (1976) reported that landless people are less likely to undertake seasonal migration. The unequal distribution of land is cited as one of the important drivers of internal migration (De Haan, 1999b). There is a positive correlation between migration and the size of land availability as shown in Figure 7 although this trend varies from place to place and country to country.

![Figure 7: Land owned (in Hectares) versus number of migrant households. Source: NSS, 49th round. Migration in India](image)

Kuhn (2005) argues that the landholdings of households are a key determinant of internal migration and the tendency to migrate will be greater for those household having less land. Mendola (2008) however found a negative and significant relationship between land holding and
migration decisions for temporary migrants in Bangladesh. Whereas Hossain (2001) found that the tendency to migrate is higher for households with some sort of land holding compared to the landless.

In Bihar - one of the Indian states, Karan (2003) showed that during the intervening period of 1982-83 and 1999-2000, landless and farmers owning one acre were undertaking seasonal migration while those with larger farms (2.5 to 5 acres) were not involved in seasonal migration confirming the work of Connell, et al., 1976 and Mallee, 1995.

2.9.6 Social Network

Social networks such as personal networks play a facilitating role in seasonal migration (Mitra, 2010). The role of social networks and social capital in promoting seasonal migration is well documented (Haug, 2008). Finding employment through informal channels plays a critical role among low-income households. Through networks, mutual benefits are ensured and the network facilitates seasonal migration (de haas, 2010b).

Seasonal migration studies show that for rural migrants social links and patronage are vital for moving from rural areas to urban areas. The networks employed are kinship or families (Nelson, 1959). De Neve (2000) reports that in Tamil Nadu besides kinship, friendships also plays a critical role in helping future migrants based on sharing and reciprocity. This social networking makes seasonal migration a self-sustaining process (Scott, 1988). Besides families and friends, village based networks also seem to play an important role in helping new migrants to settle at the destination places (de Haas, 2010a, 2010b)

2.9.7 Role of the government

There is a close relationship between seasonal migration and the policy decisions implemented by the national and state government. Both national and state governments in India either directly or indirectly control seasonal migration. There is always contradiction between the economic aspiration of the seasonal migrants and that of the state. The Indian government’s
priorities in developing urban areas resulted in concentrated growth in the urban areas and reduced investment in rural areas. Portes’ (1978) view is that migration is one of the outcomes of the biased development policies of government. Some of the popular Indian and state government intervention measures to discourage internal migration are Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS); Integrated water management schemes; free electricity for the agriculture.

2.9.8 Governmental intervention to discourage seasonal migration

Seasonal migration was seen as negatively affecting the population stability in cities (de Haan, 1997a). In order to discourage internal migration governments introduce schemes such as rural employment programs, anti-slab drives and restrictions to enter urban areas. For example, China has placed restrictions on rural villagers migrating to urban areas. The right to move to cities was allowed only during 1984. However, rural residents were banned from claiming state benefits from urban areas through a household registration system locally known as Hukou (Huang Ping & Shaohua, 2005; Roberts, 1997; Wu, 2002; Zhang & Song, 2003; Zhao, 2004).

In India there are national and regional policies to discourage internal migration. For instance the state of West Bengal views migration as an unwelcome phenomenon (Rogaly, 1998). There are regional policies that give employment preference to persons from local areas. Rural development schemes are implemented to discourage migration (Lall, et al., 2006). For example, Sampoorna Grameen Rozgar Yojana (SGRY), provides employment and wages to villagers. The works include soil and moisture conservation, repair of minor irrigation, traditional water harvesting and desilting of tanks. The other popular scheme introduced by the Indian government is Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) that provides 100 days of employment to the rural poor.

The other indirect strategy used by the Indian government to control seasonal migration was to classify villagers into below and above poverty line. The 2011-2012 poverty estimate says that if a person’s daily food
expenditure is Rs. 28.35 in urban areas and Rs 22.42 in rural areas then they are classified as above the poverty line. The below poverty line people are issued with a ration card with which they can purchase subsidized food, education and healthcare. However these cards can be used only in the villages where they live and not in the nearby villages or cities. The other controlling mechanism was demolition of unauthorized settlements in cities.

2.9.9  Remittances

The wage differentials between urban and rural areas act as one of the important drivers of seasonal migration with earnings sent to the villages as remittances. These remittances are vital resources for rural households (Deshingkar, 2005; Lipton, 1980). The potential for households to receive remittances plays a crucial role in the decision making processes (Bilsborrow, McDevitt, Kossoudji, & Fuller, 1987; Stark, Taylor, & Yitzhaki, 1988).

Remittances help to access food (David, 1995), improve rural development (Lall et al, 2006) and avoid borrowing money from the local money lenders (Rosenzweig, 2005; Rosenzweig & Stark, 1989; Stark, 1980). Thus remittances improve the social, economic and educational status of households (Yadava, Yadava, & Sinha, 1996). According to Rosenzweig, remittances act as a contract between migrants and their families where remittances form an important part of a household’s income diversification. The remittance is seen as an investment that someday migrants will inherit from their family (Lucas & Stark, 1985; Stark & Lucas, 1988; Stark, et al., 1988).

The value of remittances remitted varies from country to country. For example, in China internal remittances are greater than earnings from agriculture where 95 million internal migrants remitted US $ 45 billion in 2004 (International Organization for Migration, 2005; Roberts, 1997). In Bangladesh, rural migrants remit 60 percent of their income forming up to 80% of the total family budget. In Vietnam more than half of the studied migrants (5000) remitted during 2004 (Deshingkar, 2006b; International Organization for Migration, 2005). Remittances play a more critical role in poorer households than rich households (Reardon, 1997).
In India 89 percent of migrants send remittances back home and one quarter to one third receive remittances from urban areas. Lakshmansamy (1990) argues that there is a high flow of remittances from urban areas to rural areas. The remittances are used for both productive and nonproductive purposes. For instance, only six percent of the remittance are used for productive purposes in the state of Punjab (Oberai, 1980).

In Rajasthan, Madhya Pradesh and Gujarat, Mosse et al (2002) noted that remittances accounted for 80 percent of the total household income. In the state of Bihar one third of the annual income for the landless and marginal households are from remittances (Karan, 2003). In Jharkhand 98 percent of the rural households reported improvements in livelihood because of seasonal migration. The migrant’s households have better access to food and spend 15 percent more on food than non-migrant households. Those owning lands invest additional income in productive uses. Taylor (1995) observed that remittances were used productively however Findley (1997) argues that most of the remittances were used for consumption purposes and only a small amount is used for productive investments. Remittances also have a multiplier effect on the local economy like procuring construction materials and hiring local labourers (Guest, 1998).

In China internal migrants invested remittances on family needs, house construction and weddings rather than investing in agriculture (Roberts, 1997). The internal migrants of Egypt spend remittances in non-productive consumption and also invested in improving agricultural productivity (Papademetriou & Martin, 1991). In Pakistan remittances played different roles based on the source of origin (Arif, 2004). Some researchers are of the view that remittances created a cycle of dependency (Chimhowu, Piesse, & Pinder, 2005; Cohen & Rodriguez, 2005; Vertovec, 2004; Durand, Kandel, Parrado, & Massey, 1996; Durand, Parrado, & Massey, 1996).

Helwegs (1983) argues that remittance spending behaviour has changed over time. Initially remittances are used for family needs, later it is used for the purchase of consumptive goods and symbolic purposes, while over time
more remittances are used for investing in commercial and non-agricultural activities.

There is debate among researchers that remittances are not used for productive purposes (Helweg’s, 1983). Even if the remittances are not used productively, it seems that remittances have an overall positive impact on households. Remittances make resources available for other family commitments. Remittances help to sustain rural households and prevent rural households further slipping into poverty.

2.9.10 Marriage migration

In order to meet marriage expenses, rural young women in South India undertake seasonal migration to industries, often spinning mills, often under a scheme first developed by the Tamil Nadu spinning mills to provide cheap labour. Textile industries help female seasonal migrants meet their marriage expenses by promoting marriage savings schemes. As a part of the marriage scheme, the textile industries employ female seasonal migrants for a fixed period of three years. At the end of three years these female seasonal migrants will be given a sizeable portion of their savings to meet their marriage expenses and the company will terminate the contract. The marriage schemes are known locally as “Sumangali marriage savings scheme” [In Tamil Sumangali means unmarried girl becoming married women or happily married women]. However in some other companies this marriage scheme is known as “Thirumangala Thirumana thittam” [that is marriage plan scheme] (Solidaridad-South & South East Asia, 2012)

2.9.11 Modernization and escape from social and cultural imprisonment

The spread of the western life style to peripheral regions leads to aspirations among rural villagers, especially among young adults who aspire to move from rural areas to urban areas. This is very visible among the educated young adults (Shonchoy, 2008). For them modernity means a set of imaginations and beliefs about the way life should be (Gardner & Osella 2003). This indicates that rural villagers’ choice to become seasonal migration is not only for their economic benefit but also for the social benefits (Solinski, 2012). This important fact is often ignored by
development discourses and welfare programs (de Haan & Rogaly, 2002; Shah, 2006). Perhaps this explains why the developmental schemes introduced by the Indian and state government are ineffective in influencing seasonal migration (de Haas, 2007; Véron, Williams, Corbridge, & Srivastava, 2006).

Besides an aspiration for a more modern lifestyle, seasonal migration also offers opportunities to escape from the social hierarchy. For instance, caste based hierarchies are often not visible at destination areas (Breman, 1993). This tendency to escape from social and cultural imprisonment is also noticed among lower castes. Because of poverty, social exclusion and discrimination of household members belonging to Scheduled Caste (SC), Scheduled Tribe (ST) and other Backward Caste (BC), these groups have a greater tendency to undertake seasonal migration. These social groups have greater opportunities to find employment in urban areas rather than in traditional village society (Deshingkar & Start 2003). Seasonal migration is often perceived to challenge existing social relations and social norms of the villages (Gardner & Osella, 2003; Shah, 2006)

2.10 Impacts of seasonal migration

Seasonal migration has impacts both on the sending and receiving regions that can be either positive or negative. The section below discusses those impacts in brief.

2.10.1 Sending regions

Outmigration of villagers affects existing social, political and institutional arrangements and causes migrants to detach from their community and traditional practices thereby causing negative cultural and ecological impacts. In Orissa, India, Nayak & Robson (2010) argued that internal migration leads to abandonment of traditional fishing practices by communities leading to change in their culture, customs and diet habits.

Citing examples from Mexico, Robson & Nayak (2010) show migration induced agricultural abandonment as a result of migration. In their case study village, land abandonment was as high as 70 percent during the past
30-40 years with abandoned lands occupied by trees. Land abandonment is reported by other researchers also (Aide & Grau, 2004; Cocca, Sturaro, Gallo, & Ramanzin, 2012; Gellrich, Baur, Koch, & Zimmermann, 2007; Qin, 2010; Qin & Flint, 2012). This indicates that internal migration may have important influences on environmental and ecological succession.

The outmigration of villagers especially young adults causes a shortage of good leadership in rural areas. Seasonal migrants will no longer be interested in participating in rural affairs. Connell et al (1976) reported that the lack of men in rural areas results in a decrease in fertility rates in the rural areas.

There is criticism about the trickledown effect of migration. For example de Haan (1999b) suggests that internal migration promotes rural areas through remittances but observed no skill development in the sending regions. This view was also observed in seasonal migration in Pakistan where Irfan (1986) argues that sending areas tend to lose when out migration occurs because the sending area loses its productive, skilled people. Whereas Amjad (1989) reports that sending areas gained from migration in the form of remittances and poverty alleviation in the villages. Firman (1994) observed positive impacts as a result of migration based on his studies in Indonesia while Russell et al (1990) observed that migrants contributed to the community activities and helped in school building activities in rural villages of Pakistan. Seasonal migration also plays a critical role in influencing local caste based relations, consumption and questioned existing social norms (Gardner & Osella, 2003). The following diagram (Error! Reference source not found.) illustrates migration induced changes at sending and receiving regions.

2.10.2 Poverty alleviation

The role of internal migration in poverty alleviation is an important livelihood strategy for the rural poor with remittances from urban areas reported to alleviate rural poverty and boost the local economy (International Organization for Migration, 2005). The seasonal migration of
villagers in Bangladesh had an influence in reducing poverty up to 30 percent in migrant households compared to non-migrant’s households (60 percent poverty) (International Organization for Migration, 2005). In 2000, a Cambodian study looked at the impact of remittances in alleviating poverty and found that more than half of the households were able to escape poverty (International Organization of Migration, 2005).

Remittances from seasonal migration enables migrant households greater access to food with each migrant household spending 15 percent more on food compared to non-migrant households (Deshingkar, 2005; Godfrey et al., 2001). In Rajasthan, Conroy et al (2001) showed that even though urban poverty has increased, remittances reduced rural poverty.

Similarly in Pakistan, migrant families are better off than non-migrant families (Gazdar, 2003). In Vietnam similar observations were made by Luttrell et al., (2004). Seasonal migration is seen as a positive livelihood

Figure 8: Migration induced changes at sending and receiving regions.
Source: Adapted from Portes, A. (2007)
option for those living near coastal areas whose main livelihood depends on agriculture and fisheries. Both of those livelihood options are highly seasonal and fluctuating. The incomes from agriculture are used to support basic needs. Other needs are supported by income from the remittances. In the Nhat and Ngoc Dong villages in Red river Delta, seasonal migration plays a very important role in uplifting living standards of households. Here 37 percent of the households have at least one migrant and remittances account for 17 percent of the total income (Thanh, Anh, & Tacoli, 2004).

The participatory poverty assessment (PPA) carried out by the World Bank indicated that seasonal migration is one of the key tools to escape from poverty. Du et al (2004) studied the impacts of migration on poverty alleviation in two households in China. Their findings were that migration positively affected poverty. Murphy (2006) noted that in China migration has contributed to the development, economic growth and establishment of rural – urban linkages. Chinese scholars have suggested that internal migration has contributed 16 percent of the total urban growth in the last 18 years (Deshingkar, 2006). The skills gained in urban areas are used in the villages thereby bringing knowledge and skill gained in the cities to rural areas.

Seasonal migration contributes to countries’ internal economy, however most developing economies discourage seasonal migration. Seasonal migration was seen to affect the population stability in urban areas in China (de Haan, 1999). For example China places many restrictions on rural villagers migrating to urban areas and is apprehensive about its floating population (de Haan, 1999). The increase in crime rates in cities has been attributed to seasonal migration (de Haan, 1999).

Authors such as de Haan & van Rooij (2010), Massey, et al(1993), and Taylor et al.(1996) question arguments about migration leading to underdevelopment in the sending areas. According to these authors remittances improve living conditions, reduce poverty, and enhance economic and social conditions. Whether sending regions continue to
develop or decline into underdevelopment depends on economic and political conditions prevailing in the sending regions.

2.10.3 Impact on inequality

There are arguments and counter arguments supporting whether migration increases or decreases inequality and it is highly contextualized. Black et al (2005) argues that the relationship between migration and inequality is context specific and is influenced by political, economic and socio-cultural situation of the sending regions.

Lipton’s studies on Indian village studies showed that rural – urban migration increases inequality while Mahmud & Osmani (1980) observed that migration increases inequalities in Bangladesh. However, the impact of remittances on creating inequality can’t be generalized. In the long term the poor might benefit from migrating to urban areas. Similarly in the Indian state of Bihar rural poor migrated to cities and benefitted by sending large remittances (de Haan, 1999a). Also, migration increases the land value of the migrant’s origin areas, increases locally produced goods and services and contributes to the overall improvement of the local economy (de Haan, 1999a). Stark (1991) and Stark & Taylor (1991) reported that seasonal migration seems to increase intra – rural inequalities. The better off and better connected villagers have easy access to the information on new agricultural technology and employment opportunities in the urban areas. Thus better off farmers will be pulled towards urban areas whereas poor farmers will be pushed by rural poverty. Thus push and pull are two sides of the same coin possibly furthering inequalities in rural areas. The relative deprivation of rural areas also plays a vital role in the migration decision.

2.10.4 Influences in social structure

Seasonal migration induces cultural change in areas such as identity, village norms and behavior. Levitt (1998) termed such changes as social remittances. Through seasonal migration, the villagers are exposed to urban opportunities and urban based lifestyle. If the migration is seen as associated with social and cultural success then there is more pressure on others to move. Thus migration will become a norm rather than an exception. Massey
et al (1993) described it as a culture of migration. Migration was seen as a reason for the disruption of traditional village hierarchy structure and consumption patterns in rural areas (de Haas, 2010; Lipton, 1980; Massey, 1990). These changed consumption patterns and life style can undermine the local economy and increase the cost of living.

The migrant’s exposure to new places and new ideas make them question existing village hierarchy or other social order in the villages. For example it was observed in the state of Gujarat that Muslim sailors returning from travel abroad started to question social status and differentiation (Gardner & Osella, 2003). The wealth acquired through seasonal migration gave independence to migrant households who questioned village ritual and customs. If they were from lower caste then they questioned the dominance of upper caste in the village. The seasonal migration did have an impact on religious reformism, modernism, social and political change (Gardner & Osella, 2003)

2.10.5 Caste

In India lower caste have a poorer asset base compared to higher caste. Seasonal migration provides an opportunity for the lower caste to escape from poverty and caste based oppression (Mitra & Murayama, 2009). However there are studies which show that oppression was maintained through labour contracting arrangements at the destination place (Mitra & Murayama, 2009).

Deshingkar & Start (2009) observed that in Andhra Pradesh and Madhya Pradesh scheduled caste have a high tendency to migrate. In Jharkhand a similar phenomenon was observed by Dayal & Karan (2003). Here, 15 percent scheduled caste and scheduled tribes migrated compared to 8 percent higher caste and 3 percent other backward caste (Dayal & Karan, 2003). One of the reasons cited for this difference was less access to available resources (mainly land) in the rural areas and low literacy level. Bihar also reported a similar trend (Karan, 2003). The lower level job markets at destination areas were segmented based on the caste and kin relations.
2.10.6 Agricultural change

Seasonal migration has both positive and negative impact on agricultural changes. According to Boserupian theory an increase in population leads to an increase in agricultural productivity. However migration theorists argue that an increase in the rural population leads to outmigration and a decrease in agricultural productivity (Boserup, 2005).

Additionally Boserup (2005) argues that seasonal migration has benefitted individual families but not the development of the rural economy more broadly. There are apprehensions that seasonal migration leads to loss of farming skills affecting the food security of the nation. The other major concern expressed is depopulation of young adults from villages that in turn influences farming practices. Thus there is a shortage of able bodied men during the harvest season (Boserup, 2005).

In Mali, the absence of an able bodied labour force was felt among the smaller households. The remittances of migrants was inadequate to meet their family needs (David, 1995). In Bangladesh a similar trend was observed. Seasonal migrants who purchased land from non-migrants did not practice farming, which led to a reduction in agricultural production. The competition to purchase available lands in the village resulted in artificial increase in the land values (David, 1995).

Land abandonment among seasonal migrant households is also observed (de Haas, 2010; Massey, 1990). Returned seasonal migrants might not be interested in practicing agriculture or traditional livelihood methods (Robson & Nayak, 2010). Remittances are used for labour saving techniques there by reducing the local production and employment opportunities in the villages. Thus seasonal migration has the potential for a possible agrarian disintegration in the rural villages.

In certain instances land is underutilized due to the absence of able bodied men (Robson & Nayak, 2010). In Malawi 45 percent of women perform the task previously carried out by the men because remittances were not sufficient to employ agricultural labourers (Findley, 1997).
However there are authors who dispute these observations. For example, migration and remittances were seen to increase agricultural productivity and modernize the farming sector. Seasonal migrants have been shown to introduce new technologies to improve production and also influence agricultural institutions. For instance, in Bangladesh seasonal migrants introduced double cropping in their native villages (Lakshmansamy, 1990). Oberai and Singh (1980) reported that remittances were used for agricultural production in the Indian state of Punjab.

De Brauw et al, (2008) observed that in China seasonal migration caused a shortage of manpower for agricultural practices. However this shortage of labour was compensated by the remittances which were used directly and indirectly for agricultural development. Yang (1994) reported that in China, regions having high outmigration recorded a 2 percent decline in total grain output. However the disposable household income increased 16 percent as a result of migration. Thus it seems that the impact of migration on agriculture is context specific and depends on the many factors.

2.10.7 Household dynamics

Seasonal migration influences the household dynamics among migrants and their families. In Jaipur, India, Darana women who are seasonal migrants have increased physical freedom, often escape from economic oppressiveness and indebtedness and enjoy freedom from family members’ demands (de Haan, 1999b). When women move to cities to look for urban based employment the effects on households and rural areas is very significant. When these women return to villages they bring new ideas and technologies. For example, in Sri Lanka seasonal women migrants bring with them not only consumer goods and cash but also modern thinking and ideologies towards religion, flexible social attitudes and approaches to life. The exposure to the outside world made seasonal migrants realize the importance of education. de Haan (1999b) observed that male outmigration caused increased feminization of agricultural practices.
2.10.8 Increase in urban poverty

At destination areas, seasonal migration was seen to create urban poverty. The migration to urban areas results in a concentration of poverty and growth of slums (e.g. in Madras, Tamil Nadu and slums in Bombay, Maharashtra) (Lall, et al., 2006). In some Indian metropolitan areas, for example Mumbai and Delhi, 50 and 40 percent of the population respectively live in slums (International Organization for Migration, 2005). Simha (2003) estimated that 500,000 people migrate to Delhi every year to look for employment in the 95,000 factories existing in Delhi. Of the 500,000 people, 400,000 moved to 1500 illegal colonies and 1000 slums with poor access to clean water, sanitation and electricity (Simha, 2003). In this context the Millennium Development Goal of improving the living conditions of 100 million slums dwellers gains prominence. The United Nations warns that if adequate measures are not taken the slum populations will triple by 2050 (Kundu, 2007).

2.11 Existing knowledge gaps in the literature

Most migration studies have focused on international migration (United Nations Development Program, 2011; World Bank, 2008). There is less attention on internal migration especially seasonal migration (Lucas 2005). Even in internal migration studies the main focus is given to permanent internal migration and its economic, social and demographic significance (Shonchoy, 2008). Comparatively few studies discuss temporary internal migration, which is also known as ‘seasonal migration’, ‘circular migration’, or ‘oscillatory migration’. Thus the importance of seasonal migration is neglected in the current debate on migration and development (Skeldon, 2002). Deshinkgar (2006a) reported that internal migration is likely to exceed international migration and hence it is likely that the contribution of seasonal migration to the reduction of poverty and inequalities requires much greater attention at the policy making level too (quoted in (Haberfeld, Menaria, Sahoo, & Vyas, 1999).

Additionally the few studies focusing on seasonal migration at village level are quite outdated. For example, Conell et al’s village level study was carried out in 1976 and Wade’s village republic was in 1989. Thus there is a
need for current data on seasonal migration. With respect to seasonal migration among tank irrigation communities there is no in depth research available. The literature examined for this thesis indicated that only two policy documents mentioning migration in tank irrigation communities (DHAN policy documents).

Though there is extensive literature on economic and structural management of tanks there are no studies combining seasonal migration and tank irrigation communities in general and South Indian communities in particular. Thus there is a need to understand seasonal migration happening in tank irrigation communities of South India and understand the extent, drivers and impacts of seasonal migration from their perspectives. This research will fill the existing knowledge gap on seasonal migration in tank irrigation communities in south India.

2.12 Conclusion

The main aim of the research is to investigate seasonal migration in selected tank irrigation communities of Tamil Nadu, South India. Based on the literature review the following research questions were developed:

1. What is the extent of seasonal migration in tank irrigation communities?
   1a. What social, economic and cultural factors drive seasonal migration?
   1b. Who makes the decision to migrate, individual or households?
   1c. What are the influences of Indian government developmental intervention on influencing seasonal migration?

2. What drives rural Indians, such as Tank Irrigation communities, to become seasonal migrants?
   2a. Where do they move and what kind of employment do seasonal migrants find at the destination areas?
   2b. What are the demographic characteristics of seasonal migrants?
   2c. What is the extent of the influence of social networks on seasonal migration?
2d. Which migration theory best explains seasonal migration in tank irrigation communities?

3. What are the impacts of seasonal migration on tank irrigation communities?

3a. Does seasonal migration lead to land abandonment and absentee land ownership in the case study areas?
3b. Are there any changes in agricultural cropping patterns because of the seasonal migration of able bodied men or young adults?
3c. How are remittances used by tank irrigation communities? Do remittances impact social and income inequalities?
3d. What are the influences of seasonal migration on poverty reduction, inequalities, and on social and cultural barriers and norms?

To conclude, this chapter explored seasonal migration in India and in other countries. The literature review shows that village level studies on seasonal migration is very limited especially with seasonal migration in tank irrigation communities. The theories on migration were also reviewed. Through the literature review, I have established gaps in the existing literature and identified the need for the present research. The seasonal migration literature indicates that seasonal migration is showing an upward trend and it has important impacts for future urbanization. I have also summarised the impacts of seasonal migration that might affect these village communities such as rural depopulation of youth and its impact on demography including changes in the fertility ratio, change in the socio-economic structure, and change in cropping pattern (Connell, et al., 1976). These changes have wider repercussion for India’s effort to reduce existing inequalities in growth and development. The research outcome will provide data and insights on seasonal migration in tank irrigation communities that future researchers could make use of. The research will also provide policy suggestions for the Indian government.
Chapter 3: Research Methodology

3.1 Introduction

This chapter describes the paradigms, methodology and research methods employed to address the research questions and firstly explains the role of social science in researching human phenomena. Social research methodologies including paradigms, qualitative and quantitative research methodologies are then reviewed. This is followed by an explanation of my research design including justification of my chosen paradigms, data collection methods, data analysis and a description of my study area. The chapter concludes with a discussion of the validity and reliability of my research, ethical issues and limitations of the chosen methodology.

3.2 Research Paradigms

Research methodology is a broad term to describe various approaches to research and data collection (Walsh, 2001). The choice of research methodologies depends on the requirements of social research and the type of research questions to be answered (Creswell, 2009). Social science is the scientific study of human behaviour and aims to build explanatory theory about people and their behaviour, to be tested in real world (Punch, 1998). Thus the main aim of social research is to explore and understand human behaviors and actions and suggest possible solutions to social problems.

There are thirteen types of social research and this research employs some of them such as quantitative and qualitative methods in order to answer the research questions (Stergios, 1991).

Paradigms in the social sciences help researchers to understand social phenomena. Paradigms help in designing how research should be conducted, what the expected and unexpected problems are, and what constitutes legitimate problems and their solution (Firestone, 1987).

Thus paradigms can be defined as a “set of beliefs, values and techniques which is shared by members of the scientific community and which act as a guide or map, dictating the kinds of problems scientists should address and the types of explanation that are acceptable to them” (Kuhn, 1970). Babbie
(2013) defines “paradigm as a model or frame of reference through which to observe and understand”. Paradigms offer different ways of looking at human social life. Thus paradigms are a set of plans that explain how the world is viewed. Paradigms help researchers to understand importance, legitimacy and reasonability of a research approach (Patton, 1990).

A pragmatic approach was adopted for this research. According to Creswell & Clark (2007) pragmatism gives importance to the research questions and the suitable research methods that help to unravel the research questions. Patton’s (1990, p.38&39) view is that most of the research is based on habit rather than situational responsiveness and attention to methodological appropriateness. The pragmatic approach advocates that the researcher should make judicious decisions based on the purpose of the inquiry, the research questions to be investigated, and the time and resource available (Patton, 1987; Rossman & Rallis, 2003). This research followed this approach.

In the pragmatic approach, philosophical assumptions are independent and can be mixed in conjunction with different research methods in order to achieve the right combination to study the research under investigation (Greene & Caracelli, 1997). The flexibility and openness provided by the pragmatic approach was adopted in this research.

3.2.1 Description of four paradigms and choice of paradigm for the research

3.2.1.1 Positivism

Positivism takes a naturalistic approach to research. The ontological position of positivism is that human beings are a part of nature and can be studied in the same way as other objects in the physical world. This ontological position is questioned by many in the social sciences who suggest that humans and human behaviour cannot be reduced to variables and that it cannot be measured and statistically analyzed. The positivist approach is generally viewed as nomothetic which means developing general laws or principles in order to explain particular phenomena (King & Horrocks, 2010).
The epistemological tradition of positivism is objectivism. That is, positivism views objects in the world as independent of each other and each has its own meaning. The aim here is to provide value neutral knowledge, unbiased by the interaction between researcher and research process.

I rejected positivism as a research paradigm for my research because of its ontological and epistemological position. In my view it is highly unlikely to reduce the dynamics of seasonal migration to a measurable scale. The findings of seasonal migration will be influenced by the interaction between researcher (me) and the research (research participants). The outcome of the research will be highly influenced by researcher understanding of the dynamics of seasonal migration and the interaction between research participant, me, and the study area.

3.2.1.2 Interpretivism

Interpretivism describes aspects of the social world by offering a detailed account of specific social settings, processes and their relationships. The focus is on how people view a particular phenomenon and make sense of their life from their perspectives. Interviewing will make them share their experiences and understandings. Interpretivism offers the researcher a chance to see how people interpret and derive meanings from similar facts and events. As Schultz (1962) explains, all facts are open to interpretation, and so is this research. Interpretivism gives an opportunity to interpret the social settings and the phenomena of seasonal migration happening at the selected study villages (King & Horrocks, 2010).

Banister et al. (1985) mentions there is a gap between the object of study and the way it is represented. Interpretivism bridges the gap between the actual world and what is represented. The representation of data can be influenced by a host of factors such as the context in which data were gathered and the researcher’s agenda. The preconceptions and suppositions about a phenomena influence the explanation. However this interpretation of phenomena leads to the evolution of other concepts and interpretations by other researchers. For example, Todaro (1969) interpreted internal migration as individual decisions to enhance income. The same phenomena were
interpreted by Stark (1980) as families making decisions in order to reduce risk. Interpretivism helps researchers to interpret the same phenomena and comes up with different explanations. Thus following the tradition of qualitative methodology, I will be applying interpretivism as the research paradigm for my research.

The other two paradigms in social science are critical humanism and critical realism. In critical humanism the researcher should be unambiguously participatory in the research project (Rossman & Rallis, 2003). Critical realism gives more emphasis to large scale data gathering, often represented quantitatively (Rossman & Rallis, 2003). These two paradigms were not relevant for this study.

3.3 Epistemology and ontology

The researcher’s standpoint and research designs are guided by the researcher’s epistemological and ontological frameworks. Here I will discuss my epistemological and ontological position on carrying out this research (Guba & Lincoln, 1994; Walter, 2010).

3.3.1 Epistemology

Epistemology is the philosophical theory of knowledge. Epistemology deals with knowledge about a phenomenon – what we know about it and what we want to know. Epistemology helps to identify how much we know and to find the correct methodology to study the knowledge. This connection between the nature of the research, research design and methods is referred to as epistemological integrity by Marshall and Rossman (1989). Following epistemology, I chose mixed methodology. Seasonal migration is a very complex and dynamic phenomenon which neither can be reduced by numbers nor can it be measured. The methods chosen to study seasonal migration were rapid rural appraisal, participatory rural appraisal, document analysis, observation and semi-structured interviews (King & Horrocks, 2010).
3.3.2 Ontology

Ontology refers to “the claims or assumptions that a particular approach to social enquiry makes about the nature of social reality” (Blaikie, 1993, p. 6). Ontology provides the philosophical perspective for the chosen methodology and the right approach to study the phenomena. Ontology takes two positions while describing the world phenomena; realist and relativist. According to realist ontology, the real world is out there but is independent of researchers. Quantitative and experimental methods are based on realist ontology whereas the relativist ontologist rejects the idea of a structured world. According to relativist ontology the world is more unstructured and diverse and the world’s phenomena are open to a range of interpretation influenced by the interaction between the researchers and the researched. Here societies are seen as a by-product of interaction between people.

This research will take a relativist approach as its ontological position. This research will take a relativist approach as its ontological position. The ontological position of research is determined by various factors such as information about the particular research topic, factors influencing that particular research topic and what researchers seek to answer in that particular research topic. For instance, seasonal migration is influenced by a range of factors. The decision to move or not to move is not only influenced by personal factors but also by the interaction between various factors.

The ontological position adopted by a research project will influence the knowledge/phenomena that are being studied – seasonal migration. In other words epistemology, ontology, methodology and methods are all closely connected and influence the research outcomes on seasonal migration (King&Horrocks, 2010).

3.4 An overview of research methods

The philosophical position of qualitative research is empiricism; that is knowledge is obtained through direct experience. Thus the qualitative approach takes a broad approach to study social phenomena. The approach includes naturalistic and interpretive approaches and opts for multiple
methods of inquiry (Denzin & Lincoln, 1994). Some of the other terms used for qualitative research methods include; constructivist or naturalistic (Lincoln & Guba, 1985), interpretivist (Smith, 1983), postpositivist or postmodern perspective (Quantz, 1992). Smith (1987) refers to qualitative research as an artistic, systematic and theory driven approach (Creswell, 1994). The qualitative research is conducted in natural settings instead of controlled settings. It represents human beings as persons living in dynamic, complex social arrangements (Rogers, 2000). The researcher interprets the world they have entered. The field notes and interview data has to be interpreted to explain the social phenomena (Van Maanen, 1988) and that becomes the researcher’s observations and information about the social phenomena under study (Geertz, 1982).

3.4.1 Multiple research methods

Qualitative and quantitative research methods when used independently of one another can be considered inadequate for interdisciplinary social research (Creswell, 2009). This led to some researchers suggesting combining two or more research methods (Hesse-Biber, 2010). This approach increases the researcher’s capacity to understand and explain the phenomenon. One could gather different data, use triangulation methods and approach research participants in order to get different views and perspectives on the phenomenon under study leading to rich information (Gable, 1994; Hesse-Biber, 2010; Lee et al., 1997; Mingers, 2001).

According to the proponents of mixed methods social research – qualitative and quantitative are not mutually exclusive. These two methods intersect at different stages of the research process. Therefore a multiple methods approach is more effective than using either one of them as an independent research method (Denzin & Lincoln, 2011). Thus the choice of a research method depends on the nature of the problem under study rather than the underlying theory relating to the approach (Creswell, 2009; Punch, 2005).

In relation to this research, a multiple method approach was considered in order to answer the research questions. For instance, the research participants in this research may be illiterate and therefore providing them
with a questionnaire would be a difficult. Furthermore villagers often provide answers that they feel expected of them or in some cases they provide answers that are beneficial to local organizations in order to receive benefits from them. Thus the research participant’s answer depends on who is asking the questions, who is present while answering and how often the questions were asked. Moreover what people say sometimes differs from what they do. All these factors indicated use of multiple research methods as a better research tool.

3.5 Selected methodology for this research

This is an inductive type of research methodology based on observations, interviews and data collection from different sources including quantitative types such as household survey. In this research empirical observation was given more importance than constructing a theoretical model. In order to answer the research questions, qualitative data with descriptive statistics was used. So during data analysis and interpretation of results, complex quantitative tools have not been used. However statistical tests such as chi-square tests, correlation co-efficient and Pearson tests were applied. Thus a pragmatist philosophical framework with multiple methodologies was employed to unravel the research questions. This research acknowledges the fact that due to paucity of time all types of internal migration were not studied. This research focuses mainly on seasonal migration of rural villagers from tank irrigation communities.

As discussed earlier, due to the empirical and multidisciplinary nature of the study, I chose interpretivism as my research paradigm. Since there are fewer studies on seasonal migration of villagers from South India and no research on seasonal migration of tank irrigation communities, this research uses a combination of qualitative and quantitative research methods that complement each other (Frost, Campbell, Luckert, Mutamba, Mandondo, & Kozanayi, 2007; Nagendra, Karmacharya, & Karna, 2005).

The qualitative methods such as semi-structured interviews and participatory rural appraisal are used to collect information related to
opinions, feelings, expressions and attitudes (Creswell, 2009). The information obtained through semi-structured interviews formed primary data on perceptions, drivers, decision making, network and impact of seasonal migration.

The quantitative method such as household surveys was used to describe the extent, trend and pattern of seasonal migration in a systematic and comparable way. The household survey formed the primary data which were then analyzed and compared with the existing studies on seasonal migration. The collected quantitative data include the proportion of male and female seasonal migrants; educational qualification of the seasonal migrants; proportion of seasonal migrants moved to particular destinations; age of the seasonal migrants, and remittances earned from seasonal migration. Figure 9 gives the overall view of the research method taken by this research.
Figure 9: Overview of research method approach to answer the research questions.

- **Research paradigm**: Interpretivists approach
- **Research methods and type of data**: Qualitative and Quantitative
- **Data collection tools**:
  - **Primary data**: Semi-structured interviews; Rapid Rural Appraisal; Participatory Rural Appraisal; Wenn diagram; Household survey
  - **Secondary data**: Governments documents; office reports; newspaper reports, journals; Indian census data; local village office documents
3.6 Research Design

In order to answer the research questions, I primarily utilized ethnography and case study which are part of the qualitative research method.

3.6.1 Ethnography

Ethnography is the descriptive study of people and their cultures (Hancock, 1998). Here the researcher studies research participants in natural settings for a prolonged period of time (Wallen & Fraenkel, 1991). The research area and research participants influence the research (Grant & Fine, 1992; Spradley, 1979) with the primary data collected through interviews, participatory rural appraisal and observation.

Following the ethnographic principles, I studied seasonal migration of tank irrigation communities in four villages near Madurai, Tamil Nadu, India. I lived near the villages for three months and observed what was happening in the village and carried out a household survey. Since I come from that area, I adopted an emic approach while analysing the data. The interview data were transcribed verbatim from the local language, Tamil into English and cross checked with research participants in order to ensure that it was transcribed with correct meanings as meant by the research participants.

3.6.2 Case study

Case studies are used as a research methodology (Yin, 1993, 1994) that allows researchers to analyse real and complex situations (Christensen and Hansen, 1987). The assumptions behind case study research are such that some of the worldly phenomena such as cultural practices cannot be quantified and cannot be measured (Hunt, 1991; Leplin, 1986). Case studies also help researchers to see the phenomenon from the perspectives of the participants and helps researchers to understand participant action (Lather, 1992; Robottom & Hart, 1993).

Case studies are particularly useful to study a particular phenomenon in great depth and where there is a possibility to identify cases rich in information in which much can be learned from a few in-depth examples
Case studies are particularly favored for explanatory studies involving a large number of variables and there is a necessity to understand the phenomenon within the context of the whole (Yin, 2009). According to Stake (1995, p. xi), case study is the “study of particularity and complexity of a single case, coming to understand its activity within important circumstances”. Stake (1995) argues that the researcher should select those case studies that lead to a better understanding of the phenomenon and which contribute to academic knowledge (Stake, 1995). According to Yin (2009) case studies rely on multiple sources of evidence. Though case studies are not statistically generalizable, it is possible to generalize by identifying theoretical propositions, called analytic generalization.

Yin (2009) suggests use of multiple case studies while designing a research plan. However care must be taken while selecting multiple case studies in such a way that they either serve as representative areas so that it can be replicated or it may produce contrasting results but for predictable reasons. If under these varied conditions a common conclusion is reached then external generalisability is improved. Generally case studies are based on interviews. The aim is to describe the real world phenomena and test theories rather than develop models (Richards 1993, p. 40). The prior theories on migration can be used as evidence while testing the reliability and validity of the data.

In regards to this research the research questions will be best answered by qualitative case study methodology. The case study methodology selected here will be explanatory, explorative and instrumental involving multiple/collective case studies (Yin, 2003; Stake, 1995). The reason for selecting multiple case studies is to analyse seasonal migration phenomena in each case study’s settings and across the settings. Yin (2003) suggests that multiple case study settings can be used to predict similar results (literal replication) and predict contrasting results for predicted reasons (theoretical replication). Multiple case studies offers robust and reliable data even though it is time consuming and expensive to conduct.
As part of the case study research and to ensure credibility I used data from documents, archival records, interviews and observations of the physical and social setting of the villages. As I employed multiple methods I also collected quantitative data through household surveys. Relevant data on seasonal migration were also collected from respective government departments. The data from the different sources were combined during analysis. Data from different sources formed part of the triangulation method in order to cross check reliability of the results.

3.7 Case study approach

3.7.1 Selection of villages

Before selecting study villages, a scoping study was carried out during late January and early February, 2012 where I visited tank dependent villages. During the second part of the field trip in 2013, I purposively selected ten villages. Among the ten villages, four villages were finally selected. Two villages from Madurai district and two villages from Virudhu Nagar district, state of Tamil Nadu. The selection of these four villages was based on criteria such as size of the tank area, dependency on tank water, dependency on agriculture, history of seasonal migration and the extent of developmental interventions in the village in recent times. The other factors considered were proximity to urban areas (two villages close to cities and two villages far from cities), caste (two villages having single caste and other two having mixed caste), distance between the villages, and ease of access to the village and informants (informants are those villagers having knowledge about seasonal migration happening in their village).

3.7.1.1 Development of Humane Action (DHAN) Foundation

During the field trip, I received help from the DHAN foundation. DHAN is one of the well respected Indian NGOs working extensively with the tank irrigation communities of South India. The field trip was set up in two phases. The first part was the scoping assessment and networking with the DHAN foundation. During the first field trip (late January and early February 2012) DHAN officials agreed to introduce me the local villagers and village elders.
Once DHAN introduced me to the villagers, I interacted with most of the villagers in the village for the first two weeks. During these two weeks I tried to determine who migrated, their sex/age profiles, their destination and reasons for particular destinations. During this time I familiarized myself with farming patterns, village life styles, unwritten rules of the village and village governance.

3.7.2 Entering villages

3.7.2.1 Phase one

In the first two weeks I devoted my time to talking to villagers. The purpose of this approach is to understand the social and physical settings of the villages, including social structure and culture of the village, village norms, unwritten rules and seasonal migration patterns. After this the interviewees were selected for the semi-structured interviews.

3.7.2.2 Phase two

After spending two weeks with villagers, I settled down into village life. My day typically involved either staying with a local family or if staying in a nearby town going to the village early morning for breakfast with either a villager’s family or in a local restaurant. My presence in the village most of the time made the villagers feel comfortable and they started sharing their life stories. Most of them spoke about their day to day struggle with poverty. After making good initial impressions among villagers, I selected five villagers, five migrants and five officials from each village to interview. All four villages are economically poor with most of the villagers living below the poverty limit. This was confirmed through local officials such as village officer and Panchayat president.

During the interviews I discussed topics that are broad and generic in nature such as village history, things happening in the village, farming pattern, land holding pattern, yield from the crops, the crops planted in the field, rainfall pattern, their strategies to overcome poverty, tank irrigation and its importance in farming. Once they were familiarized with the interview setting, I started inquiring about seasonal migration in the village. I inquired about extent, drivers and impacts of seasonal migration. The participants
were given sufficient opportunities to talk at length about the topic with minimal intervention from my side. I intervened only to clarify some information. I encouraged villagers to talk at length instead of answering briefly. After the interviews, I categorized the questions into broad topics and subtopics.

3.7.2.3 Phase three: Interview with seasonal migrants

In order to understand lifestyle, employment nature and method of finding employment at the destination areas of seasonal migrants, I interviewed seasonal migrants at their destination places. A total of twenty seasonal migrants from four villages were interviewed. Some of the questions addressed to these seasonal migrants were: reason for their movement; duration and nature of the movement; reason for opting to become seasonal migrants; frequency of visit to the village; method of finding employment; wages; reasons for choosing particular destinations; mode of sending remittances and their use; merits and disadvantages of migrating, and; experiences of working in the city.

An informal diary was kept while in the villages and also while travelling between the cities. This informal diary helped me to reflect on seasonal migration and also helped me to identify strategies in order to improve the research approach. For instance, at the end of each interview, I reflected on the day and the way interviewees responded to my questions. Based on the experience of the first interview, I tried to correct any shortcomings of the first interview in subsequent interviews. This informal dairy helped me to achieve a holistic picture of village life and helped me to see things from their perspectives.

3.8 Methods of collecting qualitative data

In order to collect research data, I employed primarily the following research techniques:

Primary data collection

- Rapid Rural Appraisal (RRA)
- Participatory Rural Appraisal (PRA)
- Semi-structured interviews
 observations and household survey.

Secondary data collection

- Document analysis

3.8.1 Rapid Rural Appraisal (RRA)

I used RRA as a research tool during first two weeks of the field study. RRA is a simple and rapid method of getting into the field, understanding local contexts and identifying issues. I observed land use patterns and spoke to many villagers. I gathered documents from local officials and local NGO’s about the village characteristics such as land holding size, cropping pattern, rainfall pattern and the population of the villages. This RRA helped me to build a good rapport with villagers and helped me to identify potential interviewees. These interviewees formed the primary source of information (Chambers, 1983).

3.8.2 Participatory Rural Appraisal

The philosophy behind PRA was to learn with and from communities about their own situations and conditions of life. One of the important features of PRA was involvement of local people in the process. The techniques used to gain information as part of PRA includes; village mapping, time line, Venn diagram, village resource mapping and seasonal calendar.

In village mapping, the number of houses present in the villages was mapped. An effort was made to differentiate between the structure of the houses such as thatched, concrete and tile houses. The seasonal migrants from across the households and also the selected interviewee’s houses were also mapped. This was achieved by first drawing a village map on the ground (Figure 10) then it was transferred to a poster paper (Figure 11). The mapping of the houses gave an indication of the wealth and economic condition of the villagers. Poverty was widely noticed in all the four villages.
In the Venn diagram (Figure 12) the available infrastructure in the villages and the services available for villagers to travel outside the village was mapped. The Venn diagram suggested that villages lack many basic services such as schools, hospitals, post office, veterinary hospitals and industries.
Village resource mapping and seasonal calendars (Figure 13) record the resources available in the villages and the activities undertaken by the villagers in a year. The seasonal calendars suggested that seasonal migration is happening mostly during lean agricultural seasons where the chances of getting employment in the village are less.

3.8.3 Semi-structured interviews

The primary data collection method employed by this research was semi-structured interviews using an interview guide with follow up probing questions. Field observation was also carried out while doing the interviews. Semi-structured interviews helped me to interact with villagers and gave the opportunity to go in depth and offer fine distinction of verbal and non-verbal forms of expression made by the interviewee (Miller & Crabtree, 1999b).
Some of the key features of using semi-structured interviews includes, flexibility and it encourages interviewees to speak openly and freely and to share their experiences and their perspectives (Bailey, 1994; Creswell, 1994; Miller & Crabtree, 1999a; Minichiello, et al., 1995b; Newman., et al., 2002; Patton, 1990; Rossman & Rallis, 2003; Sarantakos, 2005). Semi-structured interviews help to explore the perceptions, feelings, values and experience of informants (Patton, 1987; Rossman & Rallis, 2003; Sarantakos, 2005) and also to understand the issue from the interviewees’ point of view (Patton, 1987; Rossman & Rallis, 2003). It helped me to understand why people behave the way they do (Minichiello, Aroni, Timewell, & Alexander, 1995b).

3.8.3.1 Ontological position

My ontological position suggests that people’s knowledge, their views, understanding, interpretations and experiences are meaningful representations of the social reality that the research questions are designed to explore. The semi-structured interviews offered me an opportunity to understand the motivation behind seasonal migration and explore fully the positive and negative impacts of seasonal migration on individuals, households and villages.
In order to answer the research questions I prepared an interview guide with open ended questions. One of the main purposes of preparing an interview guide is to impart some structure to the interviews. However I kept the interview process very flexible and open. During the course of interviews, I changed or modified some of the interview topics in order to sustain the conversation flow with participants (Minichiello, et al., 1995b; Rossman & Rallis, 2003). This flexible and open approach allowed me to judge the appropriateness of each question during the interview process (Creswell, 1994; Miller & Crabtree, 1999a; Minichiello, et al., 1995b; Patton, 1990; Rossman & Rallis, 2003). The duration of the semi structured interviews varied from one to two hours. This time frame helped me to attain large quantities of descriptive qualitative data (Hesse-Biber & Leavy, 2004). Even though the semi structured interview was flexible and allowed interviewees to speak freely, at the same time I ensured that it was focused in order to gain more information. The interview questions were later organized into different themes for analysis.

Though semi-structured interviews are widely used as a research instrument in qualitative research it is important to recognize that they can suffer from drawbacks such as the presence of the researcher which can evoke biased responses, take more time, usually involve small sample sizes, cost, lack of anonymity and standardization (Bailey, 1994; Creswell, 1994; Minichiello, et al., 1995b; Newman., et al., 2002; Patton, 1990; Sarantakos, 2005).

3.8.3.2 Interview process

While in the field I did not start asking questions to interviewees immediately. The process included meeting each interviewee the day before the interview for an informal conversation. Then on the day of the interview, I began by asking some general informal background questions to identify each participant’s background and history. Once the interviewees felt comfortable, I started asking questions related to seasonal migration. The interviews were mostly conversational. I used the interview guide only as a prompt and to ask follow up questions. Most of the time I followed the approach suggested by Miller & Crabtree (1999). According to them the interview should first aim for the rapport building questions then slowly
establish the interview style, context and research themes. I used probing and prompting in order to get rich information (Miller & Crabtree, 1999a).

The interview was recorded with the interviewees’ permission. After each interview I noted in my research diary my thoughts and summarized main points. After the interviews, I walked around the village and villager’s property. The purpose was to get additional information and also to get a better understanding of the local context.

3.8.3.3 Selection of interviewees

I selected interviewees who had knowledge of seasonal migration happening in the village and who also had a seasonal migrant as a family member. The selection of the interviewees was purposeful in order to get rich information which addresses the research problems (Miller & Crabtree, 1999a). The selection of interviewees was done after the RRA. Once initial contact was made with a few villagers, I employed a snowballing technique to select the interviewees. Thus 20 villagers, 20 seasonal migrants and 20 officials from the four villages are selected for the semi-structured interviews. The interview experiences indicated that after interviewing 20 villagers, 20 seasonal migrants and 20 officials from the four villages the saturation point was reached where there were no new themes evolving from the interviewee. Minichiello, et al (1995b) suggested that if there are no new themes emerging from the interview then the sample size is considered to be appropriate.

3.8.3.4 Preparation

The villagers selected for the interviews were given an introductory letter and information sheet. I explained to them the purpose of my research, interview process and time commitments involved. Then I organized the place of interview either in their home or in the village common ground. The time of interview was decided based on interviewee’s time availability. The interviewees were given the consent sheet and information sheet before the interview. Once again the purpose, process and outcomes of the research were explained to the participants before obtaining their consent. I also informed them that I will be recording the interviews. Some officials
initially hesitated recording their statements however once convinced that the interviewee’s names will be kept confidential, the resources won’t be shared with anyone and is the results would be used only for the thesis and paper publication, they felt comfortable with recording their interviews.

3.8.3.5 Transcription of interview data

According to Wengraf (2001) a transcript is a written version of the interview with researcher’s comments, observation, explanation, clarification and remarks. Transcription of field data is seen as a first step of analyzing data by determining what to include and what not to include (Wood & Kroger, 2000). The amount of information to be included in the transcription will be determined by the research questions (Miller & Crabtree, 1999a; Wengraf, 2001). The interview was conducted in the local language Tamil then translated and transcribed by the researcher himself in order to ensure that the interviewee’s words were translated and transcribed verbatim. In order to ensure that it is transcribed verbatim it was crossed checked with randomly selected interviewees.

3.8.4 Observation

Since this research employed an ethno-methodological approach, observation also formed part of the data collection methods. Here the importance was given to everyday life. While listening to the interviewee’s statement, I also observed interviewee’s body language and their use of words while talking about seasonal migration. Observing daily routines, conversations, language, rhetoric used, their interactions, actions and the way people behaved, helped me to understand seasonal migration of the villagers from the study areas.

3.8.4.1 Epistemology

My epistemological positions suggest that knowledge of seasonal migration could be understood by observing real life settings. The logic behind observation as a method is such that settings, situations and interactions offer an opportunity to interpret the events. Thus observation allows the generation of rich data on social interaction while conducting interviews.
The integrity of the research method was maintained throughout data collection and analysis stages. The research was carried out in an iterative manner where each stage of data collection was used to enhance my understanding of seasonal migration and clarified for further analysis and collection of data. Throughout the research an open and unbiased approach was maintained.

3.8.5 Document Analysis

Historical and contemporary documents provided information about the study area and seasonal migration. The documents collected included both text based and non-text based (e.g. maps of the village and tanks). These documents helped me to understand the socio-economic profile of the village, types of crop grown, area of the tank structure and the type of developmental activities implemented by the government. These documents also acted as a cross reference where I could verify the information obtained through interviews. This document analysis formed part of triangulation (Denzin, 1970, p.291; Yin, 1994). Combining document analysis and interviews provided a rich description of the seasonal migration phenomenon (Stake, 1995; Yin, 1994). The reports and databases acted as a potential source of empirical data for case studies (Mills, Bonner & Francis, 2006). To sum up, documents helped me to unpack the meaning and provided me with insights relevant to the research problems (Merriam, 1988).

3.8.5.1 Ontological and Epistemological position

My ontological position for the research suggests that written words, texts, documents, records, visual data such as maps and photographs or aspects of social organization are meaningful constituents of the social world. Documents act as some form of expression and representation of the social world. Through documents we can trace and read aspects of seasonal migration.

My epistemological position suggests that documents and visual media can be used as an evidence for the ontological properties. These documents have to be read and interpreted for evidence. Thus documents provide legitimate
evidence for the study of seasonal migration. The document analysis plays a vital role in the interpretive paradigm adopted by the research.

3.9 Timing of data collection, analysis, and interpretation

Table 2 illustrates the timing of data collection phases. Formation of the conceptual framework, data analysis, interpretation and integration occurred throughout the process in an iterative manner. The literature review provided the conceptual framework for the research and it was refined continuously throughout the research process. Data analysis and initial interpretation of findings also occurred throughout the process, informing subsequent stages of the research. Integration of the data occurred in the interpretation and discussion stage.

3.10 Selected interviewees

The interviewees selected were from each village were five migrants, five villagers and five other stakeholders such as officials from nongovernmental organizations, government officials including the local postman, village extension officers and agricultural officers. Thus 20 villagers, 20 seasonal migrants and 20 officials from four villages were selected for the interviews. Table 3 illustrates the interviewees selected for the research.
<table>
<thead>
<tr>
<th>Year</th>
<th>Months</th>
<th>Data collection stage</th>
</tr>
</thead>
</table>
| 2012 | December - January | Power point presentation to DHAN officials  
Visited tank dependent villages around Madurai district  
Informal talk with village leaders, villagers and local officials  
Visited tank dependent villages around Virudhu Nagar district  
Informal tank with village leaders, villagers and local officials  
Visited tank dependent villages in Coimbatore  
Visited Tamil Nadu Agricultural University to seek their suggestions on the research methods |
| 2013 | March - April | Methodologies and field plan presentation to Mr. Vasimalai, Director, DHAN  
Visited 10 identified tank dependent village in Madurai and 6 identified tank dependent village in Virudhu Nagar. Finally two villages from each villages were selected  
Village visit  
RRA  
Commenced semi-structured interviews with identified interviewees  
PRA (Venn diagram, village maps, village resource maps, seasonal calendar and time line)  
Household survey |
| 2013 | May | Continuation of semi-structured interviews  
PRA  
Preliminary analysis of semi-structured interviews |
| 2013 | June - July | Semi-structured interviews  
Household survey  
Secondary data collection such as documents and maps |
Table 3: Interviewee participants.

<table>
<thead>
<tr>
<th>Village name</th>
<th>Interview participants</th>
<th>Interview participants</th>
<th>Interview participants (Officials)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Five villagers</td>
<td>Five migrants</td>
<td>President, Self help group</td>
</tr>
<tr>
<td>Vembankudi</td>
<td></td>
<td></td>
<td>Secretary, Village office</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Village administrative officer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>President, Vayalagam program</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Village ward member</td>
</tr>
<tr>
<td>Manickanenthal</td>
<td></td>
<td></td>
<td>Village administrative officer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>President, Self help group</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Clerk, village office</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Village ward member</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DHAN official - NGO</td>
</tr>
<tr>
<td>Paphiapuram</td>
<td>Five villagers</td>
<td>Five migrants</td>
<td>President, Panchayat</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>President, Self-help group</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Director, Vanavil trust, NGO</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Village administrative officer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Secretary, Puthuvalvu thittam</td>
</tr>
<tr>
<td>Muruganeri</td>
<td>Five villagers</td>
<td>Five migrants</td>
<td>President, water user association</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Secretary, Self Help Group</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Village ward member</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tank manager (neerkatti)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Village administrative officer</td>
</tr>
</tbody>
</table>

### 3.11 Data analysis

Data analysis included preparation of maps and interpretation of interview data. While analyzing the research data, the analysis between villages and across the villages was also carried out in order to answer the key research questions. A preliminary data analysis was carried out while collecting the data. While in the field I observed the key themes that were emerging from the field data (Yin, 2003).

Both inductive and deductive approaches were adopted while analysing interview transcripts and field notes. The inductive analysis of data helped to identify patterns and themes emerging from the data (Patton, 1980, p.306). The interpretive paradigm adopted by the study helped to interpret the events that in turn provided building blocks for theory construction (Denzin & Lincoln, 1994).
3.11.1 Thematic categorisation

Coding forms an important component of data analysis (Neuman, 2000). Coding helps researchers identify themes, patterns, ideas, concepts and important meanings from the data (Minichiello, et al., 1995b; Rossman & Rallis, 2003). Coding involves categorizing the themes emerging from the field data in a process called thematic analysis, a method widely used by qualitative analysis (Creswell, 1994; Denzin & Lincoln, 1994; Guba & Lincoln, 1989; Neuman, 2000).

The transcribed interviews were reviewed at every step in order to determine the suitability of the codes with the concepts that emerged from the data. The codes were then compared with other codes to see the similarities, dissimilarities and general patterns. Thus the data were analysed in terms of emerging thematic codes and concepts. The themes were developed by combing interview data by logic. The themes together with formal theories from the literature helped to respond to the key research questions.

3.11.2 Qualitative data analysis software

The software NVivo 10 was used to code and analyse the interview data. The software helped to transform the data into thematic codes and concepts. This process took place at three different levels. The notes on coding decisions form the first level of analysis, the identified codes based on the concepts of similarity and dissimilarity formed the second level, the second level codes were then connected and consolidated based on the sub-themes that emerged from the second level coding which formed the third level of analysis. This process helped to identify the key themes, ideas and patterns that are emerging from the data and address the key research questions (Rossman & Rallis, 2003).

3.11.3 Validity and reliability

To ensure validity and reliability in case study research Yin (2009) suggests carrying out multiple case studies. Following Yin’s (2009) suggestion, multiple case studies of four villages in two different districts was selected for this study. The other methods to ensure validity and reliability in case
study research included ensuring the research question was explained in
detail to the interviewee, the research question was verified by reviewing
literature, the particular case study design was justified, the correct
purposeful sampling strategies was applied while selecting the study areas
and the systematic collection and management of the data and correct
analysis of the data carried out. All these suggested methods were diligently
followed in this research (Russell et al., 2005)

After the interview and translation, the data were shared with selected
interviewees to ensure that the data were interpreted verbatim. The
interviewees were also given the opportunity to clarify my interpretations
and contribute to new or additional perspectives. The other method to
ensure credibility included reflections from field experience, maintenance of
field notes and examination of data by peers and other researchers. In order
to ensure reliability, the data were double coded where a set of coded data
was coded again after a few days then both the codes were compared
(Krefting, 1991).

To ensure validity and rigour of the research, Padgett (1998) suggested six
strategies such as 1. Prolonged engagement with participants in the field; 2.
Triangulation; 3. Peer support and discussion; 4. Member checking; 5.
Negative case analysis and 6. Auditing. For this research, the first four
strategies were used to ensure quality and rigour of the research. For
example I employed a triangulation method in order to verify the interview
data and avoid the criticism that the research findings were obtained from a
single source (Patton, 1990). In the triangulation method, I compared
interviews, observation and document reviews. The triangulation process
helped me to gain more confidence about the research methods employed
and the research findings. Triangulation and convergence of data findings
enhanced research findings and improved data quality (Knafl & Breitmayer,
1989).

3.12 Ethical considerations

A researcher’s decisions during the research process have impact not only
on research and methodology but also on ethics. As Patton (1990)
mentioned every research process produces its own ethical and political
impacts. May (2011) defined ethics as study and practice of standards of conduct and moral judgment. It is the code of morals we use while doing the research (Minichiello, et al., 1995b).

Following the traditions of qualitative methods, ethics was strictly followed in this research. Since interview is a kind of confession by the interviewee (Patton, 1990), I assured interviewees that all the information will be kept confidential. The Charles Sturt University Ethics in Human Research Committee’s code of ethical conduct guided the ethical components of this research and approved the research proposal. I obtained this ethics approval before entering the field. The protocol number of the application was 2012/107.

Before starting each interview, the consent form and information sheet were given to each interviewee and they were asked to read and sign. For those interviewees who could not read and write I read the consent and information form and took their verbal agreement as their willingness to participate in the interview. Besides the consent form, the interviewees were informed about the purpose of the project, the process and the outcome of the interview such as thesis, report and publication of journal articles. The interviewees were also made aware of the fact that they could leave at any point during the interview. Their willingness to participate in the interview process was purely voluntary. I also informed them that their views and opinion will be kept anonymous, their names would not be mentioned in the thesis that direct quotes used in the thesis would not be identifiable and all interview forms would be kept confidentially with the researcher.

### 3.13 Limitations of the study

One of the major limitations of the study was trustworthiness. The interviewees suspected that I was a government agent visiting villages to assess government programs and outcomes. It took significant effort and energy to convince them that I was a research student. Though I was able to convince most of them still some suspicion prevailed. This suspicion towards the researcher resulted in some interviewees providing biased answers that may have suited local officials and NGO’s rather than the
actual truth. However the interviewees’ answers were verified through triangulation methodology such as confirming with published documents and government officials. Thus triangulation and convergence of data findings enhanced the research and improved data quality (Knafl & Breitmayer, 1989).

The interviews were conducted in local language, Tamil. Even though the researcher speaks this language, it was a significant task to convert the exact meaning into English. Though due care was taken to translate the interview verbatim, there are chances that the local essence and meaning might have been lost during the translation process.

3.14 Summary

In this chapter the research methods and epistemology employed by this research were described. An interpretivist- multiple research methodology was used. A qualitative approach was adopted so that interviewees’ diverse perspectives on seasonal migration could be understood while answering the research questions. The four case studies used to analyse seasonal migration helped to achieve a deep understanding of opinion and experiences of the interviewees about seasonal migration.

Both qualitative and quantitative research methods were employed in this research. The field data were collected in two stages. The first phase was in 2012 and second phase in 2013. The techniques used for primary data collection included; semi-structured interviews, participatory rural appraisal, participant observation and household survey. The secondary data were also obtained from various government organizations and local NGOs. The interviews were transcribed verbatim and cross-checked with randomly selected interviewees. The transcribed data were coded for emerging themes. Qualitative coding is an important part of the qualitative research and involves extracting meaning from the collected data by locating key themes and concepts within the data (Patton, 2002). The codes were later used as topics for analysis for the emergent themes using the qualitative computer software, NVivo 10. The results of the analysis are reported in the next three chapters.
Chapter 4: Extent of seasonal migration in Tank irrigation communities of Tamil Nadu, South India

4.1 Introduction

This section provides an analysis of the first research question, extent of seasonal migration occurring in four tank dependent villages; namely, Manickanenthal (Ma), Muruganeri (Mu), Paphiapuram (P) and Vembankudi (V). In order to answer Extent of seasonal migration quantitative data from the household surveys, and the qualitative data from the key informant interviews were utilized. My task was firstly to quantify the extent of seasonal migration amongst the resident adult population (RAP). Then I compared seasonal migrants (SM) to the non-migrant (NM) villagers amongst the RAP in terms of gender, age, caste, wealth status and education to identify trends in seasonal migration in terms of location, types of jobs, wages and the flow of remittances to RAP households and villages.

4.2 Case study villages

The household survey showed that in 2013, the four hundred and forty resident households in the four tank dependent case study villages included 1,615 villagers termed the resident adult population (RAP). Within the RAP, there were 867 (54%) adult males and 748 (46%) adult females (Table 4).

Table 4: Total resident adult population in the case study villages for 2013.

<table>
<thead>
<tr>
<th>Village</th>
<th>Total resident adult population (RAP)</th>
<th>Adult males</th>
<th>Adult females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vembankudi</td>
<td>131</td>
<td>66</td>
<td>65</td>
</tr>
<tr>
<td>Manickanenthal</td>
<td>249</td>
<td>137</td>
<td>112</td>
</tr>
<tr>
<td>Paphiapuram</td>
<td>442</td>
<td>234</td>
<td>208</td>
</tr>
<tr>
<td>Muruganeri</td>
<td>793</td>
<td>430</td>
<td>363</td>
</tr>
<tr>
<td>Total</td>
<td>1615</td>
<td>867(54%)</td>
<td>748 (46%)</td>
</tr>
</tbody>
</table>
The household survey gathered data from the resident adults in the four case study villages using face-to-face meetings with family members. Twenty semi-structured interviews from seasonal migrants (five from each of the four villages) were completed. In key informant interviews, I explored the trends, extent and experience of seasonal migrations. I also interviewed twenty officials and twenty NMR (five from each village) to discern the government officials’ and NMR opinions on seasonal migration.

The household survey identified 127 individuals or 8% of all adult residents as seasonal migrants (Table 5) with significant differences between villages ($p = 0.03$: $\chi^2 = 8.81$ and $n = 1615$). This represented more than a quarter of all households in the study with a SM, suggesting seasonal migration is an important form of alternative livelihood for many families (Table 5). The percentage of households with SM varied markedly across the villages. For instance, it ranged from 59% for one village (Vembankudi village) to 19% for another village (Paphiapuram village) (Table 5).

Table 5: Extent of seasonal migration in 2013 at the time of survey.

<table>
<thead>
<tr>
<th>Village name</th>
<th>RAP/HH</th>
<th>SM</th>
<th>Resident households with (SM) n=123</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vembankudi</td>
<td>131/29</td>
<td>17(13%)</td>
<td>17 (59)</td>
</tr>
<tr>
<td>Manickanenthal</td>
<td>249/60</td>
<td>24 (10%)</td>
<td>22 (37%)</td>
</tr>
<tr>
<td>Paphiapuram</td>
<td>442/124</td>
<td>25 (6%)</td>
<td>23 (19%)</td>
</tr>
<tr>
<td>Muruganeri</td>
<td>793/224</td>
<td>61 (8%)</td>
<td>61 (27%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,615/440</td>
<td>127 (8%)</td>
<td>123 (28%)</td>
</tr>
</tbody>
</table>

*HH=Households

Table 5 also indicates that the proportion of seasonal migrants varies across the four villages. For instance, Vembankudi village had the highest proportion of seasonal migrants (13%) which was more than double proportion of SM from Paphiapuram village (6%).
The extent of seasonal migration, similarities and dissimilarities between SM and NMR and the differences between the villages can be explained under the two broad topics: socio-demographic and economic characteristics.

4.3 Socio-demographic characteristics

The household survey and semi-structured interviews indicated the following trends and patterns. The proportion of SM that are male (85%) is higher than the proportion of SM who are female (15%) (Table 6). This difference was in contrast to the more equal proportions of adult males and females in the four villages. The proportion of male and female SM varied across the villages however in all villages many more males became SM than females (Table 6).

Table 6: Gender of seasonal migrants for 2013.

<table>
<thead>
<tr>
<th>Village</th>
<th>Number of male SM</th>
<th>Number of female SM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vembankudi</td>
<td>12 (71%)</td>
<td>5 (29%)</td>
</tr>
<tr>
<td>Manickanenthal</td>
<td>21 (88%)</td>
<td>3 (12%)</td>
</tr>
<tr>
<td>Paphiapuram</td>
<td>23 (92%)</td>
<td>2 (8%)</td>
</tr>
<tr>
<td>Muruganeri</td>
<td>52 (85%)</td>
<td>9 (15%)</td>
</tr>
<tr>
<td>Total SM=127</td>
<td>108 (85%)</td>
<td>19 (15%)</td>
</tr>
</tbody>
</table>

There were differences in the ages of SM and NMR (Table 7). The overall median age of SM (38 years) was younger than the median age of NMR (40 years) (p<0.001). However the median age of SM and NMR varied across the villages (Table 7) except for the Muruganeri village which was 35 years for both SM and NMR; (Vembankudi village (p <0.01); Manickanenthal village (p < 0.01); Muruganeri village (p>0.05); Paphiapuram village (p < 0.01)

It is interesting to note that while the median age of male SM (39 years) compared to male NMR (42 years) was similar to the overall age difference, the difference between the median age of female SM (26 years) compared to female NMR (37 years) was much greater. This indicates seasonal
migration is more attractive to younger villagers, and in particular young women.

Table 7: Median ages of seasonal migrants (SM) and non migrant resident populations (NMR).

<table>
<thead>
<tr>
<th>Village</th>
<th>Median age of males</th>
<th>Median age of females</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NMR</td>
<td>SM</td>
</tr>
<tr>
<td>Vembankudi</td>
<td>50 years</td>
<td>40 years</td>
</tr>
<tr>
<td>Manickanenthal</td>
<td>42 years</td>
<td>40 years</td>
</tr>
<tr>
<td>Paphiapuram</td>
<td>37 years</td>
<td>34 years</td>
</tr>
<tr>
<td>Muruganeri</td>
<td>35 years</td>
<td>35 years</td>
</tr>
<tr>
<td>Total</td>
<td>40 years</td>
<td>38 years</td>
</tr>
</tbody>
</table>

Table 8 shows that SM were more literate than NMR. Similarly Table 9 indicates that proportionally SM are better educated than NMR based on number of years of schooling. While this varied across villages, the proportion of SM that were illiterate was lower in every village compared to the proportion of NMR. The higher educational qualifications of some villagers acting as one of the drivers of seasonal migrations will be explored in detail in the chapter 5.

Similarly, there were gender differences evident between the educational qualifications of NMR and SM (Table 10). In the case of NMR, there was a higher number of females with zero years of schooling (13%) than males (9%) however there were more male SM (9%) with zero years of schooling than female SM (4%). There were also substantial differences between male and female SM in the other categories. The proportion of male SM with 1-5 years of formal education was higher (28%) compared to female SM (5%). In the 6-10 years of education category, there was also a substantial difference between male SM (31%) and female SM (2%) and there were more male SM with more than 10 years of formal educations (17%) than female SM (5%) (Table 10).

All four villages are mostly agrarian dependent economies and of low socio-economic status. In terms of agricultural land holdings, 57% of the households without SM are landless, compared with 31% of households
with SM indicating 69% of SM households had access to some land (Table 11).

There was a significant difference in landholding size between NMR and SM (p<0.03; $\chi^2 = 4.5$) both in total and in each village. The proportion of landless NMR households was lowest in Manickanenthal village (6%) and highest in Muruganeri village (61%). The highest proportion of landless SM households was observed in Vembankudi village SM (41%) and least in Manickanenthal village (4%) (Table 11).

Different caste types were noted in the study villages and the influence on the decision to become a SM will be discussed in Chapter 5. The caste system remains one of the important characteristics of Indian society. There are four large caste groups in the case study villages: Forward caste (FC), Backward caste (BC), Most Backward caste (MBC) and Schedule caste (SC). Table 12 shows the caste distribution in the study villages.
<table>
<thead>
<tr>
<th>Village</th>
<th>NMR</th>
<th></th>
<th></th>
<th>SM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>Illiterate</td>
<td>Basic</td>
<td>Fluent</td>
<td>Illiterate</td>
</tr>
<tr>
<td>Vembankudi</td>
<td>9 (8%)</td>
<td>22 (19%)</td>
<td>18 (16%)</td>
<td>18 (16%)</td>
</tr>
<tr>
<td>Manickanenthal</td>
<td>28 (12%)</td>
<td>44 (20%)</td>
<td>50 (22%)</td>
<td>24 (11%)</td>
</tr>
<tr>
<td>Paphiapuram</td>
<td>41 (10%)</td>
<td>135 (32%)</td>
<td>22 (5%)</td>
<td>55 (13%)</td>
</tr>
<tr>
<td>Muruganeri</td>
<td>96 (13%)</td>
<td>176 (24%)</td>
<td>99 (14%)</td>
<td>115 (16%)</td>
</tr>
<tr>
<td>Total</td>
<td>174 (12%)</td>
<td>377 (25%)</td>
<td>189 (13%)</td>
<td>212 (14%)</td>
</tr>
</tbody>
</table>
Table 9: Educational status (in years) of SM and NMR in the case study villages.

<table>
<thead>
<tr>
<th>Village</th>
<th>Non migrants</th>
<th>Seasonal migrants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of years of school attendance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>sex 0 1-5 6-10 &gt;10</td>
<td>sex 0 1-5 6-10 &gt;10</td>
</tr>
<tr>
<td>Vembankudi</td>
<td>Male (n=49)</td>
<td>20% 27% 29% 24%</td>
</tr>
<tr>
<td></td>
<td>Female (n=65)</td>
<td>38% 37% 25% 0%</td>
</tr>
<tr>
<td>Vembankudi Total</td>
<td>n=114 31% 32% 26% 11%</td>
<td>n=17 29% 47% 18% 6%</td>
</tr>
<tr>
<td>Manickanenthal</td>
<td>Male (n=122)</td>
<td>35% 24% 25% 16%</td>
</tr>
<tr>
<td></td>
<td>Female (n=103)</td>
<td>55% 14% 25% 6%</td>
</tr>
<tr>
<td>Manickanenthal Total</td>
<td>n=225 44% 19% 25% 12%</td>
<td>n=24 17% 54% 25% 4%</td>
</tr>
<tr>
<td>Paphiapura m</td>
<td>Male (n=198)</td>
<td>17% 19% 49% 15%</td>
</tr>
<tr>
<td></td>
<td>Female (n=219)</td>
<td>21% 30% 34% 16%</td>
</tr>
<tr>
<td>Paphiapura m Total</td>
<td>n=417 19% 25% 41% 15%</td>
<td>n=25 8% 16% 52% 24%</td>
</tr>
<tr>
<td>Muruganeri</td>
<td>Male (n=371)</td>
<td>11% 43% 35% 11%</td>
</tr>
<tr>
<td></td>
<td>Female (n=361)</td>
<td>20% 45% 29% 7%</td>
</tr>
<tr>
<td>Muruganeri Total</td>
<td>n=732 15% 44% 32% 9%</td>
<td>n=61 10% 26% 33% 31%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>n=1488 22% 34% 33% 11%</td>
<td>n=127 13% 32% 33% 21%</td>
</tr>
</tbody>
</table>

Table 10: Educational status of the NMR and SM in percent (%).

<table>
<thead>
<tr>
<th>NMR (n =1488)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Female Male Female Male Female Male Female</td>
</tr>
<tr>
<td>0 years 1-5 years 6-10 years &gt;10 years</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>9 13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SM (n =127)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Female Male Female Male Female</td>
</tr>
<tr>
<td>0 years 1-5 years 6-10 years &gt;10 years</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>9 4</td>
</tr>
</tbody>
</table>
Table 11: Agricultural landholdings of NMR and SM at HH level.

<table>
<thead>
<tr>
<th>Village</th>
<th>Non migrants (NMR)</th>
<th>Seasonal migrants (SM)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>landsles</td>
<td>0.5-1</td>
</tr>
<tr>
<td>Vembankudi (HH=29)</td>
<td>2 (16%)</td>
<td>8 (66%)</td>
</tr>
<tr>
<td>Manickanenthal (HH=60)</td>
<td>2 (6%)</td>
<td>7 (19%)</td>
</tr>
<tr>
<td>Paphiapuram (HH=124)</td>
<td>7 (16%)</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>Muruganeri (N=227)</td>
<td>102 (61%)</td>
<td>42 (25%)</td>
</tr>
<tr>
<td>Total (HH=440)</td>
<td>113 (44%)</td>
<td>58 (23%)</td>
</tr>
</tbody>
</table>

Table 12: Distribution of caste in the case study villages by number of people.

<table>
<thead>
<tr>
<th>Village</th>
<th>Migration</th>
<th>BC</th>
<th>FC</th>
<th>MBC</th>
<th>SC</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vembankudi</td>
<td>Non migrants</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>114</td>
<td>114</td>
</tr>
<tr>
<td></td>
<td>Migrants</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Vembankudi Total</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>131</td>
<td>131</td>
</tr>
<tr>
<td>Manickanenthal</td>
<td>Non migrants</td>
<td>0</td>
<td>0</td>
<td>225</td>
<td>0</td>
<td>225</td>
</tr>
<tr>
<td></td>
<td>Migrants</td>
<td>0</td>
<td>0</td>
<td>24</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>Manickanenthal Total</td>
<td>249</td>
<td>249</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paphiapuram</td>
<td>Non migrants</td>
<td>273</td>
<td>3</td>
<td>73</td>
<td>68</td>
<td>417</td>
</tr>
<tr>
<td></td>
<td>Migrants</td>
<td>19</td>
<td>3</td>
<td>3</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Paphiapuram Total</td>
<td>292</td>
<td>3</td>
<td>76</td>
<td>71</td>
<td>442</td>
<td></td>
</tr>
<tr>
<td>Muruganeri</td>
<td>Non migrants</td>
<td>485</td>
<td>0</td>
<td>31</td>
<td>216</td>
<td>732</td>
</tr>
<tr>
<td></td>
<td>Migrants</td>
<td>42</td>
<td>0</td>
<td>2</td>
<td>17</td>
<td>61</td>
</tr>
<tr>
<td>Muruganeri Total</td>
<td>527</td>
<td>0</td>
<td>33</td>
<td>233</td>
<td>793</td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td>819</td>
<td>3</td>
<td>358</td>
<td>435</td>
<td>1615</td>
</tr>
</tbody>
</table>

Brahmin constitute the Forward caste. The Backward Caste comprises Reddiyar, Naidu and Konar. The Most Back ward Caste consists of Nayakar, Navither, Vannar, Devar and Pillai. The Schedule Caste comprises Parayar, Pallar and Chakkiliyar. The caste-wise distribution of RAP suggests that BC were the dominant caste with 51% followed by SC 27% and MBC 22% (Table 13). The influence of caste on SM will be further explored and discussed on chapter 5.
The household survey shows that in all the castes the majority of the SM were males. This gender difference among SM in the different castes varied across the villages. In Vembankudi and Manickanenthal villages only one caste is present while the other two villages have mixed castes (Table 13). In Paphiapuram village, mostly BC migrated. Of those who migrated, 95% of them were males and 5% of them were females (Table 14). In Muruganeri village, BC also migrated more in number where 93% were males and 7% females (Table 14).

Seasonal migration involves a change of residency for a period of between one and six months in a year. The destination preferences of SM shows that within the state of Tamil Nadu rural to urban migration was the most common form (63 percent), followed by intra-state rural to rural (14 percent), then interstate rural to rural (12 percent). The least common seasonal migration was interstate rural to urban migration, which was 11 percent (Table 15).

Table 13: Distribution of caste in the case study villages by household.

<table>
<thead>
<tr>
<th>Caste</th>
<th>Vembankudi (N=29)</th>
<th>Manickanenthal (N=60)</th>
<th>Paphiapuram (N=124)</th>
<th>Muruganeri (N=226)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pallar</td>
<td>100% (29)</td>
<td>0</td>
<td>0</td>
<td>31% (69)</td>
</tr>
<tr>
<td>Nayakar</td>
<td>0</td>
<td>100% (60)</td>
<td>1% (1)</td>
<td>0</td>
</tr>
<tr>
<td>Parayar</td>
<td>0</td>
<td>0</td>
<td>12% (15)</td>
<td>0</td>
</tr>
<tr>
<td>Chakkiliiyar</td>
<td>0</td>
<td>0</td>
<td>3% (4)</td>
<td>0</td>
</tr>
<tr>
<td>Navithar</td>
<td>0</td>
<td>0</td>
<td>1% (1)</td>
<td>0</td>
</tr>
<tr>
<td>Vannar</td>
<td>0</td>
<td>0</td>
<td>6% (7)</td>
<td>1% (2)</td>
</tr>
<tr>
<td>Devar</td>
<td>0</td>
<td>0</td>
<td>10% (12)</td>
<td>0</td>
</tr>
<tr>
<td>Reddiyar</td>
<td>0</td>
<td>0</td>
<td>57% (71)</td>
<td>0</td>
</tr>
<tr>
<td>Konar</td>
<td>0</td>
<td>0</td>
<td>9% (11)</td>
<td>0</td>
</tr>
<tr>
<td>Chettiyyar</td>
<td>0</td>
<td>0</td>
<td>1% (1)</td>
<td>0</td>
</tr>
<tr>
<td>Pillaimar</td>
<td>0</td>
<td>0</td>
<td>1% (1)</td>
<td>0</td>
</tr>
<tr>
<td>Nayakar</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3% (6)</td>
</tr>
<tr>
<td>Pillar</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>66% (149)</td>
</tr>
<tr>
<td>Naidu</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>66% (149)</td>
</tr>
</tbody>
</table>
Table 14: Caste and gender of SM (N=1615; n=127).

<table>
<thead>
<tr>
<th>Village</th>
<th>Caste type</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vembankudi (N=131)</td>
<td>SC (n=17)</td>
<td>71%</td>
<td>29%</td>
</tr>
<tr>
<td>Manickanenthal (N=244)</td>
<td>MBC (n=24)</td>
<td>79%</td>
<td>21%</td>
</tr>
<tr>
<td>Paphiapuram (N=468)</td>
<td>BC (n=19)</td>
<td>95%</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>MBC (n=3)</td>
<td>67%</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td>SC (n=3)</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Muruganeri (N=759)</td>
<td>BC (n=42)</td>
<td>93%</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>MBC (n=2)</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>SC (n=17)</td>
<td>71%</td>
<td>29%</td>
</tr>
</tbody>
</table>

There were similarities and differences across the villages with respect to destinations (Table 15). Intrastate seasonal migration differed from village to village, though rural to urban seasonal migration was the most common. For instance, 24 percent of the SM from Vembankudi village were involved in rural to urban migration whereas all the seasonal migrants from Manickanenthal village were rural to urban migrants. This difference was due to factors such as network, nearness to major towns, transport facilities and relatively better socio-economic conditions. In Paphiapuram village, 56 percent moved to urban areas and in Muruganeri village, it was 63 percent. Similarly, the percentage of seasonal migrants migrating from rural to rural areas also differs for each village. From Vembankudi village 76 percent were seasonal migrants from rural to rural areas, whereas in Manickanenthal village there were none. In Paphiapuram village, SM from rural to rural areas was 12 percent and in Muruganeri village, it was just 3 percent (Table 15).
Table 15: Types of destinations of seasonal migrants.

<table>
<thead>
<tr>
<th>Village</th>
<th>Number of seasonal migrants</th>
<th>Within the state of Tamil Nadu</th>
<th>Interstate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rur al to rural</td>
<td>Percenta ge</td>
<td>Rura l to urban</td>
</tr>
<tr>
<td>Vembankudi</td>
<td>17</td>
<td>13</td>
<td>76%</td>
</tr>
<tr>
<td>Manickanenthal</td>
<td>24</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>Paphiapuram</td>
<td>25</td>
<td>3</td>
<td>12%</td>
</tr>
<tr>
<td>Muruganeri</td>
<td>61</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Total</td>
<td>127</td>
<td>18</td>
<td>14%</td>
</tr>
</tbody>
</table>

The mean distance travelled by the seasonal migrant is 440km and it varied across the villages. The table below shows the distance and destination travelled by each seasonal migrant across the four study villages. The table shows that seasonal migrants migrated to urban areas such as Thiruppur (21%), Madurai (15%) and Coimbatore (14%). In the interstate seasonal migrations, the SM workers migrated to both rural as well as urban areas. The popular interstate places were Kerala (13 or 10%) and Karnataka (Bangalore) (5 or 4%) (Table 16).
<table>
<thead>
<tr>
<th>Destination</th>
<th>Vembankudi</th>
<th>Manickanenthal</th>
<th>Paphiapuram</th>
<th>Muruganeri</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dist from village (km)</td>
<td>SM</td>
<td>Dist from village (km)</td>
<td>SM</td>
<td>Dist from village (km)</td>
</tr>
<tr>
<td>Assam</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Karnataka -Bangalore</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Chennai</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>508</td>
</tr>
<tr>
<td>Coimbatore</td>
<td>276</td>
<td>1 (6%)</td>
<td>282</td>
<td>7 (29%)</td>
<td>243</td>
</tr>
<tr>
<td>Dharapuram</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Erode</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>233</td>
</tr>
<tr>
<td>Hyderabad</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Kashmir</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Kerala</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>400</td>
</tr>
<tr>
<td>M.Puthupatti</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Madurai</td>
<td>54</td>
<td>1 (6%)</td>
<td>0</td>
<td>0</td>
<td>44</td>
</tr>
<tr>
<td>Mumbai</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Village</td>
<td>N</td>
<td>%</td>
<td>n=</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>--------------</td>
<td>---</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>---</td>
</tr>
<tr>
<td>Nagerkovil</td>
<td>291</td>
<td>13 (76%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Orissa</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Osur</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Palladam</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Periyur</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Rajapalayam</td>
<td>143</td>
<td>1 (6%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Thirthungal</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>42</td>
</tr>
<tr>
<td>Thiruppur</td>
<td>235</td>
<td>1 (6%)</td>
<td>250</td>
<td>17 (71%)</td>
<td>211</td>
</tr>
<tr>
<td>Thuthukudi</td>
<td>0</td>
<td>0</td>
<td>148</td>
<td>1 (4%)</td>
<td>0</td>
</tr>
<tr>
<td>Mean distance travelled (km)</td>
<td>264</td>
<td>259</td>
<td>228</td>
<td>590</td>
<td>440</td>
</tr>
</tbody>
</table>

N= number of households; n= number of people in the villages

1 The distance was calculated using Google earth and Google Map
Table 17 shows the proportion of SM in each village that migrated to different destinations grouped into different age categories. The data show that, with the exception of Vembankudi village, SM of all age categories preferred to migrate to urban areas.

The household data was examined for migration patterns (Figure 14). It revealed that seasonal migrants prefer to migrate short distances. Distance to destination has an inverse relation to number of migrants: the longer the distance, the fewer the number of migrants. For instance, the map in Figure 14 shows that the percentage of people who migrated to places like Assam (1 percent), Orissa (2 percent) and Mumbai (2 percent) was less compared to nearby places like Thiruppur (21%), Madurai (15%) and Nagercovil (10%). Perhaps this preference for short distances explained the reasons for seasonal migration in the study villages.

Table 17: Destination preferences of SM by age. Numbers in brackets are total persons

<table>
<thead>
<tr>
<th>Village</th>
<th>Age categories</th>
<th>Interstate-Rural</th>
<th>Interstate-Urban</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vembankudi</td>
<td>25-30 (2)</td>
<td>0</td>
<td>0</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>30-40 (8)</td>
<td>0</td>
<td>0</td>
<td>75%</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>&gt;40 (7)</td>
<td>0</td>
<td>0</td>
<td>85%</td>
<td>15%</td>
</tr>
<tr>
<td>Vembankudi total (n=17)</td>
<td></td>
<td>0</td>
<td>0</td>
<td>77%</td>
<td>23%</td>
</tr>
<tr>
<td>Manickanenthal</td>
<td>15-24 (2)</td>
<td>0</td>
<td>0</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>25-30 (7)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>30-40 (4)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>&gt;40 (11)</td>
<td>0</td>
<td>0</td>
<td>9%</td>
<td>91%</td>
</tr>
<tr>
<td>Manickanenthal total (n=24)</td>
<td>0</td>
<td>4%</td>
<td>4%</td>
<td>92%</td>
<td></td>
</tr>
<tr>
<td>Paphiapuram</td>
<td>15-24 (2)</td>
<td>50%</td>
<td>0</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>25-30 (7)</td>
<td>28%</td>
<td>0</td>
<td>14%</td>
<td>57%</td>
</tr>
<tr>
<td></td>
<td>30-40 (8)</td>
<td>25%</td>
<td>0</td>
<td>13%</td>
<td>63%</td>
</tr>
<tr>
<td></td>
<td>&gt;40 (8)</td>
<td>38%</td>
<td>0</td>
<td>13%</td>
<td>50%</td>
</tr>
<tr>
<td>Paphiapuram total (n=25)</td>
<td>32%</td>
<td>0</td>
<td>16%</td>
<td>52%</td>
<td></td>
</tr>
<tr>
<td>Muruganeri</td>
<td>15-24 (13)</td>
<td>0%</td>
<td>8%</td>
<td>23%</td>
<td>69%</td>
</tr>
<tr>
<td></td>
<td>25-30 (14)</td>
<td>0%</td>
<td>7%</td>
<td>7%</td>
<td>85%</td>
</tr>
<tr>
<td></td>
<td>30-40 (15)</td>
<td>13%</td>
<td>20%</td>
<td>7%</td>
<td>60%</td>
</tr>
<tr>
<td></td>
<td>&gt;40 (19)</td>
<td>21%</td>
<td>5%</td>
<td>26%</td>
<td>47%</td>
</tr>
<tr>
<td>Muruganeri total (n=61)</td>
<td>10%</td>
<td>10%</td>
<td>16%</td>
<td>64%</td>
<td></td>
</tr>
<tr>
<td>Grand Total (n=127)</td>
<td></td>
<td>11%</td>
<td>6%</td>
<td>22%</td>
<td>58%</td>
</tr>
</tbody>
</table>
The household data was examined for migration patterns (Figure 14). It revealed that seasonal migrants prefer to migrate short distances. Distance to destination has an inverse relation to number of migrants: the longer the distance, the fewer the number of migrants. For instance, the map in Figure 14 shows that the percentage of people who migrated to places like Assam (1 percent), Orissa (2 percent) and Mumbai (2 percent) was less compared to nearby places like Thiruppur (21%), Madurai (15%) and Nagercovil (10%). Perhaps this preference for short distances explained the reasons for seasonal migration in the study villages.

![Visualisation of seasonal migration patterns.](image)

The household survey highlighted another important feature of seasonal migration that there is relationship between family size and seasonal migration in that larger families appear to be more likely to have SM (Table 18).
Table 18: Family size and seasonal migration.

<table>
<thead>
<tr>
<th>Family size</th>
<th>Total HH</th>
<th>Number of individuals</th>
<th>Number of migrants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>32</td>
<td>32</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>2</td>
<td>69</td>
<td>138</td>
<td>11 (9%)</td>
</tr>
<tr>
<td>3</td>
<td>81</td>
<td>243</td>
<td>23 (18%)</td>
</tr>
<tr>
<td>4</td>
<td>140</td>
<td>560</td>
<td>49 (39%)</td>
</tr>
<tr>
<td>5</td>
<td>79</td>
<td>395</td>
<td>28 (22%)</td>
</tr>
<tr>
<td>6</td>
<td>28</td>
<td>168</td>
<td>12 (9%)</td>
</tr>
<tr>
<td>7</td>
<td>10</td>
<td>70</td>
<td>3 (2%)</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>9</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Total</td>
<td>440</td>
<td>1615</td>
<td>127</td>
</tr>
</tbody>
</table>

The semi-structured interviews with seasonal migrants also confirmed the close relationship between number of household members and seasonal migrants. That is, larger families have more seasonal migrants than smaller families with seasonal migrants. The motive behind this strategy was diversification of the household income.

The following quotes [MuO1, MuV2, PV2, VO] illustrate the relationship between number of household members and seasonal migrants:

... If a family has five members, two people would stay in the family and three will go out for work outside the village. From this village, if there are two male members in the family then one will stay with the family and the other one will go for seasonal migration to earn well. If they have agricultural lands, the person who resides at home would take care of the lands. Every family has at least a person working outside the village (MuO1).

...Families where there are more number of household members some of them would stay back in the village to take care of others and other assets of their family (MuV2).
People who have agricultural lands will not migrate as a whole family. Some members of their family stay here to take care of the lands and do agriculture if conditions are suitable (PV2).

Not all the members of the family migrate; some of them stay back, stay here in this village and look after the land and other assets in the family (VO).

4.3.1 Duration of migration

Most (49 percent) of seasonal migrants preferred to undertake two to six months of employment. However this did not mean they stayed at the destination places continuously. In the interviews the seasonal migrants mentioned that most of them visited their village once in every month to meet their families in the village. Some of the migrants visited their village once in two months. The household survey indicated that duration of seasonal migration varies across the village. Table 19 shows that 49 percent of the seasonal migrants indicated that the duration was between two to six months. This duration was common among Manickanenthal (54%), Papiapuram (60%) and Muruganeri (49%) villages. The other common duration was six months (37%). This type of duration was common among Vembankudi (82%), Muruganeri (35%) and Papiapuram (28%) villages. The less common duration of seasonal migration were those undertaking seasonal migration for less than two months (15%). This type was common in Muruganeri village and least common in Vembankudi village.

In the interviews the seasonal migrants mentioned that they go to their villages once in every one to two months though this varies depending on their employment, distance and household situation. Some of the male seasonal migrants mentioned that they will return to their villages once they have sufficient rainfall to undertake agriculture.

... I go to village once in every three months. I stay there three to four days in the village (MuM7)

...I go home once in a month and take rest for four to five days. I will give money to the family and spend some money during those days for household expenses (PM1)
...We go home once in every month and would stay here for 7 to 10 days. Then we come here for every auspicious occasion like festival, marriage or any emergency in the family (PM3)

Some of the officials that I interviewed also confirmed that seasonal migrants return to the village once in a month depending on their employment and destinations;

... That depends on the kind of work and place of work. If it is drivers who travel long distance could come home once in two months. If people going to Kerala would come once in a month and stay for two three days at home (PO2)

... If a single person from a family migrated to other places they will come home often. If a whole family migrated and settled outside they will come to village during festival times only (PO4)
Table 19: Duration and destinations of seasonal migrants.

<table>
<thead>
<tr>
<th>Village</th>
<th>Duration Less than 2 months</th>
<th>Destinations</th>
<th>Duration Between 2 to 6 months</th>
<th>Destinations</th>
<th>Duration Six months</th>
<th>Destinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vembankudi (Total no people migrated =17)</td>
<td>1 (6%)</td>
<td>Madurai</td>
<td>3 (18%)</td>
<td>Rajapalayam</td>
<td>13 (76%)</td>
<td>Nagercovil</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Coimbatore</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Thiruppur</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manickanenthal (Total no people migrated = 24)</td>
<td>5 (21%)</td>
<td>Coimbatore</td>
<td>14 (58%)</td>
<td>Thiruppur</td>
<td>5 (21%)</td>
<td>Thiruppur</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Coimbatore</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Thiruppur</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Coimbatore</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paphiapuram (Total no people migrated = 25)</td>
<td>3 (12%)</td>
<td>M. Puthupatti</td>
<td>15 (60%)</td>
<td>Madurai</td>
<td>7 (28%)</td>
<td>Chennai</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Peraiyur</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Madurai</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Thirthangal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Kerala</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Coimbatore</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Thiruppur</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muruganeri (Total no people migrated = 61)</td>
<td>10 (6%)</td>
<td>Madurai</td>
<td>30 (49%)</td>
<td>Coimbatore</td>
<td>21 (35%)</td>
<td>Assam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Thirthangal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dharapuram</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Erode</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Kerala</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mumbai</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Orissa</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Osur</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Palladam</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Thiruppur</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Madurai</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall (127)</td>
<td>19 (15%)</td>
<td></td>
<td>62 (49%)</td>
<td></td>
<td>47 (37%)</td>
<td></td>
</tr>
</tbody>
</table>
4.4 Economic characteristics

To determine the income status of SM and NMR households, income was calculated by taking into account income from farming and non-farming activities. The income from farming comes from crops and from the sale of farm animals, mainly goats. Calculations based on household survey data shows that the median household income of SM was higher than the median household income of NMR (Table 170). The median income of both NMR and SM households varied across the villages. The highest median income for NMR was from Vembankudi village (Rs 134,436) and the lowest median income was for the Paphiapuram village (Rs 33,701). In the case of SM, the highest median income was for the Muruganeri village (Rs 236,547) and the lowest median income was for the Paphiapuram village (Rs 71,280) (Table 170).

Table 170: Total income of NMR and SM households.

<table>
<thead>
<tr>
<th>Village</th>
<th>N= number of households</th>
<th>Median household income in Rupees per annum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vembankudi (N=29)</td>
<td></td>
<td>NMR 134,436, SM 176,870</td>
</tr>
<tr>
<td>Manickanenthal (N=60)</td>
<td></td>
<td>NMR 80,000, SM 137,904</td>
</tr>
<tr>
<td>Paphiapuram (N=124)</td>
<td></td>
<td>NMR 33,701, SM 71,280</td>
</tr>
<tr>
<td>Muruganeri (N=227)</td>
<td></td>
<td>NMR 116,224, SM 236,547</td>
</tr>
<tr>
<td>Median</td>
<td></td>
<td>NMR 98,112, SM 157,387</td>
</tr>
</tbody>
</table>

The household survey indicated that the 122 SM returned a total sum of Rs 3,004,000 back to their households and villages in 2013 (Table 181). The median amount of remittances for the four villages was Rs 40,000, although of course the median remittances varied across the villages. The highest median remittance amount was for the Muruganeri village (Rs 80,000) and the lowest median remittance was for Manickanenthal village (Rs 24,000) (Table 192).
Table 181: Remittances from SM.

<table>
<thead>
<tr>
<th>Village</th>
<th>Remittance in Rs</th>
<th>Migrants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vembankudi</td>
<td>0-24,000</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>24,001-32,000</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>32,001-40,000</td>
<td>15</td>
</tr>
<tr>
<td>Manickanenthal</td>
<td>0-24,000</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>24,001-40,000</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>40,001-60,000</td>
<td>2</td>
</tr>
<tr>
<td>Paphiapuram</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>0-24,000</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>24,001-40,000</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>40,001-80,000</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>80,001-120,000</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>120,001-160,000</td>
<td>2</td>
</tr>
<tr>
<td>Muruganeri</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>0-24,000</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>24,001-40,000</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>40,001-60,000</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>60,001-80,000</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>80,001-120,000</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>120,001-160,000</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>160,001-180,000</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>180,001-240,000</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>240,001-256,000</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>256,001-280,000</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>280,001-440,000</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>440,001-480,000</td>
<td>2</td>
</tr>
<tr>
<td>Grand Total</td>
<td>3,004,000</td>
<td>127</td>
</tr>
</tbody>
</table>

Table 192: Median remittances in the case study villages.

<table>
<thead>
<tr>
<th>Village</th>
<th>Median amount of remittances in Rs from SM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vembankudi</td>
<td>40,000</td>
</tr>
<tr>
<td>Manickanenthal</td>
<td>24,000</td>
</tr>
<tr>
<td>Paphiapuram</td>
<td>40,000</td>
</tr>
<tr>
<td>Muruganeri</td>
<td>80,000</td>
</tr>
<tr>
<td>Median</td>
<td>40,000</td>
</tr>
</tbody>
</table>

Remittances formed 19 percent of median household income though it varied across the village and between villages. For instance in Vembankudi village remittances formed 19 percent of the total household income, 17 percent in Manickanenthal village, 36 percent in Paphiapuram village and 48 percent in Muruganeri village indicating importance of seasonal migration as one of the important aspects of livelihood improvements for the villagers (Table 203).
Table 203: Remittances as percentage of median SM household income (in Rs.).

<table>
<thead>
<tr>
<th>Village</th>
<th>Number of households having seasonal migrants</th>
<th>Median household income of seasonal migrants</th>
<th>Median of remittances from seasonal migrations</th>
<th>Percentage of remittance to household income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vembankudi</td>
<td>17</td>
<td>176,870</td>
<td>33,882</td>
<td>19</td>
</tr>
<tr>
<td>Manickanenthal</td>
<td>22</td>
<td>137,904</td>
<td>23,040</td>
<td>17</td>
</tr>
<tr>
<td>Paphiapuram</td>
<td>23</td>
<td>71,280</td>
<td>25,629</td>
<td>36</td>
</tr>
<tr>
<td>Muruganeri</td>
<td>61</td>
<td>236,547</td>
<td>114,577</td>
<td>48</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>157,387</td>
<td>29,756</td>
<td>19</td>
</tr>
</tbody>
</table>

These remittances were transferred mostly through friends and relatives or carried by the migrants when they visited their families.

...I do not send money. I bring with myself when I go home once in three months. ‘Till then, they manage either working as laborer or borrow from neighbors (MaM1).

...We bring money in person to home or send it through my neighbors or friends (PM5).

...My husband brings money by himself. Only when there is some unavoidable situation, he sends money through nearby villagers or by friends who works along with him (PV6).

The contribution of SM remittances played a critical role in boosting the household revenue compared to the limited income of NMR households (Table 214). The income differences between NMR and SM and the role of remittances in contributing to the total household income act as important drivers of seasonal migration. The income differences between NMR and SM and the role of remittances in contributing to the total household income act as important drivers of seasonal migrations, for not only the existing SM but also act as inducements for future SM. This will be discussed in chapter 5.
Table 214: Total income of NMR and SM households.

<table>
<thead>
<tr>
<th>Village</th>
<th>Median household income in Rupees per annum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NMR</td>
</tr>
<tr>
<td>Vembankudi (N=29)</td>
<td>Rs 134,436</td>
</tr>
<tr>
<td>Manickanenthal (N=60)</td>
<td>Rs 80,000</td>
</tr>
<tr>
<td>Paphiapuram (N=124)</td>
<td>Rs 33,701</td>
</tr>
<tr>
<td>Muruganeri (N=227)</td>
<td>Rs 116,224</td>
</tr>
<tr>
<td>Median</td>
<td>Rs 98,112</td>
</tr>
</tbody>
</table>

There was a relationship between age and remittances returned to the household by the SM. The household survey showed that migrants 59 years and above remitted more (Rs 99,385) followed by the 26-36 year olds (Rs 87,200). The lowest amounts were remitted those aged 48-58 years (Rs 57,538). By age, the remittance patterns varied across the villages. For instance, in Vembankudi village, all age categories remitted an average of Rs 40,000 except the 26-35 year old category. In Manickanenthal village, the highest remittance was from the 18-25 year age category and lesser amounts from both 26-36 and 48-58 year age categories (Rs24,000). In Paphiapuram village, the highest remittance was from 18-25 year old age category (Rs 120,000) and lesser amount was remitted by 26-36 year old age category (Rs53,091). In Muruganeri village, the highest amount was remitted by the 59 and above age category (Rs 153,333) and lesser amount was from the age group 48-58 (Rs 76,667) (Table 225).

Table 225: Relationship between age and income.

<table>
<thead>
<tr>
<th>Village</th>
<th>18-25</th>
<th>26-36</th>
<th>37-47</th>
<th>48-58</th>
<th>59+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vembankudi</td>
<td>40,000</td>
<td>35,200</td>
<td>40,000</td>
<td>40,000</td>
<td>40,000</td>
</tr>
<tr>
<td>Manickanenthal</td>
<td>38,286</td>
<td>24,000</td>
<td>25,778</td>
<td>24,000</td>
<td>33,000</td>
</tr>
<tr>
<td>Paphiapuram</td>
<td>120,000</td>
<td>53,091</td>
<td>55,000</td>
<td>60,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Muruganeri</td>
<td>96,250</td>
<td>132,000</td>
<td>106,000</td>
<td>76,667</td>
<td>153,333</td>
</tr>
<tr>
<td>Grand Total</td>
<td>78,815</td>
<td>87,200</td>
<td>66,872</td>
<td>57,538</td>
<td>99,385</td>
</tr>
</tbody>
</table>

101
An analysis of type of employment and income earnings, revealed that those working as business people were earning more (Rs 797,565) followed by professionals (Rs 432,957). Further down the pay scale came labourers (Rs 126,723), agricultural labourers (Rs 106,307) and lastly farmers (Rs 99,544). Differences in employment type and household income varied across the villages and also across the migrants and nonmigrants categories (Table 236).

Table 236: Type of employment and average income in Rupees (Rs).

<table>
<thead>
<tr>
<th>Village</th>
<th>Migration status</th>
<th>Farmers</th>
<th>Agric'l labourer</th>
<th>Labourers</th>
<th>Business</th>
<th>Professionals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vembankudi</td>
<td>NMR</td>
<td>159,196</td>
<td>489,160</td>
<td>98,009</td>
<td>36,013</td>
<td>582,175</td>
</tr>
<tr>
<td></td>
<td>SM</td>
<td>492,340</td>
<td>157,138</td>
<td></td>
<td></td>
<td>699,425</td>
</tr>
<tr>
<td>Manickanenthal</td>
<td>NMR</td>
<td>184,413</td>
<td>90,885</td>
<td>18,010</td>
<td>183,954</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SM</td>
<td>133,432</td>
<td>189,869</td>
<td></td>
<td>150,292</td>
<td></td>
</tr>
<tr>
<td>Paphiapuram</td>
<td>NMR</td>
<td>27,872</td>
<td>36,722</td>
<td>57,881</td>
<td>58,390</td>
<td>324,135</td>
</tr>
<tr>
<td></td>
<td>SM</td>
<td>169,732</td>
<td>109,441</td>
<td></td>
<td>345,945</td>
<td>274,008</td>
</tr>
<tr>
<td>Muruganeri</td>
<td>NMR</td>
<td>105,671</td>
<td>66,291</td>
<td>100,254</td>
<td>1,308,280</td>
<td>234,906</td>
</tr>
<tr>
<td></td>
<td>SM</td>
<td>218,415</td>
<td>150,509</td>
<td>272,242</td>
<td>850,699</td>
<td>1,052,016</td>
</tr>
<tr>
<td>Total Average</td>
<td>NMR</td>
<td>99,544</td>
<td>106,307</td>
<td>126,723</td>
<td>797,565</td>
<td>432,957</td>
</tr>
</tbody>
</table>

The household survey indicated that those who undertake seasonal migration to urban areas were able to remit more of their earnings compared to those migrated to smaller cities and towns (Table 247).

Table 247: Destination and income.

<table>
<thead>
<tr>
<th>Village</th>
<th>Destination</th>
<th>Low (Rs &lt;=40,000)</th>
<th>Middle (Rs. 40,001-100,000)</th>
<th>High income (100,001-200,000)</th>
<th>Very high (Rs &gt;200,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vembankudi</td>
<td>Rural (13)</td>
<td>1 (7%)</td>
<td>3 (2%)</td>
<td>5 (38%)</td>
<td>4 (31%)</td>
</tr>
<tr>
<td></td>
<td>Urban (4)</td>
<td>1 (25%)</td>
<td>2 (50%)</td>
<td>1 (25%)</td>
<td>0</td>
</tr>
<tr>
<td>Manickanenthal</td>
<td>Interstate-Urban (1)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Rural (1)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Urban (22)</td>
<td>0</td>
<td>1 (1%)</td>
<td>20 (16%)</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Paphiapuram</td>
<td>Interstate-Rural (8)</td>
<td>0</td>
<td>4 (3%)</td>
<td>2 (2%)</td>
<td>2 (2%)</td>
</tr>
<tr>
<td></td>
<td>Rural (4)</td>
<td>0</td>
<td>1 (1%)</td>
<td>3 (2%)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Urban (13)</td>
<td>2 (2%)</td>
<td>6 (5%)</td>
<td>4 (3%)</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Muruganeri</td>
<td>Interstate-Rural (6)</td>
<td>0</td>
<td>0</td>
<td>5 (4%)</td>
<td>1 (1%)</td>
</tr>
<tr>
<td></td>
<td>Interstate-Urban (6)</td>
<td>0</td>
<td>1 (1%)</td>
<td>2 (2%)</td>
<td>3 (2%)</td>
</tr>
<tr>
<td></td>
<td>Rural (10)</td>
<td>1 (1%)</td>
<td>9 (7%)</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Urban (33)</td>
<td>2 (2%)</td>
<td>8 (6%)</td>
<td>15 (12%)</td>
<td>14 (11%)</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td>7 (6%)</td>
<td>22 (17%)</td>
<td>27 (21%)</td>
<td></td>
</tr>
</tbody>
</table>
4.5 Conclusion

In this chapter data was analysed in order to provide answers to the first research question - the extent of seasonal migration. In order to answer the extent of seasonal migration, the quantitative data provided by the household survey was mainly used. The household survey shows that seasonal migration was happening in the four study villages and was an important livelihood component for the rural people since the remittances from the seasonal migrants formed an important component of total household income. Though seasonal migration was happening in all the four villages it varied across the four villages. The household survey data showed that there are differences in seasonal migration based on gender, caste, age and educational qualification across the four villages. This chapter highlighted the socio-economic profile of both migrants and nonmigrants and addressed the first research question. In the next chapter reasons for the seasonal migration will be described by analyzing semi-structured and household survey data.
Chapter 5: Drivers of seasonal migration

5.1 Introduction

In the previous chapter, I established the extent of seasonal migration in the four case study villages and discussed the socio-economic characteristics of seasonal migrants. This chapter deals with drivers of seasonal migration. In order to answer the research question, semi-structured interviews supplemented with household surveys were employed (See Chapter 3 for details). This chapter will also reflect upon findings from Chapter 4 that might act as drivers of the seasonal migrations in the four case study villages.

In order to answer the second research question – drivers of seasonal migration, conceptual frameworks were formed. The important conceptual frameworks developed were:

- seasonal migration was both a coping and accumulative strategy practiced by the rural families as an alternative source of household income;
- though income maximization is an important factor, there are other underpinning factors such as social factors which also drive rural villagers to become seasonal migrants;
- the patriarchal nature of Indian society means that more rural men are migrating than women;
- the decision to become a seasonal migrant involves both personal and household decisions;
- rural men and women seek the help of friends and relatives to find employment at the destination areas;
- and it is mostly small landholders who undertake seasonal migration.

In the following section key narratives explaining seasonal migration in the case study villages will be described.

5.2 Narratives

In this thesis, drivers will be analyzed as narratives that combine some/several/multiple drivers (push and pull factors) instead of covering every driver or classifying them into the traditional approaches of push or pull factors. The reason for this approach is because empirical studies
suggest that drivers of seasonal migration manifest themselves in different spatial and temporal patterns in different ways depending on the local context highlighting the importance of village based studies of seasonal migration.

Based on the empirical evidence from household survey data and semi-structured interviews, key narratives were elicited to explain the key drivers behind seasonal migration in the four case study villages. The potential drivers of seasonal migration were identified by the seasonal migrants (Table 28). Based on those identified drivers, three broad themes were developed that combine a number of related push and pull factors. The three major themes identified are that seasonal migration is part of a household livelihood strategy; is a response to ongoing agrarian distress; and is a response to the opportunities in cities for individuals.

As part of the household survey seasonal migrants were asked the reasons for undertaking seasonal migration. These seasonal migrants identified 17 drivers. The most frequently mentioned drivers are; poverty (59% percent), drought (39%), lack of employment opportunities (38%), lack of regular employment opportunities (29%) and to support family (15%). These drivers of seasonal migration vary across the four villages suggesting that drivers of seasonal migration vary across spatial and temporal patterns necessitating the need to group them together instead of treating them separately as push and pull factors. The top five factors identified by the migrants broadly fall under social factors (poverty, support family), environmental factors (drought) and economic factors (lack of employment).
Table 28: Drivers of seasonal migration. Numbers represent the frequency of responses from the household survey.

<table>
<thead>
<tr>
<th>Drivers</th>
<th>Vembankudidi (n=17)</th>
<th>Manickanenthal (n=24)</th>
<th>Paphiapura (n=25)</th>
<th>Muruganeri (n=61)</th>
<th>Median percent for four Villages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty</td>
<td>82</td>
<td>87</td>
<td>36</td>
<td>32</td>
<td>59</td>
</tr>
<tr>
<td>Drought</td>
<td>29</td>
<td>57</td>
<td>39</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td>Lack of employment opportunities</td>
<td>18</td>
<td>65</td>
<td>39</td>
<td>36</td>
<td>38</td>
</tr>
<tr>
<td>Lack of regular employment opportunities</td>
<td>6</td>
<td>4</td>
<td>54</td>
<td>52</td>
<td>29</td>
</tr>
<tr>
<td>Support family</td>
<td>24</td>
<td>30</td>
<td>4</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>Non profitability of agriculture</td>
<td>18</td>
<td>35</td>
<td>0</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>Debt</td>
<td>29</td>
<td>9</td>
<td>0</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Low income</td>
<td>24</td>
<td>8</td>
<td>4</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Nature of employment</td>
<td>0</td>
<td>4</td>
<td>7</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Less opportunities</td>
<td>0</td>
<td>13</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Lack of rainfall</td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Meet medical expenses</td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>No suitable job for the educational qualifications</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>Marriage savings</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Lack of business opportunities</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Government job</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Invest in agriculture</td>
<td>0</td>
<td>9</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Based on the drivers of seasonal migration three major themes were developed (Table 292529). The drivers that are closely associated with each theme were grouped and placed accordingly. The table also shows the migration decision associated with each theme.

Table 29 suggests that there are push and pull factors associated with each theme which influence villagers’ decisions to become seasonal migrants. The strength of push and pull factors varies across the villages. For instance, in some villages push factors (agrarian distress) are stronger than pull
factors (more opportunities in the urban areas). For others both push and pull factors act together (complementing each other, e.g. the household livelihood strategy). This suggests that it is highly improbable to generalise whether push or pull factors are stronger to make a person become a seasonal migrant. In other words the strength of push and pull factors on seasonal migrants varied from village to village and are highly context specific necessitating that the drivers be treated as narratives rather than treated individually as push and pull factors.

Table 2925: Major themes and the related drivers.

<table>
<thead>
<tr>
<th>Family livelihood strategy</th>
<th>Agrarian distress</th>
<th>More opportunities in urban areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family decision (Involves both Push and Pull factors)</td>
<td>Family and individual decision (Push factors)</td>
<td>Individual decision (Pull factors)</td>
</tr>
<tr>
<td>Important livelihood strategies of the marginalised communities</td>
<td>Economic liberalisation, globalisation and green revolution</td>
<td>Growth of labour intensive non agricultural sectors</td>
</tr>
<tr>
<td>Seasonal nature of the cropping</td>
<td>Drought</td>
<td>High wages</td>
</tr>
<tr>
<td>Lack of employment</td>
<td>Market fluctuation</td>
<td>Modernization</td>
</tr>
<tr>
<td>Education</td>
<td>Overproduction and monocrop</td>
<td>Network</td>
</tr>
<tr>
<td>Caste</td>
<td>Lack of man power for agriculture</td>
<td>Growth of information and communication technologies</td>
</tr>
<tr>
<td>Debt</td>
<td>Old age and lack of interests in agriculture</td>
<td>More employment opportunities</td>
</tr>
<tr>
<td>Poverty</td>
<td>High productivity agricultural zone outside the village</td>
<td>Bright lights/age or stage of life</td>
</tr>
<tr>
<td>Govt Scheme</td>
<td>Youth and agriculture</td>
<td>Lack of infrastructural development</td>
</tr>
<tr>
<td>Marriage migration</td>
<td>High man-land ratio</td>
<td>Employment</td>
</tr>
<tr>
<td>Multiple livelihood strategies</td>
<td>Small size of the landholdings</td>
<td>Better facilities and life style</td>
</tr>
<tr>
<td>Change in agricultural technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High cost of agricultural produce</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land sale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tank failure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market based crop production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changing food habits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inequalities of growth and development</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the next section, the three major themes will be described with supporting evidence from the associated drivers identified by the seasonal migrants.

5.3 Family livelihood strategy

As part of the narratives, the family livelihood strategy is described as the first theme. In this theme, seasonal migration is one of the family livelihood strategies for obtaining an alternative source of income. This theme will be supported by citing relevant drivers as examples. The drivers that support
this theme include: livelihood strategy; seasonal nature of agriculture; lack of employment; education; caste; debt; poverty; government employment schemes; marriage; and multiple livelihood strategies.

In order to enhance household income Indian rural families adopt different strategies. One example is seasonal migration where males become seasonal migrants and females remain in the village in order to look after the family and agriculture. In some cases these women will also work as laborers in the villages. In some cases rural families also send one of their young adults to earn additional sources of income for the family. This strategy was especially noticeable in bigger households (Refer Chapter 4).

In rural villages, family plays an important role in seasonal migration. In this research households form the unit of analysis. In the household survey 15% of the interviewees mentioned they became seasonal migrants in order to look after their families. Though the proportion seems small, it should be remembered that other related drivers such as lack of employment, poverty, debt and low profitability of agriculture also induced rural villagers to look for employment elsewhere in order to support their families. In other words the driver “to look after family” is a broad driver under which some other drivers also fit. This confirms that drivers or push and pull factors should be studied as narratives instead of as single entities.

In order to know who takes the decision to migrate, the interviewees were asked if: “they spoke to their family members before migrating to urban areas” The interviewees said that migration decisions were taken jointly by the family members including the migrants. The family’s involvement in migration was explained by some of the interviewees:

*I was struggling to support my family and my family members understood the reason for my migration...We as a whole family sat and discussed about my plan of migrating to cities to find an employment* (PM3)

*Before becoming seasonal migrants, my wife, my 18 and 20 year old kids, my mother and two sister [Family] discussed a lot then we decided that it will be good for our family if I do seasonal migration to Kerala in that way I could go home once a month and also earn good wage. Now we are living*
decently without much struggle and I visit my home once a month, if there is some emergency I visit them in between (PM5)

I borrowed money from neighbors to dig well that put me in a debt in order to repay the debt and support the family, my wife and myself made a decision that I work in Kerala and she look after farm. I go home once in a month some time once in every two month. If my wife need some help with farming that time I go quite often (MuV4)

....I spoke to my father who was an ex-tank manager and also to my wife. We as a whole family felt that it will be better for the family if I find employment in urban areas and my family look after farming in the village. I go home once a month some time once in every three month depending on family situation (MaM3)

However in some cases the decision to migrate was taken by the individual migrants themselves without informing/ discussing with family members. Here the motivation was to provide economic support to their families.

Four of the seasonal migrants [VM6; PM7; MM6; MM1] interviewed said that they decided themselves in order to provide economic support to their families.

I made the decisions to become a seasonal migrant in order to support my family. I told my wife about my decision; she didn’t object knowing the family economic condition. I know that if I didn’t make that migration decisions my families will economically [VM6]

I tried to find employment in the village but I couldn’t find any. My father was sick for a long time and he is getting very unwell. There was nothing to eat in the home so I decided to migrate to find an employment to support my family. Even though I didn’t discuss my seasonal migration plan with my parents, I knew that they wont object to my decisions. Now I am supporting my father with his medical expenses and also looking after my family in the village. I go home every month or every two month and give money to my parents for the household expenses (PM7)
I was searching for employment opportunity in the village but I couldn’t find any. The family economic situations were getting worse so I made the decision to become seasonal migrants without consulting my parents and brothers. I went to Thiruppur and asked my friend to help me in finding an employment. My friend introduced me to his employer and he offered me shop assistant job. Part of my monthly income goes to my parents and also pay my brother education expenses. I go home every month and give money for the household expenses [MM6]

I migrated to earn more money to look after my family. There are no employment opportunities in the village so I told my wife that I am going to Kerala to work as employment laborer. She didn’t say anything. I come home every month and pay money for the family expenses (MM1)

The interview quotes suggest that the decision to become a seasonal migrant involves either family or the individual. The motivation in both cases was to provide economic support to the family.

The quotes also suggest that seasonal migration is a household strategy where the rural families see seasonal migration as an opportunity to increase their total household income for a better life. To access this additional income the general strategy adopted by the rural family is to send one (or more) of the family members to urban areas. This livelihood improvement strategy of the rural villagers could be seen either as a risk taking or risk aversion strategy. For instance rural families are willing to take the risk by sending one of their family members for the additional sources of income. It is generally seen as risk taking behavior when associated with young adults. It could be true that risk taking tendencies are higher among young adults but this may not always be the case. The mature married men also migrate in order to look after their family, hence demonstrating risk taking behavior. This behavior is associated with both development and distress migration as indicated by the interviewees.

After the completion my education, I thought to take the risk of migrating to Chennai to find an employment and support my family (MM4)
I am going to be 24 year old next year. I searched for employment in this village but couldn’t find. So in order to earn money and support my family I took the risk of going to cities and earn as much as I could (VM1)

Risk aversion involves moving to urban areas where there are more employment opportunities and wages are higher. The other way to avoid risk is not to practice those livelihoods which are unprofitable and unpredictable such as farming. This kind of risk aversion was seen among the rural youth where there was less preference to practice farming because it is considered risky and unprofitable;

....We have one acre of farming land. I am not keen on to become a farmer like father. I think farming is full of risk and hard work. There is not much you can earn from it. I would like to go to city and look for employment than wasting my time and energy here in the village and in my farm (MuM3)

The interviews with seasonal migrants suggested that diversification of the rural household’s income and savings for future uncertainties was one of the important livelihood strategies of families. This family saving strategy was necessary due to a lack of employment opportunities and low wages in the village. Most of the available employment opportunities in the village were mostly agriculturally based and were highly seasonally dependent providing limited employment opportunities with low wages. These low wages were seen as insufficient to support their families.

Thus opportunities for regular income with high wages act as important influence of seasonal migration. Here, remittances played an important role as they were one of the major components of the total household income of the seasonal migrants. For instance, the household survey analysis showed households having seasonal migrants had higher median incomes (Rs 157,387) than non-migrants (Rs 98,112) (Refer Chapter 4). This suggests that seasonal migration is a strategy to enhance and diversify total household income. The additional incomes (remittances) are often used as savings.

Economic factors were one of the important parts of the family livelihood strategy. Lack of employment in villages and perceived employment
opportunities in urban areas were causes for increasing trends of the seasonal migration. The perceived employment opportunities in the urban areas instead of actual employment availability are one of the reasons for the formation of urban slums and urban poverty (Harris & Todaro, 1970). The consequences of the urban slums and urban poverty at the destination place will be further explored in the Chapter 6 and Chapter 7.

The lack of employment opportunities in the villages forces the rural families to look for employment elsewhere. Access to regular income to support the family was one of the important family livelihood strategies practiced. The absence of industries and other development oriented activities that have the potential to create employment in the rural areas led to reduced employment opportunities for the rural villagers. Successive Indian government have given less focus to the rural villages which has resulted in a lack of development and economic growth in the rural areas (United Nation, 2011). The lack of employment opportunities in rural areas acts as a push factor. From the household survey, 67 percent of the seasonal migrants mentioned lack of employment and lack of regular employment as reasons for seasonal migrations. The lack of employment in the rural village results in families searching for employment elsewhere as part of the family livelihood strategy. The strategy adopted by the families was such that men undertake seasonal migration to nearby areas and women look after the farm, farm animals and children as explained by the interviewees below [PM3; MuM6; MaM3; MuO2; PM4]:

My father was a ‘Thalayari’ [tank manager] of this village. After he got retired the regular income got disturbed. We had livestock but for cash I had to go out for work...I have three children to look after so I started to work outside the village. I visit my family once a month (PM3)

There are no employment opportunities for us in the village except agriculture. We, the men have to do seasonal migration to support our families. I was doing seasonal migration to Kerala for the last couple of years to support my family. My brother also joined with me recently after his marriage (MuM6)
...there is no employment here to look after my family and parents. In order to look after my family and also to repay the loan, I started going out for work. My family also felt that I should go outside for work. I go to village once a month, see my family and give them money (MaM3)

For regular employment opportunities and to earn money villagers has to go outside the village. This strategy was seen in most of the households of this village (MuO2)

Here in this village I faced only unemployment. Some time I get employment but they are mostly irregular employment with low wage. We [wife, father and me] thought that it will be better for the family if I work outside and bring regular income to support my family (PM4)

The analysis of semi-structured interviews indicated two types of seasonal migration based on the individual motives of the seasonal migrants; development driven (accumulative strategy practiced mainly by the educated young adults) and distress driven (coping strategy practiced mainly by the farmers and agricultural labourers). For instance, among the farmers and agricultural laborers the main reason for seasonal migration was related to distress (coping strategies) whereas for educated and young adults, seasonal migration is mostly development related (accumulative). The two interview quotes below show that development and distress driven seasonal migration exist in the case study villages (MaM4, MuM6).

...I completed my catering studies and got selected in campus interview as Chef here in Chennai. With my education I could get good employment and salary at Chennai only. With this regular employment and income I could support my family back in the village... (MaM4)

...there is no rainfall and to earn money and to meet the financial needs of the family I went for construction works in Kerala... (MuM6)

5.4 Seasonal nature of the cropping pattern

The seasonal nature of agricultural cropping acts as another driver of seasonal migration. This type of seasonal migration was mostly common among farmers and agricultural laborers. After the harvesting period there are no employment opportunities for farmers and agricultural laborers in the
village. This lack of employment opportunities after the harvesting season drives rural farmers and agricultural laborers to become seasonal migrants in order to look after their family.

In the study area the main crop cultivation practices are mid-September to mid-October then mid-November to mid-December. During these periods the state of Tamil Nadu receives the North-East monsoon (the main rainy season and hence the peak agricultural season). The village calendar methodology revealed that the main crops grown during these cropping seasons are paddy and groundnut. Sometimes the retracting South-West monsoon brings showers from mid-May to mid-June. During this period the villagers grow onions. Once these two cropping season are over there are no employment opportunities for the villagers forcing some farmers and agricultural labourers to become seasonal migrants for their income support. The three interviewees below highlighted the cropping season and type of crop grown in the villages [MuV5 and PM3; MaM1].

Our cultivation practices are Purattāci (mid-September to mid-October) that time we grow Nel (Paddy), In Kārttikai (mid-November to mid-December) we grow Kadalai (Groundnut) and in Vaikāci (mid-May to mid-June) we grow Vengayam (Onion) remaining period we look for employment somewhere else outside the village. In order to support family and kids education my husband migrate during these lean season (MuV5)

... We have agricultural lands but the yield was very less and the harvesting was once in every six months. For the remaining period I have to look for work somewhere else to take care of my family.... [big breadth] So am forced to look for work somewhere else... (PM3)

Once the harvesting seasons are over we don’t have much work in the village so we move to nearby cities and sometime adjacent state like Kerala and Karnataka to support our family and meet the day to day expenses (MaM1)

5.5 Debt

Seasonal migration for the repayment of debt was another important livelihood strategy practiced by rural families. Here remittances are used to
repay debt. In most of the study villages, lack of employment opportunities and low wages forced most rural men to borrow money from the money lenders in order to meet family expenses. To repay debt the rural men become seasonal migrants. Again the common strategy adopted by the rural families was men becoming seasonal migrants and women left to look after agriculture and other household activities including working as laborers in the village.

In the household interviews 8% of the interviewees mentioned that one of the reasons of seasonal migration was to repay debt and stabilize family economic situations. The reasons for debt varied from interviewee to interviewee and from village to village. Some have borrowed money from local money lenders in order to look after families; failure of agricultural crops; low market prices for the agricultural produces; for investing in the agricultural crops; sending children to school; and to meet other social obligations. In some instances they have to borrow money either from friends or relatives to undertake migration.

Some of the villagers mentioned in the interview that pressure from money lenders for the repayment of debt made them look for employment in urban areas as explained by the interviewee; [MaM3; MuV4; MV2; MuM6 and PM3]

...Due to lack of employment I started borrowing money from money lenders. In order to repay the loan, I started going out for work. I go to village once a month, see my family and give them money. I stay there for a week to ten days...my main motivations for moving out of village for employment was to clear my debts and look after my family (MaM3)

... We [Family] borrowed money to create a bore-well for our agriculture in our dry land. That has put us in the cycle of debt. For us the only way to repay the loan was seasonal migration...even to reach the destination of work place I have to borrow from my neighbour as loan which I paid on the day I got my first income (MuV4)

I borrowed money to invest in agriculture that put me in debt. The wages were low in the village that I couldn’t able to support my family needs.
*When the due date came for the debt repayment, I couldn’t, so in order to repay debt I became seasonal migrant. My friends helped me at the destination place and they also helped me with initial financial support (MV2)*

*I went to Kerala to work as agricultural laborer since there are no employment opportunities in the village. I borrowed money from the money lenders to look after the family that put me in debt. Even to travel to Kerala I didn’t had enough money so my wife borrowed money from her friends. When I reached Kerala my friends helped me with accommodation and food (MuM6)*

*I didn’t study much and there is nothing to eat in my house….after seeing condition of my family, I thought to migrate. I borrowed money from my neighbors to search for employment in Kerala. Now I am living debt free only because of seasonal migration. I could look after my family without borrowing money from money lenders (PM3)*

### 5.6 Poverty

Seasonal migration as a strategy to escape from poverty was practiced by some of the rural families as part of the family livelihood strategy. The four case study villages selected for this research are socio – economically poor. In these villages poverty acts as one of the important push factors. To escape from poverty some of the rural families practice seasonal migration. Seasonal migration provided rural villagers access to alternative sources of income.

In the household interviews, 59% of the interviewee’s said that they became seasonal migrants because of poverty. The rapid rural appraisal (RRA) and interviews with officials suggests that Vembankudi village is the most socio - economically poor among the four villages. Poverty was very visible in the village. Some of the villagers were rag pickers picking metals and paper which were later sold to a local vendor. Some of them led their life by begging in the surrounding areas. In this village, 59% of the families had at least one member who was a seasonal migrant indicating seasonal migration is a strategy practiced by the household to escape from poverty. Besides
poverty other factors that enhance migration rates are discrimination based on caste, gender, inequalities, lack of employment opportunities, and low wages from agriculture. In the case of women migrants besides the above factors, marriage also acts as one of the important factors.

In order to explore the potential role of poverty in influencing seasonal migration, the household survey was used to compare the four study villages which were of varying socio-economic levels. The analysis was carried out using predetermined variables such as household income, area of farm land per household and percentage of landless households. When the villages were grouped according to their median household income, they fell into three broad groups; poor (Paphiapuram), middle (there was not much difference between Vembankudi and Muruganeri) and high (Manickanenthal). As expected, the proportion of people migrating due to poverty varied across the four villages. In order to assess the influence of poverty on seasonal migration, the median household incomes were matched against the proportion of seasonal migrants. Table 260 shows that the lowest proportion of seasonal migrants were from the village having the lowest median household income, Paphiapuram (19%). This seems to suggest that poverty has some adverse influence on a villager’s ability to migrate. The highest proportion (59%) of seasonal migrants were from the middle income group, Vembankudi village, suggesting seasonal migration might be an alternative employment livelihood strategy however the other middle income group Muruganeri didn’t follow the same pattern suggesting the involvement of other drivers in influencing seasonal migration. The high income group, Manickanenthal contributed 38% of the seasonal migrants.

Table 260: Household income and seasonal migrants.

<table>
<thead>
<tr>
<th>Village</th>
<th>Households without land</th>
<th>Median household income</th>
<th>% of seasonal migrants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vembankudi</td>
<td>31</td>
<td>47200</td>
<td>59%</td>
</tr>
<tr>
<td>Manickanenthal</td>
<td>3</td>
<td>114500</td>
<td>38%</td>
</tr>
<tr>
<td>Paphiapuram</td>
<td>89</td>
<td>22800</td>
<td>19%</td>
</tr>
<tr>
<td>Muruganeri</td>
<td>41</td>
<td>48700</td>
<td>22%</td>
</tr>
</tbody>
</table>

Two of the interviewed seasonal migrants said poverty acted as main driver behind their decision to become seasonal migrants;
...I was struggling to support my family. In order to escape from poverty I migrated to Kerala. There I get daily wage of Rs. 500/day and lunch provided by the employer. I visit my family every month, sometime once in every twenty days and give them money for the household purpose. Now we are living decently without much struggle (PM5)

My family was struggling for money. There was nothing to eat. Since I didn’t had a good income I couldn’t buy new dresses for my children. Now after migrating to Kerala I could earn enough to meet the family needs, could contribute for social obligations and sending children to the school. I visit my family every month some time every two months (MuM6)

5.7 Caste

Caste is another important driver of the family livelihood strategy. Caste plays an important role in the socio-cultural norms of the rural villagers.

For the Backward and Scheduled Caste families, seasonal migration provided an opportunity to avoid the caste based tensions existing in the rural areas. It is also possible that these lower caste people might not be given any employment opportunities in the villages. Seasonal migration provided these lower caste families an opportunity to escape from poverty and oppression and provided an alternative source of livelihood. Even though this caste based discrimination had direct influences on seasonal migration there is no identifiable point beyond which seasonal migration happens.

In the interviews some of the BC and SC caste families mentioned that they became seasonal migrants because of the lack of employment opportunity and caste based discrimination in the village. They said that without becoming seasonal migrants they would not be able to support their families.

Two of the interviewees [PM3, PV6] highlighted the influence of caste in employment availability. The quotes are highlighted below;

...they [Higher caste] won’t let us know about the government schemes that are available to us. We won’t get any employment here in this village. Last year we [family] thought that in order to survive I have to go outside and
earn to support my family. My wife looks after the farm animals. I go home once in a month, sometime once in every three months. Now with the income from seasonal migrations I could support and look after my family without worrying about those higher caste people (PM3)

... My husband couldn’t find any employment in this village because we belong to lower caste. Now he is working as an agricultural labourer in Kerala and come homes once in a month. Without his income we won’t able to run this family and look after my 3 year old child....Caste system has not changed yet in the village. It will never change in India. Due to communal tension the lower caste families are sending their young ones to look for employment in the cities (PV6)

5.8 Ineffectiveness of the government development schemes

Seasonal migration provided an opportunity to generate additional income due to the low wages offered by the village based employment and low wages provided by the government development schemes. The important government scheme implemented in the studied villages is the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) which comprises road development, housing schemes and other infrastructure development. One of the motives behind these government sponsored programs is to discourage seasonal migration to urban areas. However most of these schemes were marred with corruption and low wage payments which resulted in rural families seeking alternative livelihood/employment opportunities in the form of seasonal migration (Sjoblom & Farrington, 2008). The strategy of the rural families is that mostly women and older men work under the MGNREGS scheme due to low wages and younger men work as seasonal migrants. In the four case study villages, 49% of the rural families participated in the MGNREGS scheme making it one of the main alternative sources of total household income for the rural families.

MGNREGS is one of the world’s largest employment programs. The program was introduced in 2005 in 635 districts covering 750,000 villages with a work force participation of 27 000 000 villagers across India. The program promised to provide 100 days of mandatory employment for one
family member from each household. The main aim of the program was to create employment opportunities for the rural villagers at the village itself thereby preventing outmigration. However the lack of proper implementation, low wages and corruption in the program made the program ineffective (Sjoblom & Farrington, 2008).

The household survey indicated that the proportion of females working in the MGNREGS scheme was higher than the males (Table 31) but that also the age of the males working in the MGNREGS scheme was much higher than the median age of seasonal migrants. The high participation of females and older males indicates that the MGNREGS scheme was not effective in attracting young male villagers thereby influencing seasonal migration among this group minimally.

Table 271: Participants in the MGNREGS.

<table>
<thead>
<tr>
<th>Village</th>
<th>No of males</th>
<th>Median age of males in years</th>
<th>No of females</th>
<th>Median age of females in years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vembankudi</td>
<td>5</td>
<td>57</td>
<td>14</td>
<td>40</td>
</tr>
<tr>
<td>Manickanenthal</td>
<td>16</td>
<td>65</td>
<td>33</td>
<td>42</td>
</tr>
<tr>
<td>Paphiapuram</td>
<td>25</td>
<td>62</td>
<td>64</td>
<td>45</td>
</tr>
<tr>
<td>Muruganeri</td>
<td>30</td>
<td>60</td>
<td>107</td>
<td>45</td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
<td>61</td>
<td>218</td>
<td>44</td>
</tr>
</tbody>
</table>

The semi – structured interviews confirmed that mostly women and elderly villagers were participating in the MGNREGS scheme. These female villagers used income from the MGNREGS scheme as a supplementary source of income to support the family whereas male members worked outside the villages as an income diversification and alternate employment strategy as illustrated by the following interviews;

*We work in the government employment program. We do developmental work in our village. The income from that work is not enough to run the family. MGNREGS couldn’t able to stop people from migration especially the youths and adults. In this village the general trend is women work in the MGNREGS scheme and men work as seasonal migrants to urban areas to support their families (MaV5)*

*I go for MGNREGS works where I get Rs. 60 to 70 daily. I clear weeds, remove silt and deepen ponds, canal and tank for the rain water harvesting.*
I go to work at 9am and come home at 4pm. Most of the ladies in this village come to work in this scheme. I could not go to any other works except MGNREGS scheme because of my old age... males do not come to work in the scheme. Mostly female and elderly people work in the MGNREGS scheme because the wage is very low that youth and grown up men go elsewhere to work as seasonal migrants to look after their families (PV4b)

MGNREGS works won’t fulfill the needs of the family. The scheme allows only one member of the family to work in the scheme. My wife works in the program. The scheme offer very low wages with that wage it will be hard to manage the family. Most men and young people go somewhere else for work. My son and I go to Narikudi [neighboring town] to work as agricultural laborer to look after family expenses (MuV8)

MGNREGS won’t have any influence in stopping people from migration. The rural youth don’t want to live in the village anymore. The married men go to neighboring town to look for employment opportunities to support their families. The MGNREGS scheme only worsened the agricultural practices of the village that also influenced our employment opportunities in the village. Most of us [the men] look for employment elsewhere to look after our families. (MaV1)

MGNREGS is a good scheme for the poor families. However the wage is very low to support a family. Mostly aged persons and women go to work in the program. The adult men and young people go to town to look for employment to support their families (PM3)

5.9 Marriage migration

Marriage migration as a household strategy was practiced by the young, female migrants. In the study areas, 26% of the young women were undertaking seasonal migration. Many of these rural women of marriageable age were motivated to become seasonal migrants in order to save money for their marriage expenses.

To encourage rural females of marriageable age to become seasonal migrants and save money for their marriage expenses, the textile industry in
Tamil Nadu plays a critical role. The textile industries are the second largest employment provider in the region after agriculture. The household data suggests that the majority (21%) of seasonal migrants in the case study areas were undertaking seasonal migration to Thiruppur (Refer Chapter 4).

I interviewed two young female seasonal migrants working in the textile company. They went to work in the company as seasonal migrants under the company sponsored “Sumangali marriage savings scheme”. One of the young female seasonal migrants worked in a textile industry at Thiruppur and the other seasonal migrant worked in Coimbatore based textile industry. These two seasonal migrants mentioned their industries were involved in helping the young female seasonal migrants to save money for their marriage expenses. As explained by the interviewee;

…In our spinning mill there is a scheme for female workers to help girls to meet their marriage expenses. After three years the company pays a lump sum amount of Rs. 50,000. The company terminates the contract at the end of three years. We can rejoin the company but on a daily wages. The company pays a weekly wages of Rs. 270 per day. Since my parents are poor, they cannot afford to pay for my marriage expenses so I became seasonal migrants to save money for my marriage expenses (VM1)

I work as seasonal migrant in one of the textile industry based in Coimbatore. I became seasonal migrants in order to save money for my marriage expenses since my parents can’t afford it and also support my family...The company sponsored marriage scheme is called Sumangali [In Tamil Sumangali means unmarried girl becoming married women or happily married women. In some other companies this marriage scheme was known as “Thirumangala Thirumana thittam” that is marriage plan scheme]. Presently I am contracted with the companies for next three years. At the end of three years I will be getting a sum of Rs 30,000 as my marriage savings (VM3).

Some of the interviewee spoke about pros and cons of this type of marriage scheme. One of the major advantages of the marriage scheme is that it provided broader social, economic and cultural upliftment and the much needed alternative sources of income to the seasonal migrants and their
families. For the parents of the seasonal migrants, it was an attractive way to meet their daughter’s marriage expenses. Their young unskilled daughter work for the contracted three years and get the lump sum amount paid by these companies by the time she was ready for the marriage. The other important point was since these parents were poor, they think that their daughters have access to three meals a day provided by the companies and for them it is a one mouth less to feed. For the young female seasonal migrants working in the company provide an exposure to the outside world, opportunities to move out of the remote rural village life and an opportunity to escape from poverty. Most of these young women’s were selected from the remote and interior villages by the company appointed agents/broker or in some cases by the middlemen who acted as a source of network between the seasonal migrants and the companies where they get commission from the companies for supplying cheap labour forces. The middlemen also charge from the seasonal migrants, 10% of the first month salary as their commission for helping seasonal migrants to find an employment “I got the job in Thiruppur textile industry through an agent, he charged me 10% of my first salary. The agent was from the local town area. He has a good connection with the textile industries in Thiruppur. Without him I won’t be able to get this job so I was happy to pay his commission” (PM1).

However there were criticisms about industry sponsored marriage savings scheme. For instance, one of the officials in the village told me that the marriage scheme was a way of getting cheap labour forces for the textile factories. In some cases there were exploitation by these companies “the agents from textile company come to this village and talk to these innocent young girls and their parents with the inducement that they will good job and salary. They are all lie. These women will be cheap work force them (PO2). The interviewee also mentioned that there are no written contract between the companies and seasonal migrants. Mostly it is a verbal assurances given by the company appointed agents/brokers/middlemen

Most of these young female seasonal migrants stayed in the company sponsored hostel thereby limiting their exposure to the outside world as said by the interviewee “I live in the company sponsored hostel where I share the room with three other girls who also work in the company sponsored
marriage scheme. I start my work at 6am and finish by 6pm some time I have to work extra hours depending on the supervisor’s instruction” (VM1). There were also complaints that facilities provided in the hostels were poor and having unhygienic living condition “the hostels were not that good. I live in a very small room sharing the room with three other girls who also work in the marriage scheme. Since most of us come from the remote villages we won’t get much respect from the mess workers and the hostel warden. They show deferential regard towards us compared to the local labourers. The food was of very low quality. We don’t complaint to the company authorities for the fear of losing our job and the promised savings for our marriage expenses (VM3)”

When I was in Coimbatore I sought to interview some of the textile industries who sponsored this marriage scheme. However my requests to interview these young seasonal migrants were turn down by the supervisors of the textile industries that I approached for the interviews. I gathered that refusal for my interview request was due to recent protests from some of the local NGO’s and the civil rights group. These organizations were of the view that young female seasonal migrants were misused and exploited by the company under the pretext of helping seasonal migrants with their marriage expenses.

Because of the pressure from NGO’s and civil rights groups the government of Tamil Nadu issued directives to the companies. The Tamil Nadu government has appointed special officers to look in the marriage savings scheme with special focus to understand socio-cultural dynamics from the perspectives of the seasonal migrants and their families.

While doing village household survey, I met these two young seasonal migrants who were visiting their families. They have been working in the textile company for the last six months. They went to work in the company as seasonal migrants under the company sponsored “Sumangali marriage savings scheme”. I had an opportunity to interview these young female seasonal migrants as part of my semi-structured interviews and got to understand the nuances of the Industries sponsored marriage savings scheme.
The two young female seasonal migrants whom I interviewed explained that they were doing seasonal migration to save money for their marriage expenses and also help their families for the additional sources of income. They said that their parents can’t afford their marriage expenses so this was the only options that were left to them. One of the young female seasonal migrant worked in a textile industry at Thiruppur and the other seasonal migrant worked in a textile industry that was based at Coimbatore (one of the other urban area in Tamil Nadu which also known for its textile industries). These two seasonal migrants mentioned their industries were involved in helping the young female seasonal migrants to save money for their marriage expenses. As explained by the interviewee;

…In our spinning mill there is a scheme for female workers to help girl’s to meet their marriage expenses. After three years the company pays a lump sum amount of Rs. 50,000. The company terminates the contract at the end of three years. We can rejoin the company but on a daily wages. The company pays a weekly wages of Rs. 270 per day. We get wages paid on every Wednesday ...The company sponsored people came to my village and spoke to my mother. They asked my mother to send me to their factory. They promised to my mother that they will take care of me and also will help about marriage expenses (VM1)

I work as seasonal migrant in one of the textile industry based in Coimbatore. I became seasonal migrants in order to save money for my marriage expenses since my parents can’t afford it and also support my family...two years ago three officials from the textile factory came in a car to our village. The company officials spoke to all the parents and their daughters. They requested parents to send their daughters to work in the industry and in return they promised to help their daughters with savings for marriage expenses. They also spoke to my parents and explained their companies marriage saving scheme....They told that the marriage scheme is called Sumangali [In Tamil Sumangali means unmarried girl becoming married women or happily married women. However in some other companies this marriage scheme was known as “Thirumangala Thirumana thittam” that is marriage plan scheme] and its main aim was to help poor rural young girls with their marriage expenses and there by ease off the
pressure from their parents. My parents liked the idea of marriage savings scheme and send me as a seasonal migrant. Since we are very poor my parents felt that it is a good opportunity if I earn money for my marriage expenses and also help family. Presently I am contracted with the companies for next three years. At the end of three years I will be getting a sum of Rs 30,000 as my marriage savings. My contract with the company will be terminated at the end of three year periods. However I have the option to work either as a daily wage labourer or return home. I am planning to continue to work even after the three year period. My parents are poor, they dont have much savings. I want to help them before I get married. The marriage scheme helped me to get an employment and regular source of income. It reduced financial pressure of my parents. Because of marriage scheme they don’t have to worry about my marriage expenses (VM3).

These young seasonal migrants shared the hardships they face in the company. They said since they live in the company sponsored hostel they were expected to do over time work. Sometime these overtime works were not accounted as part of their wages. If the company pays wages for the overtime work the seasonal migrants and their families prefer the income from working overtime be saved as part of the lump sum amount so that they could have large amounts of savings as their marriage savings. “I do lots of overtime work since I don’t have anywhere to go. I have not received my overtime wages as my monthly income. Since my parents felt that it will be better if the company pay the overtime wage along with the lump sum amount that they supposed to pay me at the end of three year in that way I have bigger savings. There are also other girls working in the company as part of the marriage savings scheme. They were saving even their wages for their marriage expenses asking the company to add their salary to the lump sum amount so that they could take home larger amounts of savings at the end of the contracted period. The money that I earn also supports my family. My wage is an additional income to my parents to take care of the family. They also don’t have to worry much about my marriage expenses. Now I am helping my parents to build a house since our old house was in a dilapidated condition that it will fall any time (VM1).
The seasonal migrants also mentioned that work pressure in the company was high and work was physically demanding with loud noises of the machineries. They also mentioned that they get scolding from their supervisor if they don’t meet their day’s work deadlines which was given to them by the supervisor at the beginning of their work “the work is very hard and we are not allowed to speak to anyone. My supervisor will give the task in the morning then I start my work. He will check the amount of work that I have done at the end of each day. Sometime the task was so overwhelming that I feel sick. There are days where I got scolded for not completing my work. The sounds of the machines are so loud that some time I think that I get deaf when I get old” [this young seasonal migrant shared her employment trouble with the textile company with a sad face (VM3)]

5.10 Multiple livelihood strategies

Diversification of income from different sources was another potential family livelihood strategy. These multiple livelihood strategies were employed due to low wages and because village based employment is mostly agriculturally based. Many of the interviewees mentioned that they were undertaking multiple jobs including seasonal migration as an alternative income sources to support their families. The statistical test showed a correlation (p<0.001) between migrants and non-migrants in that migrants have more access to multiple sources of income than the non-migrants. The interviewees [PV5, VV1 and MaO1] explain that they were doing a combination of jobs including seasonal migration to improve their economic status and reduce the risk of depending on only one source of income;

... My husband was doing seasonal migration to Kerala. I look after cattle and also do agricultural coolie works and go for 100 days work [MGNREGS]. I get a wage of Rs. 70 per day. We do developmental works like deepening village ponds, canals and tanks (PV5)

... My daughter works in a textile factory in Thiruppur and come home every six months. I work as an agricultural laborer and also collect medicinal plants that I sell in the local market (VV1)
... My husband comes home every month from Kerala. He works there as an agricultural labourer since there is no employment in this village. For the additional income and support my family, I look after 40 goats and one milch animal and one calf. I also go for ghd agricultural coolie works, MGNREGS works and wood cutting. During rainy seasons I also go to paddy fields to work as an agricultural labourer that pays me Rs 70 per day (MaO1)

5.11 Agrarian Distress

Agrarian distress forms the second theme on drivers of seasonal migration. The broad factors that relate to agrarian distress include: non-profitability of agriculture, globalization, the green revolution and drought.

In the case study areas agriculture played an important role. All four villages are very remote with little/limited employment opportunities for the villagers.

As part of the theme, I will be explaining influences of agricultural distress in seasonal migration. By citing evidence from household surveys and interviews, I will establish that the agrarian crisis is one of the important drivers of seasonal migration.

5.11.1 Non-profitability of agriculture

Non-profitability is one of the biggest issues faced by the Indian farming community and led to a decline in agricultural contributions to the total GDP of the Indian economy (Bosworth, 2007). The informants (Informants are those villagers who shared information about seasonal migration but were not part of semi-structured interviews) mentioned non-profitability of agriculture as one of the major issues forcing farmers to search for alternative employment elsewhere in the form of seasonal migration. From the household surveys, 11% of the interviewees said that they became seasonal migrants because of the non-profitability of agriculture. This statement was supported by the household survey analysis where farmers seem to be earning a lower income compared to other employment categories (refer Chapter 4). In the interviews farmers mentioned various reasons for the non-profitability of agriculture. The important themes among
them are: drought, high cost of agricultural inputs, changes in the agricultural practices including the introduction of agricultural technologies such as machines, chemical fertilizers, change in crop production from rice to cash crops, land sales resulting in land fragmentation, small size of the agricultural land holdings, unemployment, tank abandonment and absentee ownership leading to agricultural lands being left fallow which were later infested by the weed Prosopis. The interviewees who were farmers highlighted non-profitability in agriculture sectors as:

*I am in debt because of the non-profitability of the rice crop. I am not planning any cultivation this season. I will lease the lands in order to pay back the debt* (MuV8). The following interviewee quotes highlight the lack of interests and vulnerability of farming as a profitable venture:

*...We cannot solely depend on agriculture in the village for our living. To meet the basic needs of the family we need to migrate...Agriculture in this village is very poor in condition; due to lack of proper rainfall we could not earn enough through agriculture* [MaM1]

*Villagers are not interested in doing agriculture. We cannot blame them as there is no rainfall and they have no other employment opportunities ...* (PO4)

*... People are not interested in agriculture. They want to work in cities. When they could not practice agriculture they keep the lands without cultivation...* (MuO3)

The non-profitability of agriculture resulted in a lack of interest in agriculture among existing farmers and young adults in some cases leading to land sales. These three issues will be discussed in the following sections.

5.11.2 Lack of interest in agriculture

The lack of interest in agriculture was observed among elderly farmers and also among young adults. Old age and non-profitability are cited as reasons for leaving farming practices. In the case study areas the farmers were either looking for some other employment or depending on their family members to support their livelihoods. In some cases they sell their agricultural lands
and deposit the money in their bank account. The interest they receive from
the bank is used to meet their day-to-day requirements. Three of the
interviewees mentioned that due to old age they were not practicing
agriculture and couldn’t find any one to lease their lands indicating a lack of
interest in farming among the villagers:

*I have an acre of dry land which is not under cultivation. It remains
uncultivated for the last two years. I could not cultivate it due to my old age.
No one in this village is interested in leasing out my lands. Agriculture here
is highly expensive and yield is very low. People are selling their lands as
they could not do profitable agriculture in their land…My son who migrated
to Thiruppur is looking after me* (PV1)

*I am very old to do farming and also I won’t get the profitability for my
hard work. I will leave my land fallow this season…. I am living with my
son; he gives money for my expenses* (MuO4)

*I had one acre of land that I sold to another villager. I deposited the money
in the bank as a fixed deposit. The interest from fixed deposit and the wages
that my wife and I earn by working as agricultural laborers is enough for
our livelihood* (MuV4).

Villagers also mentioned that young people were not interested in practicing
agriculture. The lack of interest in farming was widely noticed among
educated youth. It is a common trend among parents who were farmers to
discourage their children from working in the agricultural sectors. The
agricultural sector was widely seen as a loss sustaining enterprise requiring
lots of hard work. There were also the cultural dogmas attached to taking
farming as a main profession especially among the young generation. Even
those who studied agriculture in universities such as Tamil Nadu
Agricultural University would prefer not to become farmers. The non-
involvement of youth in agriculture was explained as:

….. *The young generations are not interested in agriculture. Younger
generation opted to study well and wants to work in the cities. When they
could not maintain land, they sold it to others…* (MuO3)
...The youngsters here do not know how to do agriculture and they go to urban areas for alternative employment and come to the village once a month or some time once in every two months (MuV2)

.... youths less than 30 years of age are not present in this village. They want to work other than agriculture. Madurai, Thirumangalam, Thiruppur, Coimbatore, Bangalore, Mumbai, Kerala are some of the places where our youths are going for work (MuV7)

5.11.3 Labour shortage to practice agriculture

The labour shortage was considered a major impediment for agricultural growth. Villagers’ preferences for working in the nonagricultural industries resulted in a lack of labourers during peak agricultural seasons. The migration of members of households caused a shortage of labourers available for planting and harvesting which in turn affected the total crop yields. Even those household members who are available in the village don’t want to work in the agricultural field because of the low wages and hard physical labor involved. Moreover working as an agricultural labourer is seen as a last resort where only those who have no other means of livelihood would undertake it. Young adults see working in agriculture as low esteem employment with limited future and low income generating capacity. The government sponsored employment scheme, MGNREGS was also blamed for this shortage of manual laborers. The villagers preferred to work in the scheme instead of agriculture as the scheme offered a wage which is at par with agricultural wages. Often the small and marginal farmers struggled to pay the wage equivalent to the wage offered by the scheme. The scheme participants are not required to undertake as much physical work compared to agricultural work.

These days, villagers want to work outside and earn good money which is causing shortage of laborers during harvest time. In the last harvesting season, my wife and I worked till late night in order to compensate for the lack of labor availability. Even those available were asking high wages that we hardly afford to pay them (MuO2)
I just can't find enough people to work for me in the fields anymore. These days nobody in the village really wants to stand under the sun for 10 hours and work in the farm. The MGNREGS scheme made villagers lazy and easy way of making money (MV5)

....Unless the government makes some radical changes with the way the MGNREGS scheme is being implemented; the future of agriculture in this village will face huge challenges (MV6)

5.11.4 High man to land ratio

Reforms in the health sector have enabled an increase in the life span of rural villagers. In the rural villages of India, there is a greater number of people dependent on agriculture which agriculture alone cannot support and this is apparent in the study villages. For instance in Vembankudi village there are 29 households (131 individuals) dependent on 26.75 acres of agricultural land. Some of the families don’t have their own land but instead depend on leased land. In Paphiapuram village there is more pressure on available agricultural land because of land conversion, encroachment of tanks, less water storing capabilities of tanks, absentee ownership and Prosopis weed infestation. Thus the pressure for available agricultural land acts as a driver of seasonal migrations

....Here we have 29 households most of us depends on income from agriculture. The low income and less employment opportunities in agriculture made us to look for employment outside the village (VO1)

.....There is no employment here and depending on agriculture to support family is a waste so I migrated to city. I don’t think agriculture could provide employment for all of us. There are too many of us depending on agriculture (PM1)

5.11.5 Small size of the land holdings

The smaller size of the agricultural land holdings were less profitable and in some cases were not making a profit for the farmers. The results presented in the Chapter 4 show that seasonal migrants have small land holdings with the median land holding being one acre (Refer Chapter 4). Because of the
small land holdings, there is decreased productivity and profitability which in turn acts as a driver for migration.

The interviewees below highlight the influence of low productivity and small land holdings in seasonal migration. When asked whether small, medium or large land holding size caused villagers to migrate, one of the interviewed officials mentioned that migration doesn’t depend on size of the lands but rather it was the income from the agricultural lands that decided the migration:

*The size of the agricultural lands has reduced. Landless, marginal and small farmers decided to go out for work to get decent and regular earnings in order to look after their family* (MuV8)

*… I only have half acre of land to do agriculture. So I became a seasonal migrant leaving my family in the village...with income from half acre of lands one cannot support one’s family needs...the lack of rainfall and reduced production in agriculture made me to become a seasonal migrant ... other people also migrating because of lack of income from agriculture and lack of rainfall which affects their livelihoods* (MM3)

*The yield has reduced drastically to very small amount per acre. We used to get a yield of 30 to 40 quintal per acre nowadays if we get even 10 quintal per acre will be a great achievement* (PV4)

5.11.6 Economic liberalization, globalization and green revolution

It seems that the liberalization of the Indian economy in the 1990’s has benefitted mostly urban areas compared to rural areas. At the same time, governments have not invested in creating employment opportunities in rural villages:

*the officials have time to spend only in the cities none of the higher officials bother to visit our village to hear our struggle* (MuV4).

One of the main criticisms of economic liberalization is its urban centric growth that neglects 60% of the rural population whose main livelihood depends on agriculture. In the post economic liberalization period agriculture has shown a slow growth:
the villagers were neglecting their agricultural practices....these changes started during last 10-15 years (VO2).

The liberalization of the economy also influenced rural markets from an agrarian to capitalistic mode of production. The rural way of life changed with consumerist culture beginning to dominate. These changes were noticed by the arrival of agricultural products in packets and containers that villagers have never seen before;

these days people have no patience they want everything quick, see now a day we are buying some of the agricultural products including milk which comes in packets (MuV8).

Economic liberalization has also caused the movement of young people from rural areas to urban areas. The growth of non-agricultural industries attracts villagers to cities especially the rural youth;

these days the youngsters don’t want to live here they all want to work in the cities where there are more things happening than here” (MuO3).

The nonagricultural industries were viewed as providing more income than the agricultural sector. Some of the women laborers with whom this researcher interacted said that working in the industries is better than working in agriculture because industries pay higher wages. They also felt that working in industries may not be physically demanding and the workers don’t have to stand in the harsh weather as rural women do;

It is better to work in the industry than here. They [Industry] pay higher wages and don’t have to stand in the sun. See my skin is getting darker and I am getting weaker because of the physical work that I do in the rice field (MV2).

One of the negative spinoff effects of urban based markets was on rural handicrafts, turning it into obsolescence and the moving handicrafts manufacture to urban areas which created more employment opportunities in urban areas than in the rural areas. The appearance of these urban market products in rural areas was explained by villagers as;
earlier we make toys for our children from bamboo and coconut leaves. In my younger days I use “kottakkai” [Jatropha seeds] as wheels for my toy vehicle. These days these are replaced by factory made plastic vehicles (PV2).

My grandfather tells lots of stories while making toys from mango leaves and mango seeds. Sometimes he also carves toys from mango trees and makes cricket bats from coconut trees. These days those practices have disappeared. I buy toys from the shop for my son. I feel nostalgic when I think about my childhood days. Today’s kids miss many of the things we enjoyed those days (PV1)

We use to run around in the field and climb in the trees that were in our village. These days those kind of outdoor activities seems to be disappearing because no one has time and also these days we don’t have that many leisure opportunities (MV7)

Globalization also seems to have an impact on rural agriculture. The crop cultivation practices changed to cater to an urban market;

earlier we use lots of different type of crops. These days villagers cultivate mainly maize, rice and groundnut. The popular crop cultivated in this village was Maize because of its higher prices in market. Recently some farmers were cultivating flowering crops such as Jasmine (MuO6).

The changes in cropping practices suggests that the integration of world markets, especially the urban markets and rural markets is influencing many rural villagers’ way of life and livelihoods.

The introduction of the green revolution in 1968 was another major influence in the farming sector. The green revolution was made possible by the introduction of strains of hybrid seeds, chemical fertilizers and improved irrigation practices. However, it is very questionable whether the “miracle seeds” delivered on the promised production potential. The heavy use of chemicals as part of the green revolution had an influence on the soil quality and the local ecosystem;
these days we are using pesticide, insecticide and fertilizer to increase crop output. These chemicals have harmed the soil as a result we are getting reduced output these days (MuO2).

This agricultural revolution was viewed skeptically by some of the village farmers. According to them the green revolution changed farming practices from animal and human based to machines which reduced the employment opportunities for the rural villagers as said by this interviewee:

*Earlier by using bullocks we could harvest good yield. Nowadays we are not getting that much yield like olden days. Having bullocks at our houses was helping us to get good yields from agriculture as its dung being used as a fertilizer and the final residue of paddy cultivation being used as fodder for those livestock. Now with the use of machineries like tractors those cycles got affected and we too could not maintain livestock anymore (MuV8)*

Another interviewee opined that changes in crop production and introduction of new technologies introduced new pests and diseases that were not heard of before in the village.

*Manual ploughing was much more effective than tractor. Earlier there were not many pests attacking the crops lately it’s increasing. Nobody knows the type of diseases and their causes. When we use manual laborers and traditional cultivation practices we used to get 10 bags of groundnut and one bag of Thovarai (Pigeon pea/dal) as intercrop from 0.5 acres of land. Nowadays we are harvesting less than 3 bags (MaV3)*

The introduction of machines in agriculture changed the social structures of the villages. For instance one of the Neerkatti (tank water managers) mentioned that with the introduction of machines, villagers’ dependency on the important role played by the traditional water managers had reduced and people stopped recognizing their role in tank irrigation water management and stopped paying his dues which affected the Neerkatti’s livelihood;

*Due to introduction of machineries the cost of harvesting was very much reduced. Also, due to machineries these days, farmers were taking the yield*
to their home and not giving my wage properly. This affects my livelihood as well (MuO2)

The green revolution created two important changes in rural farming. First, those who could afford to access these technologies practiced modern machine based hi-tech farming and those who could not either sold the lands or looked for some other alternative sources in order to support the family.

....Agricultural machineries reduced the man power requirements but at the same time it increased the cost of agriculture. These days only those who can afford do farming... (MaV7)

Agricultural practices are very expensive these days. We couldn’t afford to buy chemical fertilizers and plastic pipes for the drip irrigation so we sold the land to our neighbor who is a big farmer, he could afford these techniques but not us (PO1)

5.11.7 High productivity agricultural zones

In contrast to the decrease in agricultural productivity in the study villages, the interviews revealed that villagers were undertaking seasonal migration to work as agricultural laborers in adjacent states like Kerala, Karnataka and Andhra Pradesh. For the seasonal migrants who work as agricultural laborers the favorite destination is Kerala. The lack of locally available agricultural laborers and high wages in Kerala attracts seasonal migrants from Tamil Nadu. The state of Kerala receives well distributed South West monsoon and has good water resources to support agriculture. However there is a severe shortage for agricultural laborers. This is a boon for the seasonal migrants from the state of Tamil Nadu. The seasonal migrants worked as laborers in the rice farms and plantations including rubber, banana and tea estates. Thus the interviews indicated that one of the trends in seasonal migration was migration from agriculturally low productive areas such as Tamil Nadu to high productive areas in neighboring states like Kerala.

I migrated to Kerala to work as an agricultural labourer. I work in the banana plantation. The employers provide three meals per day with tea break. I start my work at 9am and finish by 3pm. I get a wage of Rs. 500 per
day. The wage will be paid at the end of the day after inspecting the quality of the work. I won’t get this high wage in my village. The wage in my village is Rs. 100-120 for men and Rs 80 for women (MM3)

5.11.8 Drought

Drought was identified as another major driver of seasonal migration. Twenty one percent of the interviewees mentioned in the household survey that they became seasonal migrants because of drought. The state of Tamil Nadu depends on the erratic and unpredictable North - East monsoon. A delay in the monsoon affects agricultural crops and reduces yields causing losses to farmers. Sometimes there was unexpected rainfall during harvests that greatly damage the crops (the most affected were rice growers where the sudden onset of rainfall not only damages the quality of the rice but also the rice bunds). To complicate the agricultural practices, the state of Tamil Nadu undergoes droughts every ten years that makes farming a gamble.

It seems that drought causes mainly seasonal or short duration migration. The villagers return to the village with the onset of rainfall. Droughts influence seasonal migration by influencing productivity of the agricultural lands which in turn influences yield and household income. The reduced household’s income forces rural villagers to seek alternative sources of income elsewhere. This movement could be seen as a coping strategy of the households to maintain their income through livelihood diversification. It is worth remembering that the mere presence of drivers won’t create migration, it is the individual responses to the drivers that causes migration. Though drought has an influence on seasonal migration, who migrates, where and when was usually determined by the socio-economic context of the villagers.

When I was in the field, the state of Tamil Nadu was undergoing a severe drought. Many of the villagers explained that they were looking for jobs elsewhere;

this time the drought is very harsh, there is nothing here for us to support our lives. Some of them already went to nearby cities and some of us are also thinking about it (MM2).
The village women who worked mostly as agricultural laborers ended up taking any employment on offer;

*we work as agricultural coolie in others farming field because of these drought we are sitting at home* (PV7).

The women also said that the village was desperately looking for summer rain.

*The villagers have planned festivals for a local goddess to bring summer rain* [PV7].

Worshipping or making offerings to local gods/goddess to bring rain was one of the common cultural practices in the state of Tamil Nadu. The severe droughts caused villagers to do seasonal migration to urban areas.

*Agricultural failure and lack of rainfall affected the livelihood of farmers...the reduced rainfall results in reduced electricity and we couldn’t irrigate the crops in time* (VO2)

This year, both dry land and wetland cultivation got affected due to lack of rainfall. The change in weather patterns affected our agriculture... Since there is no rainfall and to earn money and to meet the financial needs of the family I went for construction works in Kerala (MuM6)

*This time the drought is so severe that we [women] don’t have any employment in this village. We are planning to offer our prayers to our local goddess “Mariamman” to bring rain and bless this village and look after our young children. The village elders have decided to do the offering at the end of this month. The renovation works of the temple [where the goddesses are kept] have already started. We hope that our goddess will be pleased with our offering and ask Varuna bhagavan [rain god] to rain in our village* (PV7)

5.11.9 Tank failure

The interviews indicated that the failure of tanks to store water was another important driver of seasonal migration. Tank failure is due to lack of rainfall, lack of tank management, tank siltation, encroachment of the tank
beds, infestation of weedy plants such as Prosopis as explained by the interviewees:

Lack of rainfall and failure of water storage in tanks are the reasons for the change in farming failure. Almost all the command area of the tank is infested with the weed, Prosopis. If anybody wants to cultivate their land, first they have to clear Prosopis. Even the cultivated lands are full of Prosopis which needs to be cleared first requiring lots of cost (PO2)

...More than 100 acres gets irrigated as per the official documents but more than 50% of the command area turned into fallow uncultivable land infested full of Prosopis trees. The tank is not getting filled every year which results in the reduced area of agriculture. People could not cultivate their land as Prosopis trees were growing in their cultivable lands also... (VO)

5.12 Opportunities in cities for individuals

The attraction towards cities is my third theme on drivers of seasonal migration. In this theme the main emphasis was given to the individual seasonal migrants who decided to become seasonal migrants because of the perceived opportunities in the cities. In order to support my arguments, I will be citing those drivers which attract rural villagers to cities.

5.12.1 Social Networks

Social networks play an important role in the movement of people from one area to another. In the study areas networks played a critical role in finding urban based employment. Since the rural villagers are either poor or middle income groups the informal channels reduce the cost and facilitate the urban based movement. In fact networks actively facilitated migration. Most of the networks are based on kinship, friends and families. These networks play an important role while searching for a job and a place to stay. Social networking is one of the strategies practiced by the new migrants to utilize the knowledge and experiences of the existing migrants.

It was observed that certain destinations were more popular than others. The preferences for particular destinations could be explained by the existence of networks. For example, in Vembankudi village the majority (76%) of seasonal migrants went to Nagerkovil (Refer Chapter 4) because
many villagers have close networks with brick kiln manufacturers. This network prompted the current seasonal migrants to work in those brick kiln industries. Once seasonal migration was established to a particular destination the pattern becomes consolidated through the dynamics of cumulative causation whereby the initial movement leads to further migration. The migration networks could be either formal or informal. The formal includes involvement of agencies or middlemen who find employment by charging migrants money. The common practice was charging 10% of the income of the migrants. The agencies or middlemen also get money from the industry for supplying cheap labour forces to the company:

*I work as a fitter in a textile company in Thiruppur. I got this employment through a middleman. He charged about 10% of my first income. Since I know him and also knows that he know many people in cities, I agreed for the deal.* (VM1)

The informal network involves relatives and friends. Those relatives and friends who already are seasonal migrants can act as an agent for the future migrants either promoting or inhibiting migration. The role of networks as a cumulative causation factor in seasonal migration will be investigated in the discussion chapter (Chapter 7).

Maintaining networks with rural areas also plays a crucial role for the migrants. Seasonal migration provides an opportunity to form a link at both origin and destination areas. Through networks the seasonal migrants maintain close contact with villagers in order to keep their culture and also as a fall back option if the strategy in urban areas fails. Three interviewees (MaM2, MaM4 and VM3) explained the role of networks in finding employment:

*Before coming to hotel work in Coimbatore, I worked in a college hostel. The warden in the hostel recommended me to get this job in PSG College. I didn’t plan to come here. Since I got this opportunity I moved to Coimbatore.* (MaM2)
I completed my catering course at Arupukottai and took training at Kodaikanal then I got the job immediately through campus interview then my friends helped me to find some other better jobs in Chennai (MaM4)

Mr. Sankar owner of the brick making chamber was introduced to me by the neighbours. My neighbours who worked there told me about the job opportunities. I joined there once I got the positive answer from Mr Sankar who also gave me advance money to join in his chamber for work (VM3)

Those who have a network of friends and relatives often receive an offer of employment immediately, whereas those who don’t have a network often have to wait for a couple of days;

I didn’t get job immediately. I waited for three days to get a job in hotel (MaM5)

In the case of educated migrants the educational institutions played a key role in getting employment in cities. One of the interviewee shared how he got job in the city;

I completed my catering course and took training in Kodaikanal then I got the job immediately through campus interview (MaM4)

5.12.2 Improvements and growth of information, communication and transport

The growth of communication technologies especially mobile communication among youths made seasonal migration an attractive option. The transfer of information becomes rapid between existing migrants and future migrants. Communication facilities acted in a two way process. The technologies enabled them to get all the information about opportunities at urban areas and also gave them an opportunity to remain connected to their village. In the case study villages the migrants mentioned that they were in contact with previous migrants before moving to the particular urban area.

I was in the village without any employment. My brother works in the textile company called me and informed that there is an employment opportunities in his company. So I came here to work in the company (VM1)
I failed in my high school studies. I was simply wasting my time then one day my friend called me to my mobile and said there is an employment opportunity at his company. I caught the next available bus to Thiruppur and joined for the job (MuM7)

One day my friend called me and asked whether I want to work along with him in Kerala as an agricultural laborer. Next day I left to Kerala. My friend introduced me to his employer and he took me to work in his banana plantation (PM2)

The use of mobile and internet communication technologies helps to reduce psychological and anxiety costs associated with migration for both migrants and migrant families.

Before migrating I brought two mobile, one for me and one for my family. I speak to my family every day in the evening. I have young children only through daily phone talk I could check that they are doing good and behaving properly with their mother (PM1)

I speak to my wife every evening. When I left for Coimbatore she was pregnant. It was important for me that she feels not lonely. I speak for 30 minutes, some time for an hour. I also speak to my parents and know things happenings at my home and in village (MuM1)

I have one acre of land and two farm animals. I speak to my wife in the evening every day and inquire about things happening in the farm. Since ours is a small farm it won’t support a family unless I go somewhere else for employment, so I came here to work as agricultural laborer (PM3)

Besides social networks, the popularity of certain destinations among seasonal migrants was due to a well-connected transport network. The improvement in transport facilities made seasonal migration a convenient one. Perhaps because of the good transport facilities the median distance travelled by the seasonal migrants was 440 km (refer Chapter 4). However the proportion of seasonal migrants decreased with increasing distance.
5.12.3 Inequalities of growth and development

The inequality of growth and development was cited as another important reason for seasonal migration. To understand the influence of inequalities of growth and development, villagers were asked to create a Wenn diagram. A Wenn diagram is a diagram to depict the relationship between the variables. The purpose was to show the relationships between lack of infrastructure and seasonal migration. The Wenn diagram was created as part of the Participatory Rural Appraisal (Refer Chapter 3). The Wenn diagram suggests that there are only minimal/basic facilities in the four villages. For instance in some villages the villagers have to travel outside the village even for basic facilities such as schools (no school facilities in Vembankudi village) and hospitals (none of the villages have medical facilities). The minimum distance travelled to access these basic facilities was 5km, though it varied from village to village (Refer Chapter 3 in the PRA&RRA section).

...There are not many facilities in this village. People first start as a seasonal migrant later some of them end up in living in cities (VO1)

The youngsters don’t want to live in the village here. They want city life where lots of things happening. The youngsters are chasing entertainment that they get only in the cities (MuO2)

I migrated to Chennai. In our village there is not much things happening. After 6pm, the village is like a dead area. No one come out. There is only one small stationary shop. Now I am having good life here in Chennai (MaM4)

5.12.4 Bright lights

Seasonal migrants, especially the young adults of the rural villages, prefer to migrate to cities to make use of the urban facilities and entertainment. This escape from social and cultural deprivation could be described as searching for “bright lights”.

The young adult interviewees (in the age range of 18-28 years) mentioned that besides employment the other reason for opting for seasonal migration is that the urban areas have more to offer than the rural areas. They mentioned that in the cities they can visit pubs or watch the latest
Bollywood movies and late night movies without fear of being watched over by parents. For others the reasons are to be with friends and playing cricket near the beach (popular among Chennai based seasonal migrants), going to cultural events, and shopping.

Thus based on the age groups there are two types of seasonal migration happening in the villages. Those in the age range of 30 – 50 years were undertaking seasonal migration for the additional income in order to look after their families, and those in the age range of 18 – 28 years which were undertaking seasonal migration not only for employment but also for entertainment purposes as explained below;

In the village inter caste marriages were not allowed. So the youngsters abscond with their lovers to urban areas where there is not much importance to caste. There are couple of youngsters ran away with their lovers from neighbouring villages to cities like Madurai, Thiruppur, Chennai. They come back to village after having a baby after couple of years. These youngsters are spoiled by watching these movies and they tried to copy in their own life (MaV7)

I moved out of my village to work in the textile company. Even if I don’t get this job I will still move out since there is nothing for me in the village. I can’t go anywhere. There is no shopping mall; there is no place to hang out with friends. There is none for us… (MuM3)

5.12.5 Better facilities and lifestyle (Social amenities)

The availability of improved infrastructure and social amenities also acts as an inducement for seasonal migration. There are some villagers who own a house in urban areas to make use of the better facilities. Typically they move between the village and cities once a month. In Paphiapuram village, the village president had a house in a nearby town and also owns a house in the village. The village president and her family come to the village once a month. During agricultural seasons also they will stay in the village to look after agricultural works. Some of the young interviewees also mentioned that they are doing seasonal migration because of the availability of good facilities in urban areas;
In cities the life is easy compared to our village. Good transport, good facilities. The shops are nearby. The hospitals are very close. There are shops which open 24 hours (MaM5).

...Good transport and better facilities are here. The shops are nearby. The hospitals are very close. There are shops which open 24 hours; it’s unimaginable in my village. In my village we got a small stationary shop which open at 7am and close at 6pm. The shop is very small and it got less stationary items. Better earning and good job opportunities in the urban areas encourage people to migrate..... In the village people could not get enough works except during agricultural seasons (MaM4).

5.13 Conclusion

This chapter addresses the drivers of seasonal migration based on the information provided by the household surveys and semi-structured interviews. The seasonal migrants identified 17 drivers. The most frequently mentioned drivers are; poverty (59% percent), drought (39%), lack of employment opportunities (38%), lack of regular employment opportunities (29%) and to support family (15%).

The data collected suggests that push and pull drivers of seasonal migration varies across the villages. Instead of analyzing push and pull factors in a traditional way, this research combines them together under broad themes and describes them as narrative. The broad themes identified after merging related drivers are; family livelihood strategy, agrarian distress and opportunities at the destination areas. This narrative approach helped to analyse a huge and complex data set in a systematic way to answer the research question related to the drivers of seasonal migration. This chapter also shows that drivers of seasonal migration varies depending on the local context and also gender and age.

The household surveys indicated that a strong push or pull factor for one of the villages may be a weak push and pull factor for another. The other advantage of combining similar drivers under a broad theme is that it offers all the possible answers to the reasons behind migration. For instance, an interviewee might say she or he became a seasonal migrant because of the family situation. This fact might prove difficult to analyze following a
strictly traditional approach of pull and push factors. Family situation comprises various push and pull factors. Therefore this research work argues that the best possible way to study seasonal migration is to combine the related drivers and analyze them under broad themes.

This chapter also shows that drivers of seasonal migration varies depending on the local context and also gender and age. For instance the number of seasonal migrants varies across the village suggesting that seasonal migration varies across space (in this instance across the village). The possible influence of local context are, size of the household, population size of the village, nearness to the urban areas, access to information and social and economic factors. Migration rate also varies based on gender where more males migrated than females. The data also suggested that mostly middle aged adults migrated suggesting the importance of age in deciding seasonal migrants (Refer Chapter 4).

The field finding confirmed the conceptual framework developed during the research work. The data analysis indicated that both coping and accumulative seasonal migration was occurring across the four villages. However the semi-structured interviews suggested that the proportion of seasonal migrants employing a coping strategy was higher than those employing an accumulative strategy. This was expected since agriculture formed a major livelihood for these villagers. Income from the seasonal migration was seen as an additional income (income maximization strategy) to be used for different purposes (Refer Chapter 5).

As predicted in the conceptual framework, the gender analysis indicated that a higher proportion of males were undertaking seasonal migration compared to females (Refer Chapter 4). This is perhaps due to the patriarchal nature of Indian society as identified in the conceptual framework.

In the next chapter impacts of seasonal migration will be discussed.
Chapter 6: Impacts of seasonal migration

6.1 Introduction

Chapters 4 and 5 established the extent and drivers of seasonal migration in the four case study villages and discussed socio-economic characteristics of seasonal migrants. This chapter deals with impacts of seasonal migration at the origin and destination places. In order to answer the research questions, Semi-structured interviews supplemented with household surveys were used. The impacts of seasonal migration at the origin will be explored at three levels: individual, household and village level. The impacts at the destination will be analysed only from the perspective of seasonal migrants, as no data were collected from urban based employers. This chapter also draws mainly from the household surveys and semi-structured interviews.

6.2 Major themes and related impacts

The potential impacts of seasonal migration identified by the seasonal migrants are shown in Table 282. These impacts are then grouped under broad themes (Table 293).

From the household surveys, seasonal migrants highlighted the five important impacts of seasonal migration were highlighted: improved living standard (16%), able to build houses (15%), able to meet day to day personal/family expenditures (15%), able to purchase food and clothes (14%) and being able to repay debt (14%). These identified impacts of seasonal migration vary from village to village and from migrant to migrant suggesting that the impacts of seasonal migration vary across the four study villages.
Table 282: Impact of seasonal migration under their respective themes.

<table>
<thead>
<tr>
<th>Individual</th>
<th>Origin</th>
<th>Village level</th>
<th>Positive impacts</th>
<th>Negative impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Household level</td>
<td>Village level</td>
<td>Positive impacts</td>
<td>Negative impacts</td>
</tr>
<tr>
<td></td>
<td>Positive impacts</td>
<td>Negative impacts</td>
<td>Positive impacts</td>
<td>Negative impacts</td>
</tr>
<tr>
<td>Positive impacts</td>
<td>Negative impacts</td>
<td>Positive impacts</td>
<td>Negative impacts</td>
<td>Positive impacts</td>
</tr>
<tr>
<td>Exposure to outside world</td>
<td>Difficult working condition</td>
<td>Improved economic status</td>
<td>Female headed households</td>
<td>Introduction of new skills and ideas</td>
</tr>
<tr>
<td>Acquired new skills</td>
<td>Stress – work stress &amp; away from family</td>
<td>Built a house</td>
<td>Sold farm animals</td>
<td>Investment in agriculture</td>
</tr>
<tr>
<td>Higher wages</td>
<td>Acquired bad habits such as drinking alcohol</td>
<td>Bought farm animals</td>
<td>Feminization of agriculture</td>
<td>Revive local economy</td>
</tr>
<tr>
<td>Education to children</td>
<td>Psychological stress among kids/wife</td>
<td>Caste disintegration</td>
<td>Consumerism</td>
<td>Congested cities</td>
</tr>
<tr>
<td>Able to meet agricultural expenses/HH expenses/social obligations</td>
<td>Improvements in livelihood</td>
<td></td>
<td>Change in social structure such as caste imbalance, young adults questioning authorities of village social norms and village elders, less unity and cultural degradation</td>
<td>Waste and environmental pollution</td>
</tr>
<tr>
<td>More respect from villagers</td>
<td></td>
<td></td>
<td>Absence of able bodied men – mostly women and children (demographic imbalance)</td>
<td></td>
</tr>
<tr>
<td>Invest in agriculture</td>
<td></td>
<td></td>
<td>Less labour availability</td>
<td></td>
</tr>
<tr>
<td>Debt free</td>
<td></td>
<td></td>
<td>Tank abandonment</td>
<td></td>
</tr>
<tr>
<td>Reduced poverty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 293: Impacts of seasonal migration. Numbers represent the frequency of responses from the household survey.

<table>
<thead>
<tr>
<th>Impacts</th>
<th>Vembankudi (n=17)</th>
<th>Manickanenthal (n=24)</th>
<th>Paphiapurm (n=25)</th>
<th>Muruganeri (n=61)</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved living standard</td>
<td>9</td>
<td>17</td>
<td>16</td>
<td>24</td>
<td>16</td>
</tr>
<tr>
<td>Built houses</td>
<td>10</td>
<td>16</td>
<td>14</td>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td>Meeting day to day personal/family expenditures</td>
<td>9</td>
<td>14</td>
<td>15</td>
<td>28</td>
<td>15</td>
</tr>
<tr>
<td>Access to food/clothes</td>
<td>8</td>
<td>14</td>
<td>14</td>
<td>25</td>
<td>14</td>
</tr>
<tr>
<td>Paying Debt</td>
<td>8</td>
<td>16</td>
<td>13</td>
<td>30</td>
<td>14</td>
</tr>
<tr>
<td>Bought more farm animals</td>
<td>8</td>
<td>15</td>
<td>13</td>
<td>22</td>
<td>14</td>
</tr>
<tr>
<td>Reduced poverty</td>
<td>12</td>
<td>14</td>
<td>11</td>
<td>24</td>
<td>13</td>
</tr>
<tr>
<td>Meeting other household expenditures including meeting social obligations</td>
<td>8</td>
<td>9</td>
<td>13</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>Paying children’s education fee</td>
<td>7</td>
<td>12</td>
<td>9</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>Meet agricultural expenses/invest in agriculture</td>
<td>8</td>
<td>11</td>
<td>6</td>
<td>31</td>
<td>9</td>
</tr>
<tr>
<td>Regular income/regular employment</td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>33</td>
<td>9</td>
</tr>
<tr>
<td>Meet other social obligations</td>
<td>6</td>
<td>9</td>
<td>9</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>Improved income</td>
<td>5</td>
<td>9</td>
<td>8</td>
<td>25</td>
<td>9</td>
</tr>
<tr>
<td>Exposure to outside world</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>Better access to infrastructures/facilities</td>
<td>6</td>
<td>8</td>
<td>7</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td>Improved livelihood</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Meeting medical expenses</td>
<td>5</td>
<td>8</td>
<td>6</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Able to save money for the marriage expenses</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Savings for future</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Helping parents</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Prestige</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

In order to understand the impacts of seasonal migration on villagers’ livelihoods, the household survey asked questions relating to their socio-economic conditions (Table 304). The results indicated that seasonal migration improved the overall socio-economic conditions of the villagers with 66% reporting that seasonal migration helped them socioeconomically, followed by 19% saying it did not change much, followed by 14% identifying that seasonal migration had a negative impact.
Table 304: A comparison of the socio-economic conditions of migrants before and after migration.

<table>
<thead>
<tr>
<th>Village</th>
<th>Condition</th>
<th>Employmen t opportunity (n=127)</th>
<th>Income (n=127)</th>
<th>Access to education (n=121)*</th>
<th>Living condition (n=127)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vembankudi (n=17)</td>
<td>Improved</td>
<td>9</td>
<td>8</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Worsened</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remains same</td>
<td>4</td>
<td>6</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Manickanenthal (n=24)</td>
<td>Improved</td>
<td>10</td>
<td>14</td>
<td>19</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Worsened</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Remains same</td>
<td>6</td>
<td>19</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Paphiapuram (n=25)</td>
<td>Improved</td>
<td>9</td>
<td>16</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Worsened</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Remains same</td>
<td>6</td>
<td>3</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Muruganeri (n=61)</td>
<td>Improved</td>
<td>28</td>
<td>31</td>
<td>31</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Worsened</td>
<td>9</td>
<td>4</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Remains same</td>
<td>11</td>
<td>13</td>
<td>14</td>
<td>10</td>
</tr>
</tbody>
</table>

*In Paphiapuram and Muruganeri villages only 22 & 58 villagers answered; n=number of SM

6.3 Themes

In the following sections I will be discussing the broad themes identified from the qualitative interview analysis and their related impacts. The three broad themes identified are: impacts of seasonal migration on the migrants; impacts of seasonal migration at origin; and impacts of seasonal migration at destination.

6.4 Impacts of seasonal migration on individuals

Seasonal migration has positive and negative impacts on migrant behavior and their outlook towards life. When villagers become seasonal migrants and move to urban areas they are exposed to new life styles that are either detrimental or favorable to seasonal migrants. For instance interviews with three seasonal migrants [MM2; MaM4; MM3] indicated the benefits and disadvantages of being a seasonal migrant as;

...now I earn more. I learnt to speak English. My English is not perfect. However, I could communicate and understand with people who speak to
me in English. There are lots of foreigners coming to the bar and I speak to them in English and develop my skills. I joined in the bar as a customer assistant. After I learnt the skills and customers service, I was promoted as a Bar manager. My exposure made me to realise importance of English and I encouraged my children’s to study in English medium school.....there are negative impacts too leaving family, neighbours and village was very hard for me. First few months I struggled a lot to get to used to this life. [Big breath]...See, I cannot go home during emergency or whenever I want. I, still struggle to overcome this emotional stress... However migration is good for me because of migration only I could earn more money and support family and children’s education. I think financially I am better off being a seasonal migrant [MM2]

After completing my catering studies I moved here. I learnt a lot such as customer service, how to speak to people, how to address them. I got uniform, shoe and cap as part of the job. Sometime people from different parts of the country come here to have dinner. Some of the customers share their life and travel experience. It is quite different to what I grew up and exposed to so far. I am getting good exposure by working here. This kind of exposure and experience, I won’t get from my village [MaM4].

Migration is good for earning money. Living alone here is the most difficult part and also the place of work is very difficult. I am here just to earn and support my family [MM3]

Some seasonal migrants struggled to adapt to the new environment and new cultures. This struggle was especially evident among those who moved to a neighboring state where food and cultures are different. This struggle was also noticed in those moving to big cities.

When I first moved to Kerala to work as an agricultural labourer, I struggled to speak their language. Their language is totally different from us. Even their culture and food habits are different. When I went last year, I struggled a lot especially with language and food habits so I return. This year I started going to Kerala again, though I still struggle with language I
am slowly adapting to it. However one of my friends return to village because he couldn’t able to cope with new life style. For me, I have no other choice except to work here in order to save money and support family [MuM6]

When I first moved here, city life scared me. Everywhere people running around, vehicles moving fast. Here people have no time to stop and talk to each other. In my village everything is slow and people talk to each other all the time. Here, everyone rushes to reach office. I did not like city life at all. I am here just because of my family. I need to support and help them [MuM4]

The psychological stress and separation from family was mentioned as the other major impact on seasonal migrants. This theme occurred frequently among married seasonal migrants. Many of them mentioned that living away from family was a difficult one. They mentioned that they miss their family especially children. They were concerned whether their absence affects their children’s education and whether their wives would able to manage children and the agricultural businesses including farm animals as described in the interviews [PM3 and MuM3]

When I first moved to Kerala, I could not sleep for couple of days. The thought of my children and wife was keep coming to my mind and kept me awake late night. My youngest child is 3 years old and I am worried whether my wife could able to look after children and farm animals. Though I visit them once a month, I miss them very much. If I could able to get regular job and good wages I would not be coming here and work as an agricultural labourer [PM3]

Separation from family was the biggest drawback of migration. I do visit them once a month, sometime once in every two months. I cannot live away from my family too long. The other drawback is here we don’t get much freedom that we get from village. In the village we could go to work a bit late and no one will object. Here, in the factory if I am late by five minute
my supervisor will scold me and some time the company will reduce salary [MuM3]

This separation from family was also expressed by some of the seasonal migrant’s parents, wives and their children as;

My husband went to Coimbatore to work in the factory. Here, I am alone with my child. Sometime my husband’s family visit me. My child and I miss him very much especially now since I am pregnant and I wish he was with me [MuM1]

Those seasonal migrants who moved to urban areas to work in factories mentioned that they were facing work related stresses that they have not experienced in villages. This is perhaps because in the village most of the work was agriculturally oriented and they are experienced farmers, whereas urban based employment was capital intensive and with commercial companies that villagers were not familiar with. Some of the interviewees mentioned that they felt uncomfortable working under someone’s supervision on a day to day basis. The following interviews illustrate work stress experienced by the seasonal migrants;

Here in our textile industry the work load is very heavy. If I am late or could not complete my work in time, my supervisor will scold me. I am not used to this kind of work pressure. Sometime I think why I came to work here. I work from morning 8 am till 5pm in a high pressured environment. I used to be very healthy, now I am getting very weak because of work pressure and being inside the company most of the time [PM1]

I used to work as an agricultural labourer in our village. I could not find regular employment with good wage so I moved here to work in the Industry. Here the work load is very heavy. I have to lift cotton materials and fill in the machine for converting in to yarn; it’s a physical work demanding lots of physical energy. If it rain I might go back to village to look after farm and work as an agricultural labourers [PM2]
Working condition in Coimbatore is very difficult. I don’t think working outside village is safe.... No good and healthy food available at the working place. Physical absence from home is other drawback that I could not able to go home during emergency..... Hmm, I think working in village is safe and better than working outside. In the village, I could stay with my family. Here nobody is there to take care of me. I don’t encourage people from my village to go outside for work [MM5]

There was mention of villagers acquiring habits that they were not used to before. The urban life has imparted new life styles and habits new to many villagers. It seems that changes due to an urban life style were noticeable among young adults, as explained by the following interviewees;

These youngsters live alone in cities, away from parents. They mostly share a room with their friends in order to save income. Since being away from parents, they get all the freedom, this leads to acquiring bad habits. The social condition of the city changed our youngsters. They eat unhealthy food, eat very late. Some of the youngsters started drinking alcohol, chewing pan beeda’s. These habits was showing an increasing trend among seasonal migrants especially the young one’s [MO4]

I dropped off my studies and came here to work. I started smoking and drinking alcohol after coming here. First I started smoking with friends then drinks followed. These days I drink and smoke to have bit of fun and not to think about my work load [MuM7]

....due to migration there are increased number of divorce and men having affairs with other women at the working place [PV4]

Acquiring prestige and respect seems to be another important aspect seasonal migrants yearn for. The aspiration for prestige and social respect was particularly seen among lower caste and financially weaker sections of the community. Seasonal migration gave these communities respect and acceptance among village communities and village norms. This acceptance might be due to improved economic/wealth status. Two of the interviewees explained their changes in social status because of seasonal migration;
I belong to Schedule Caste and my father used to work as a ‘Thalayari (Tank water manager). Because of our lower caste and economic conditions, we were always been looked down by villagers. My father accepted it as his fate but I could not. I migrated to Thiruppur [one of the urban area of Tamil nadu] and started working in Textile industry as a fitter. Now we are economically better than what we used to be. I contribute to the local temple festivals and recently my name was included in village festival committee. I think, now we are getting acceptance from other caste. This change was due to our improved economic condition and also I won’t allow them to dictate our life. Those days are gone [PM1]

Though I belong to Devar community [one of the backward caste], our family never got the respect we deserve [big breath]... This village was ruled by those who have money and social status. After moving to Kerala, I started earning decent income and built home and bought 5 goats that my wife looks after. Now I am financially better than some of the other caste. Now I get lots of respect when I visit my village. My family also get the prestige and respect that we deserve [PM3]

6.5 Impacts of seasonal migration at household level

One of the important motivations for villagers to become seasonal migrants was to look after their families. The support of family includes living a decent life without poverty, reduced debt, providing access to children’s education and access to food and clothes. Table 2 indicated that the household consumption of seasonal migrants had changed. The ability to buy clothes, building better houses and access more food was the primary impact of seasonal migration at the household level.

There were marked improvements in the standard of living between seasonal migrants and non-migrants. The seasonal migrant households had televisions, fridges and other electrical equipment compared to non-migrants. This indicates that remittances were invested in consumption purposes.
Changes happened in my house are; we bought telephone, mobile phone, television and other kitchen utensils [MM2]

Because of remittances from seasonal migration, I could send my children’s to school, able to meet my family needs. I could also able to buy clothes for my family and celebrate local village festivals. Now I am repaying back my debt. The wage from seasonal migration helps me to live debt free life [MM1]

Before going for migration, we could buy only very less amount of rice for our consumption...these days the wage from seasonal migration helps me to support family and pay back my debt. Leaving my family is the only difficult situation [MM3]

With the help of my husband’s remittances, I renewed houses for both of my sons. I arranged marriage for both of my daughters... Just like us there are 10 other families they also built houses of their own by earning more from outside [MuV7]

We were very poor; we don’t have decent dress to wear. We have been living in a rented house. After my son migration, we built a house in four cents of land, worth of 3 lakhs. These days there is no problem of dress, in fact we have plenty of dresses [MuV9]

I mortgaged my wife’s jewel in the bank for Rs. 1 lakh to construct house. I have remaining Rs. 30000/- to be paid to the bank with interest. Unless I go to Kerala, I could not repay the loan and retrieve the jewel...Not only for loan, there are some unexpected social obligations would arise where in our caste we need to do a lot. For example, during my mother’s death, we were given three rings of three pounds worth of Rs. 45000. If any need or functions arise from their side, I need to give more than what they did. For which I need to borrow money that should also be repaid. Seasonal migration helps me to meet social obligation and repay my debt....The main drawback is not being able to see my children for a month....I get a wage of
Rs. 500/day. I work in a plantation where we grow pineapple and ginger [PM3]

Because of migration, I could educate my children, one son is going to college, and two of my daughters are studying in 10th and 6th standard. My wife takes care of agriculture and whenever I go to village, I also help her with farming [VM2]

I spend my earnings for family purpose. We buy dress, spend amount for temple festival. We give some money to parents...most of my earnings goes for day to day activities and also for buying food and clothes [VM4]

Now after going for work, we were able to eat three meals a day and all of our basic needs are met by the earnings of my children. We have built our house. I could purchase some gold jewellery for our 2 daughters [VV1]

6.6 Impacts of seasonal migration at village level

6.6.1 Socio-cultural impacts

Seasonal migration often leads to permanent migration. Some interviewees mentioned that seasonal migration is leading to permanent migration which in turn results in a reduced population in the villages. One of the interviewees [PO4] mentioned that seasonal migration leads to changes in the status of the electoral constituents of his village. He mentioned that seasonal migration led to his village losing the opportunity to elect their representative to the regional assembly as follows;

Initially villagers migrated seasonally. When they realised social and economic advantage of living outside village, they started settling at the place of work. This resulted in decrease in the number of families living here. Earlier T. Kallupatti and Sedapatti was joined together for election purpose and was known as “Sedapatti satta mandra thoguthi”. This gave us a chance to have an MLA [Member of Legislative Assembly] for our area and we were getting fund for the development of our area in Kallupatti and Sedapatti [villages]. For the recent election the election commission made a population assessment. Due to migration there were not enough families in
the village and we lost the status of “Satta Mandra Thoguthi” [electoral districts]. Now we do not have an MLA to represent us in the legislative assembly. Presently Kallupatti joined with Tirumangalam and Sedapatti joined with Usilampatti. Now there is reduced flow of funds for us. This is a great loss for our village development [PO4]

Other relevant quotes include;

First they go for work to support their family. They come once or twice a month. Later the frequency gets reduced. They come once in every two or three months. Later they settled at the place of work by taking their family along with them [MO4]

One day villages will disappear due to migration. Then there will be nobody to live in villages [MuO4]

In this village, the villagers first do short term seasonal migration. Later, once they found employment in places such as textile companies they take their family along with them. This way the family will be with them. They keep their traditional home and lands. These properties will be looked after by their parents or relatives. Though this kind of entire family movement is very less but if it happens then our village will disappear one day. For example, our village president moved to a nearby city- Peraiyur which, is 8km from this village. After establishing his business, he moved his entire family there. Now he comes to village once in a month some time once in every two month. He stays here during agricultural seasons such as planting and harvesting after that he move back to the city [PO2]

The interviewees mentioned that seasonal migration is also causing changes in cultural norms of villages. They said that there are behavioural changes with the way seasonal migrants dress, eat and talk with village elders. The lack of unity and respect for elders was mentioned constantly by the villagers as;
Now a day youngsters does not know how to talk and respect village elders. They learnt strange cultures that are foreign to this village [MO4]

Those who went outside to work are not respecting elders and living their life as per their wish without thinking about any one [MV3]

Those days there was a greater unity among villagers. Different castes have elders as their leaders and villagers abide by their leaders instruction. These days hardly anyone listen to either elderly people or village leaders. These people go to urban areas and take their culture and bring back to the village. Seasonal migration is influencing our village culture, relationship between families especially husband and wife....I don’t think seasonal migration helps us in maintaining village culture and family lives [MV3]

They get exposed to various environment and cultures at the destination areas. Bad habits are increasing like drinking habits. Due to these bad habits, families are affected. Then how could village culture develop...there is no unity among villagers. For instance, seasonal migrants won’t pay for village festivals or any common village related purposes. If we go to their home to ask for money they show least interests and respect. They should remember that it is their village too and they have a commitment to look after village common purposes....Probably most of the seasonal migrants work as labourers or does other menial job and their income might be just enough to support their family and that might be reasons for lack of interests in supporting village common activities. These days it is all about money and there are no such things like commitment to village norms and cultures [MV6]

Interviewees mentioned that due to seasonal migration there is a lack of able bodied men and also that villagers were interested in working outside rather than in the village. This reduced number of males has social consequences such as increased incidence of theft in households having only female members. Two of the interviewees [MO6, VO2] mentioned shortage of labourers as follows;
...villagers are not available to work in the village at the same these
villagers are available for a cheap labour somewhere else in urban areas
[MO6]

Due to reduced number of able bodied men in the village there is increased
incidence of thieves in our village. These thieves attack those houses where
only ladies and elderly people lives [VO2]

The other impacts of seasonal migration on social norms of villagers
mentioned included the changing role of caste hierarchy and breaking up of
the traditional extended family structure. Interviewees mentioned that the
improved economic situation of lower caste seasonal migrants enabled them
to buy land from other castes in villages. The other topic was breaking up of
the joint. A joint family consists of parents, their children, and the children’s
spouses and offspring in one household. This system is prevalent on the
Indian subcontinent particularly in India. Villagers mentioned that exposure
to the outside world made seasonal migrants move out of the parents’ home
and start their own life. This change in caste dimension and family structure
was explained by two of the interviewees [PO2, PO5] as follows;

....the other important changes happened here was; earlier lower caste
people could not buy lands. Now a day, remittances helped lower caste
seasonal migrants could able to buy lands. They go outside and earn money
and buy lands. They keep lands idle; construct houses or resell it to real
estate companies [PO2]

Seasonal migration has an impact on joint family. Now a day, villagers
were chasing after money. They want to be rich as quick as possible. There
is no care for elders. They don’t think that it is their responsibilities to look
after elders. The joint family system is deteriorating. These days villagers
prefer nuclear family where husband, wife and their children’s want to live
separately, leaving their parents in their ancestral home...[big breath] I
looked after my parents till their death. When my son married he moved out
and started living along with his wife [PO5]
Some of the villagers also spoke about caste imbalance due to seasonal migration. The initial movement and settling in the destination area of a particular caste from the village causes caste imbalance. For instance in one of the study villages – Paphiapuram village, the village elders mentioned that twenty years ago, the village was dominated and controlled by upper caste such as Brahmins. This particular caste started moving out from the village to various urban areas resulting in a decrease in their numbers. Now there are only three households which belong to this caste in this village.

*In my younger days there were many Brahmins in this village. They controlled the village and also the temples. Slowly they started moving out of village. Now we have only three households living in this village (PO2)*

*I used to work as a household labourer for one of the Brahmin family (higher caste). When one of their children got employment in cities they all moved to cities. They used to come once a year. Now a day they stopped coming here and sold their properties. I think one or two households are left now (PV5)*

While others mentioned that youngsters were questioning village authority and culture. *Now a day youngsters does not know how to talk and respect village elders. They learnt strange cultures that are foreign to this village (MO4)*

*Those who went outside to work are not respecting elders and living their life as per their wish without thinking about any one (MV3)*

*Those days there was a greater unity among villagers. Different castes have elders as their leaders and villagers abide by their leaders instruction. These days hardly anyone listen to either elderly people or village leaders. These people go to urban areas and take their culture and bring back to the village. Seasonal migration is influencing our village culture, relationship between families especially husband and wife....I don’t think seasonal migration helps us in maintaining village culture and family lives (MV3)*

They get exposed to various environment and cultures at the destination areas. Bad habits are increasing like drinking habits. Due to these bad habits, families are affected. Then how could village culture develop...there is no unity among villagers. For instance, seasonal migrants won’t pay for village festivals or any common village related purposes. If we go to their
home to ask for money they show least interests and respect. They should remember that it is their village too and they have a commitment to look after village common purposes....Probably most of the seasonal migrants work as labourers or does other menial job and their income might be just enough to support their family and that might be reasons for lack of interests in supporting village common activities. These days it is all about money and there are no such things like commitment to village norms and cultures (MV6)

6.6.2 Agricultural impacts

The impact on agriculture is another influence of seasonal migration at the village level. Because of seasonal migration, migrants are exposed to new skills and agricultural practices at destinations which are then introduced to the migrant’s village upon return. This transfer of technology was described by the interviewee [MM2]. In some cases there was the introduction of new varieties of crops as mentioned by [MV6].

...because of seasonal migration there was introduction of certain crops and technologies that were not practiced before in the village. Earlier we don’t grow maize and medicinal plants. These crops were introduced in the village because of the exposure of seasonal migrants to outside world [MM2]

Earlier we ate cumbu (millet), varagu (millet), now a day we eat rice. Earlier we cultivate Varagu (millet), kurutah valli (millet), thinai (millet), solam (millet) saamai (millet), cumbu (millet), these days we cultivate market oriented crops such as kadalai (ground nut), mullai (Jasmine flower), thennai (coconut plantation) and tree crops such as maangai (Mango) and thekku (teak)...

The lack of men during the peak agricultural season affected crop cultivation practices in villages. In some cases, villagers opted to change agricultural cropping practices. Crops such as coconut plantation, mango plantation and teak trees are less labour intensive. In certain cases the
villagers left land fallow. Changes in agriculture are described by the interviewees as follows;

_The labour would not be available at lower cost due to other opportunities they have outside which also affects cultivation of pulse crops. The cultivation of paddy also reduced due to large harvesting cost which affects net income out of cultivation of particular crops [MuO3]_

_Agriculture was seriously affected because of the absence of able bodied men. Though these men come back during peak agricultural seasons still some of them would not come back either due to their work commitment at the destination place or they end up losing interests in agriculture because of unprofitability of the agriculture. In fact they earn good wage at destination places than what they earn from agriculture [MO2]_

_S sometime seasonal migrants leave their land fallow. In some cases the land is kept fallow or sold to real estate purposes. This reduces land for agriculture and there by affecting food availability. These days we are purchasing agricultural produces from outside. We used to raise green vegetables and cereals in our lands. Those practices have disappeared and we are buying these vegetables from local market [MO4]_

_Due to less able bodied men in the village, these days villagers are cultivating less labour demanding crops such as flowering crops – Jasmine, coconut plantation and tree crops such as teak [MO5]_

_Due to migration people changed their cultivation from crops to trees (MuV9)_

The interviewees mentioned that part of the remittances was used for investing in agriculture. This investment is either to buy chemical fertiliser or to pay wages for agricultural labourers. This use of remittances for agriculture was described by the interviewees as follows;
I will use remittances remitted by my husband to buy fertiliser for agricultural crops, land preparation and pay wages for agricultural labourers [MV1]

These days due to lack of labourers more machineries are being introduced from planting to harvesting periods [MV2]

Earlier we used bullocks to plough agricultural lands and used organic manure. Now a day we use tractor and chemical fertiliser. My husband remittances were used to pay for the agricultural labourer and buy fertiliser [MV5]

Earlier we use organic manure from our livestock now we have to use chemical fertilizers... the extensive use of chemical fertilizers and shortage of labour resulted in change in crop cultivation. Part of my husband remittance goes to buying fertiliser and paying wages for agricultural labourer’s [MV7]

6.6.3 Land sales

A large scale land sale was noticed in the study area. Mostly people from outside the village bought land then either converted it for real estate purposes or kept them as fallow lands. The conversion of land for real estate was mainly noticed in Paphiapuram and Muruganeri villages. This was probably due to the village’s nearness to cities whereas in the other two villages such land conversion was not noticed, since they were away from the cities and are socio – economically poorer. When I asked who buys the lands and what they do, villagers told me that outsiders, mostly people from urban areas and North India, purchase the lands. The lands are then either kept as fallow lands (land abandonment) or converted for real estate purposes. In Paphiapuram and Manickanenthal villages besides land sale, extensive tracts of land were either infested with the weed Prosopis, or left as fallow lands [Figure 15]. When asked why the lands were infested with Prosopis I was told that it was because of drought, non-profitability of farming and some of the land owners were living outside the village who do
not bother to practice farming. The interviewee below highlights land sale and its conversion for real estate purposes:

There is change in ownership of lands as they could not manage and maintain their lands due to absence of family members in the family......Yes, people are selling their lands to local people and also to people from other states. The widespread land sale started from 2007 onwards because of lack of rainfall. Those who buy the lands keep them idle and some of them divide the lands in to plots and resell it for the real estate purpose (Mu01)

Mostly people sell it to real estate persons. The government schemes are not strict enough to control the conversion of agricultural land to housing plots (Mu05)

The younger generation who settled outside the village is not interested in doing agriculture and so they sell their lands. The rich people from nearby towns and cities bought cultivable lands and left it remains fallow which reduced the intensity of agricultural cultivation in our village (MuV8)

Lots of lands were converted for real estate purposes. This is a very recent phenomenon. Earlier we could not sell it for Rs. 2,000/acre, now people are ready to buy lands for Rs. 20,000/ cent of land. It became a business. Farmers could not maintain their lands as there is no rainfall. When there are emergency needs like marriages or other huge expenses they will sell their land in order to meet their needs (PO2)

The villagers were attracted by increased wages given by factories and mills. Hence, we were forced to give higher wages to retain workers for agricultural works which was not possible all the times for farming families. Due to this problem, the number of acres cultivated land has been reduced considerably [MuV8]

...Yes, changes are happening such as conversion of agricultural lands into construction lands. Many people in village have sold their land. If you visit our village again in five years there will be no land for cultivation. All lands will be turned into construction sites. Villagers sell lands in order to meet expenses such as marriage, education, support business of their children’s
or they sell lands and deposit money in the bank. Here, the real estate people are buying lands for commercial purpose. Some migrants who work abroad also bought lands. Those lands are lying idle. The increase in money among seasonal migrants is causing changes in landholding pattern in this village [PO1]

![Agricultural lands infested with Prosopis.](image)

6.6.4 Tank degradation

In the interviews, the interviewees mentioned that seasonal migration has had some impact on tank degradation. In their view, seasonal migration has created a lack of interest among young adults to take responsibilities for tank maintenance. The higher wages from seasonal migration reduced the dependency of seasonal migrant families on the social culture of villages, including cultural responsibilities for tank maintenance. Access to more income gave them the freedom to question village hierarchy and rules imposed by the village elders. Some seasonal migrants have their own wells and powered pumps and hence showed less interest in tank maintenance. The influence of seasonal migration on tank degradation was described by the interviewees as follows:

....Seasonal migration affected tank maintenance. Earlier there was unity
among villagers and they looked after tank bunds. These days there was no unity among villagers and this led to neglect of tank [MO1]

My father was a Thalyari [Tank manager]. After my father’s retirement, I didn’t become Thalyari but went to Thiruppur to work in textile factory. These days it is hard to run our live by depending on income from tanks. The lack of interests from us leads to tank disintegration [PM1]

Earlier specific leaders from each caste involved in tank maintenance. For instance, lower caste was involved in water allocation to each farm lands and higher caste was involved in collection of revenues from tank. In my days tank was used for multiple purposes. We used tank bunds to raise tamarind trees; later these trees will be leased to the interested parties to collect fruits. The lease money will be used for tank renovation and for village festivals. We also raise fish in the tank water that is another source of revenue for the tank maintenance. Lately such practices are not seen due to lack of interests among young generation. There is general lack of unity among villagers these days. They go to nearby cities and work in the companies and earn more money [MO1]

Because of seasonal migrants, villagers have more money and they are not interested in looking after tank and its maintenance [MO2]

Villagers who have access to more income started constructing their own well and energized pump sets. These people won’t participate and contribute money to tank maintenance that resulted in tank abandonment [MO4]

Besides seasonal migration, the government policies also had important influences on the present status of tank. The government alienated us from our tank [PO1]
6.3.1 Impacts at destination

Due to time constraints, only seasonal migrants were interviewed at the destination areas. Therefore this section highlights the impacts of seasonal migration on individual seasonal migrants at the destination.

Seasonal migrants reported issues they were facing at the destination areas. The frequently mentioned issues included difficulties finding employment immediately after reaching destination [MuM2; PM3; VM2]; lower wages [MaM1; VM4] and wages not paid on time [MuM5; PM3; PM4].

I couldn’t find job immediately. I struggled a lot to get my job. There are too many people here [MuM2]

The employer knows we are migrants so they won’t give us job. You have to know people to get employment in this locality [PM3]

It took me almost a month to get this job in the textile company. Initially they took me as casual labourer. After a month, they considered me as reliable and gave me regular job and the wage also increased. Now I am earning Rs 200/day [VM2]

I have to work long hours and the wage was also low. Since I am a migrant, my employer has an upper hand [MaM1]

I come to work early morning and work till late evening. The salary is not that high. My boss knows that I am new to this area and am a migrant. I have no choice other than obeying my boss order. Some time I have to work without wage. I get paid when my owner have money to pay my wage [VM4]

Since being a migrant I won’t get paid regularly. My owner says, wait, I pay next week. This goes on till he have money to pay my wage [MuM5]

I work as an agricultural labourer. My wage was on a daily basis, however my employer pays me only when he have money to pay my wages [PM3]
I get paid only on the day of my village visit. So instead of getting wage every day, I get paid once in every 20 days or in a month. If there is urgency then I have to ask my employer [PM4]

In order to save money, seasonal migrants stayed in unhygienic places where basic facilities were missing such as toilets and bathrooms. In one of the places that I visited there were seven migrants sharing a room. Some seasonal migrants were sleeping on construction sites, roofs and railway stations. Here, the motive was to save as much money as possible. In some cases employers provided food and accommodation. The motives of employers were to reduce their expenditure by reducing wages of seasonal migrants in return for food and accommodation. However seasonal migrants mentioned that food and housing arrangements were often of low quality. Seasonal migrants mentioned that they did not object to the quality of food and accommodation provided for the fear of losing jobs. The interviews below highlighted issues faced by seasonal migrants;

*We rented a small room where 7 of us stay in that room. It is very crowded and it is not very clean either* [MuM4]

*The employers asked us to stay in their rented place. It is a very small thatched house. The facilities are very basic and minimal. If it rains the water will come inside* [PM3]

*We been given a room but for basic necessities like toilet, we have to go outside in nature* [MM2]

*Our employers provide three meals per day, they are of low quality. We cannot say anything for fear of losing our employment. The meal expenditure will be deducted from our salary* [VM3]

### 6.7 Conclusion

This chapter addresses the impacts of seasonal migration were explored at the household, individual and destination levels. The data presented shows
that the impacts were both positive and negative in nature. The types of impacts varied across the villages. It is very difficult to say which impacts (positive and negative) outweigh the other. The economic benefits are many and are positive in nature whereas the social impacts seems to be negative in nature. In the next chapter the impacts of field findings with the existing literature will be discussed.
Chapter 7: Discussion and conclusion

7.1 Introduction

This chapter discusses the main points arising from the data chapters (Chapter 4, 5 and 6) thereby addressing the research questions. The three main research questions are; Extent, Drivers and Impacts of seasonal migration in tank irrigation communities. The field findings will be compared and contrasted with existing literature and their relevance with the existing literature and theoretical implications of the research will be discussed. On the basis of field findings this chapter concludes by offering scope for further research in order to better understand the dynamics of seasonal migration. The field findings were used to examine key implications of seasonal migration at the village level. This chapter also offers suggestions for further research on seasonal migration of villagers, the significance of the research and limitations.

7.2 The extent of seasonal migration in tank irrigation communities

One of the characteristic features of tank irrigation dependent seasonal migrants was they tend to be middle aged and more educated than non-migrants. This finding agrees with existing studies on age of seasonal migrants (Breman, 1985; Racine, 1997; Rogaly, 1998; Rogaly et al., 2001) whereby middle aged villagers need to migrate due to their current life stage, lack of employment opportunities in order to support their families. However, the higher proportion of educated migrants found in this study disagrees with other findings on educational qualifications. Existing literature suggests that seasonal migrants are mainly illiterate or have minimal education (Deshingkar, 2006b). In the villages studied here, the decision of educated villagers to migrate could be influenced by the very low socio-economic status of the villages where employment commensurate with their qualification is nonexistent. For these educated and literate people, urban areas offered much greater employment opportunities that were more appropriate to their level of education. Thus urban areas acted as a pull factor in attracting educated and literate villagers from rural tank irrigation villages.
Similar to other studies (Rogaly et al., 2001), this study also observed that seasonal migration of males was higher than seasonal migration of females. This could be explained by the patriarchal nature of rural Indian villages evident in tank irrigation communities. In rural Indian villages, men are expected to find employment in order to support family and women are expected to look after their family and children (Mencher, 1988). This trend was observed in the four tank irrigation dependent villages selected for this research work. However, this study also found that a significant proportion of young females were undertaking seasonal migration in order to save money for their marriage, similar to findings of other research (Solidaridad-South & South East Asia, 2012).

Other studies note that female seasonal migrants are usually older women (Conolly et al, 1976; Bhagat, 2005; Bhattacharya, 1998; Greenwood, 1971, 1975) and due to family commitments these women prefer to do short distance and short duration migration (Janvry & Sadoulet, 2001), however this study shows that female seasonal migrants from tank irrigation communities tend to be younger females. This is most likely due to the very low socio economic status of the villages making the marriage schemes popular in the study areas. In the context of these schemes private organisations employ young female seasonal migrants and help them to save money for their marriage expenses. In Indian culture, especially in rural villages, dowry payment of bridal prices to the groom is one of the important aspects of the marriage ceremony. The bridal prices vary from cash to gold or both. Since these young women are of low socio-economic status, one of the main ways of raising money for marriage expenses was through seasonal migration. Many of the young women in this study explicitly noted this was an important reason for their seasonal migration. They are aware of the fact that the chances of working outside their village after marriage will be remote. For these young women, this is an opportunity to work outside their village in order to get experience and to earn money.

Similar to other studies (Caldwell, 1968; Deshingkar & Start, 2003; Janvry & Sadoulet, 2001) this study also found that larger families have at least one
family member acting as a seasonal migrant compared to smaller families. This phenomenon of larger families having one seasonal migrant could be due to the ability of a larger family to take the risk of sending one of their family members to urban areas for the extra income. This is an income diversification strategy adopted by rural families. This enables them to adapt to the uncertainty of depending on only one source of income. Perhaps this explains why rural villages have proportionally more male children. Though there are various reasons proposed for the preferences of male children over female children in India (Clark, 2000; Gupta, 1987; Rosenzweig & Schultz, 1982). One of the reasons for this preference is the earning potential of a male as a migrant.

From the social category analysis (Chapter 4), this research shows that a higher proportion of Backward Caste (48%) and Scheduled Caste (29%) members were undertaking seasonal migration compared to Most Backward Caste (23%). This observation is in agreement with other studies (Deshingkar & Start, 2009; Dayal & Karan, 2003; Karan, 2003). The higher proportion of seasonal migration among Scheduled Caste and Backward Caste was to escape poverty and also escape from caste based oppression (Mitra & Murayama, 2009). The higher proportion of Scheduled Caste as seasonal migrants was found to be due to their better access to a good social network at destination places, more mobility than other social groups, and fewer opportunities for them in the village because of their social category.

This research found that the proportion of seasonal migration is relatively high among small landholders. This is in agreement with literature (Connelly et al 1976; De Haan, 1999b; Kuhn (2005). However there is other research arguing that mostly landless people migrate (Mendola, 2008). Reasons given for this include; poverty (de Haan & Rogaly, 2002; Gardner & Osella, 2003; Breman, 1996), lack of employment (Conoll et al.1976; Deshtingkar & Start, 2009; Haberfeld, et al., 1999; Krishnaiah, 1997; Rogaly, et al., 2001) and support family (Rogaly, et al,2002; Rao, 2001; De Neve, 2000). Unlike farmers, these landless people are not tied down to land, they could move to whatever employment opportunities are presented. However the contrasting findings from this study could be explained by the
fact that seasonal migration requires certain levels of resources such as capital and social networks. In these communities, the very low socio economic status of the villagers may mean that the landless people do not even have the minimum resources required to undertake seasonal migration. For those with land ownership, owning land acted as a motivation to participate in seasonal migration. Small landholders were motivated by the opportunities to earn an extra wage outside their village. The extra wage could be used to invest in agriculture. For the tank irrigation communities, small land holding size and seasonal nature of agricultural practices acted as push factors.

Literature on internal migration (National Sample Survey Organisation, 2010) suggests that rural to rural migration will be higher than rural to urban migration. Possible reasons given by researchers include ease of returning home (Breman, 1985; Keshri & Bhagat, 2011) and lack of networks outside the village (Breman, 1996; de Haan, 1999; Deshingkar, et al., 2008; Gardner & Osella, 2003; Ronald Skeldon, 1987). However this study shows that urban based seasonal migration is higher than rural based migration. This could be due to various reasons however it is most likely related to the low socio economic status of the surrounding rural area which may mean that the attraction of urban areas is greater in these communities than in other regions.

Data analysis indicated that a majority of the seasonal migrants worked in informal sectors which align with existing literature (Harris & Todaro 1970; Thanh, Anh, & Tacoli, 2004). The literature suggests one of the possible reasons is ease of finding employment within their social network or being able to work in the same sector, and this agrees with the results here. The other possible reason could be that informal sectors outnumbered formal sectors in the region surrounding the villages.

The income analysis of those who moved to urban areas and those who moved to rural areas indicated that those who moved to urban areas were earning more than their rural counterparts. This is expected and in line with other literature (Hicks, 1963; Harris & Todaro 1970; Thanh, Anh, & Tacoli,
It is a common observation that urban areas offer higher wages compared to rural areas due to the existence of capital intensive companies. Even though urban areas offer higher wages compared to rural areas due to the existence of capital intensive companies, in some cases employers can collude and keep the wages down making it a more complex phenomenon. The high competition in urban areas forces employers to pay more for the workers. The mean distance travelled by the villagers in search of employment was 440 km. Besides the preferences for urban areas, it seems that particular destinations are more popular than others. This could be explained by the influence of social networks in addition to improvements in the transport network. For instance, in the study areas 21% of seasonal migrants went to Thiruppur; followed by 19% to Madurai. In the interviews the interviewees mentioned that they moved to that particular destination because of social networks. This confirms the influence of social networks in attracting migrants to particular destinations as cited by other researchers (Mitra, 2010; Haug, 2008; de haas, 2010b; De Neve, 2000).

The income analysis of seasonal migrants and non-migrants suggested that seasonal migrants had higher and multiple sources of income compared to non-migrants. Seasonal migrant households were receiving income from remittances, agriculture and farm animals. However non migrants do not have access to remittances. This research also found that remittances contributed a significant proportion (25%) of total household income (Refer Chapter 4). Thus this study confirms that seasonal migrants have more access to income compared to non-migrants and this is in line with other findings (Amjad, 1989; Firman, 1994; International Organization of Migration, 2005).

The income analysis also indicated gender differentials in remittances behaviour. There is a limited numbers of studies on remittance behaviour of male and female seasonal migrants (Tumbe, 2012; Ye, Wang, Wu, He, & Liu, 2013). However those that are available indicate that male seasonal migrants remit more than female seasonal migrants (Rosenzweig, 2005; Rosenzweig, 1989). The patriarchal nature of Indian society necessitates that males should earn in order to look after the family. However this study
shows that female seasonal migrants remit more than male seasonal migrants suggesting that increasingly females are also taking the responsibilities of looking after their family. It is difficult to explain this finding compounded by the lack of studies on gender based remittances in South India.

Another important finding and implication of seasonal migration found in this study, and also found in other studies, was the effect of the change in employment before and after seasonal migration. Before seasonal migration most of the migrants worked as farmers and agricultural labourers but at the migrant’s destination employment was mainly in non-agricultural sectors. This change in employment at the destination areas also acts as one of the discouraging factors for the migrants to lose interest in farming (Mitra & Murayama, 2009; Dayal & Karan, 2003) and although seasonal migrants practice farming when they return there is often a lack of enthusiasm. This may result in a desire to develop less intensive crops such as Jasmine flower, coconut, mango or teak plantation which may lead to a change in farming practices.

Summer seems to be the popular season for seasonal migration. The seasonality calendar developed through participatory rural appraisal (PRA) shows that seasonal migration is occurring mostly during the agricultural lean season (See Chapter 3). This finding is in agreement with other research findings that seasonal migration occurs when the villagers could not find employment from agriculture (Nelson, 1976; Breman, 1996; Deshingkar & Start, 2003). The reason for more seasonal migration during this phase was due to the seasonal nature of agricultural crops. Once harvest is over, there are limited employment opportunities for villagers and seasonal migration was one of the important alternative ways of finding employment and support their livelihood. This finding was in conformity with other studies (de Haan & Rogaly, 2002; Gardner & Osella, 2003).

7.3 Drivers of seasonal migration in tank irrigation communities

The influence of social, economic and cultural factors in seasonal migration in tank irrigation communities was established in the data analysis chapter
(Chapter 5). There are both push and pull factors which drive tank irrigation villagers to migrate. Here, I will be mentioning the important social factors indicated in this study. Thus the five important social factors influencing seasonal migration in tank irrigation communities are; family support, marriage savings, alternative livelihood strategy and poverty. These social factors act as push factors in driving villagers in search of employment elsewhere. The important pull factors are; entertainment/bright lights, friends, social amenities and social networks.

Apart from social factors, there are economic factors that also act as push and pull factors. The five important economic push factors in tank irrigation communities are; low wages, lack of employment, low profitability of agriculture, debt and small size of land holdings. These economic factors acted as a push factors in driving seasonal migration in villages.

The other major push and pull factors are cultural factors. The important cultural factors pushing tank irrigation communities are; tank degradation, changing attitudes of young adults, influence of friends, caste tension and a search for modern life styles. In the interviews, I was informed that immediately after high school, young adults learn to drive then search for employment elsewhere preferably in urban areas. I was told this trend is most popular among young adults. Thus migration as a culture was growing in rural villages especially among young adults.

Even though there are push and pull factors that influence tank irrigation communities to migrate it is still very complex to explain. For instance, this research seeks to address the existing controversies on who makes the decision to migrate and whether it is an accumulative or coping strategy? The semi-structured interviews indicated that the decision to become a seasonal migrant was either at the individual or household levels. This finding was in conformity with existing literature which argues that the decision to become seasonal migrants was either at an individual level or at a household level, but not both (Seto, 2011; Harris & Todaro, 1970). This research found that individual decisions are made mostly by married men. They first decide to become seasonal migrants then inform their wives, though household level decisions were also observed. In young adults in
this study, it seems that decisions to become seasonal migrants are made at household level. However it is not always the case. Sometimes there are individual decisions also. For instance one interviewee said that he decided to become seasonal migrants after failing in school.

The decision to become a seasonal migrant is both an accumulative and coping strategy in tank irrigation communities. This is in contrast with existing literature that argues that seasonal migration is a coping strategy (Deshingkar, 2009). In my view both strategies are valid. The coping strategy was mostly observed among farming and agricultural labourer communities in order to escape from agricultural failure, poverty and debt. Once the harvesting period is over there are not many employment opportunities in these farming communities. The only livelihood option to support their family was to do seasonal migration to adjacent cities.

The accumulative strategy was seen mostly among educated young adults and also among businessmen. Here, the motive was to earn higher wages at the destination places. Though they had the opportunity to get employment in villages they opted to migrate in order to earn more and save more income.

7.4 The influence of government policies on seasonal migration

The Indian and regional governments have implemented many schemes in villages in an attempt to discourage seasonal migration. Traditionally governments view migration as an unwelcome phenomenon (de Haan, 1997a; Huang Ping & Shaohua, 2005; Roberts, 1997; Wu, 2002; Zhang & Song, 2003; Zhao, 2004). They see migration putting pressure on urban amenities, creating urban poverty and an imbalance in demography (Rogaly, 1998). Some countries such as China are actively involved in stopping internal migration known as the hukou system (Huang Ping & Shaohua, 2005; Wu, 2002; Zhang & Song, 2003; Zhao, 2004). The Indian government is indirectly involved in discouraging internal migration. One of the strategy was by giving preference to local people for employment and also by implementing employment generating schemes in the villages. One of the schemes was the Mahatma Gandhi National Rural Employment
Guarantee Scheme (MGNREGS) implemented in the villages in this study. The semi-structured interviews indicated that the scheme was ineffective in preventing migration. The villagers cited corruption and low wages as important reasons for failure of the scheme in preventing seasonal migration. This finding was in conformity with other findings (Sjoblom & Farrington, 2008). It seems that for effective implementation of the scheme, the government has to ensure it is transparent, corruption free and must offer a competitive wage. Two of the important criticisms about the scheme is that it harms agriculture since most of the scheme work coincides with peak agricultural activity thereby making fewer labourers available for agricultural work. The other criticism about the scheme was that it just results in public spending without asset creation. The villagers view this as a government scheme aiming to help them whether they work or not. For instance, when the researcher was in the village, most of the villagers were undertaking social activities with limited accountability.

7.5 Theories explaining seasonal migration in tank irrigation communities

Both colonial and neo-colonial migration theories explain seasonal migration in tank irrigation communities. In the context of my work, I will use three migration theories which best explain seasonal migration among tank irrigation communities in this study.

One of the colonial migration theories which explain seasonal migration among tank irrigation communities is Ravenstein’s laws of migration (Ravenstein, 1885). Economic factors played a key role in the decision to become a seasonal migrant and it is the individual’s decision to maximise opportunities from the economy (Harris & Todaro, 1970; Lewis, 1954). Seasonal migration sometimes leads to permanent migration. Before migrating long distances, migrants first move a short distance then move to big cities. This is called step migration and it was noticed in this study among tank irrigation communities. The distance to destination areas played a crucial role in this process with the number of people migrating to destination areas inversely correlated with distance to the destination. The
seasonal migration pattern and extent confirms that Ravenstein’s law of migration is applicable to the tank irrigation communities.

Among other migration theories, the Todaro model of rural to urban migration (Harris & Todaro, 1970) seems to also explain aspects of seasonal migration among tank irrigation communities. Seasonal migration among tank irrigation communities was for an expected income instead of actual income. The villagers are expecting that they will get certain amount of income if they become seasonal migrants, though in reality this may not be true. Thus income motivation is an important influence of seasonal migration. Even if there are no employment opportunities in urban areas, villagers will still migrate expecting that they will find employment someday. This may contribute to the formation of urban slums and urban poverty (Harris & Todaro, 1970). These phenomena found in seasonal migrants of tank irrigation communities are similar to those predicted by Todaro model of rural urban migration.

The third migration theory that explains aspects of seasonal migration among tank irrigation communities is new economics - especially survival migration (Parnwell, 1993; Hugo, 1983). Seasonal migration among tank irrigation communities is a survival strategy where villagers want to increase their income from different sources. Here the decisions are made at household levels. The income earned outside might be used for household consumption and investing in agriculture. One of the theories under new economics is survival migration. Here people migrate because of distress. Seasonal migration among tank irrigation communities was often reported to be in response to economic distress (refer Chapter 5). Thus the survival migration under new economics also explains seasonal migration behaviour among tank irrigation communities.

7.6 Impacts of seasonal migration at individual, household and community level

There are both positive and negative impacts of seasonal migration at individual, household and community levels. The important positive impacts at individual levels are exposure to the outside world, skill
development and meeting new people and making friends. Seasonal migration offers villagers an opportunity to go outside and meet new people and witness changes happening in society. Through seasonal migration, villagers were able to acquire new skills, information and knowledge that they could apply in their village when they return to villages. These findings are similar to existing literature on impacts of seasonal migration (Amjad, 1989; Firman, 1994; Thanh, Anh, & Tacoli, 2004). These positive impacts on individuals have an influence on the village’s overall development where seasonal migrants after returning to the village implement skills acquired outside that have an impact on overall village socio-economic development. For instance, some of the villagers implemented the agricultural cropping practices they learnt while being seasonal migrants.

Negative impacts related to seasonal migration include stress/depression, changing food habits and to a certain extent acquiring smoking and drinking habits. The psychological stress of living away from family was mentioned by many seasonal migrants in the semi-structured interviews. This observation was in line with existing literature (Connell et al, 1976; Mitra & Murayama, 2009; De Haan, 1999a). However the literature does not highlight acquired bad habits and changing food habits among seasonal migrants. These changes are highly context specific or in other words they are highly individual centric and hard to generalise.

The other major negative impact of seasonal migration at community level is tank degradation and neglect of tank irrigation uses and their management. Already tank irrigation was facing severe challenges because of changes in farming practices, decreased rainfall pattern, indifferent attitudes of well owners in tank management and decreased interests among villagers in management of tank irrigation structures, exacerbated by seasonal migration. Chapter 6 reported the decreased interest in tank management among villagers. The lack of interest in practicing agriculture among villagers especially among young adults was seen as a major influence in tank deterioration. In Chapter 5 interviewees mentioned that decreased profitability of farming and high wages in the urban areas as main reasons for seasonal migration and neglect of tank irrigation.
Tank irrigation is one of the important assets to the sustainability of agriculture for South India (Anbumozhi, Matsumoto, & Yamaji, 2001). Realizing the importance of tank irrigation to the region, governments have encouraged tank renovation and management. One of the government policies to renovate tank structure is employing local people through Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS). However this research has indicated the ineffectiveness of the MGNREGS scheme (Chapter 5).

Thus one of the important findings of this research is that seasonal migration is leading to further deterioration of tank irrigation and their management.

7.6.1 Impacts of seasonal migration at household level

Similar to individual level impacts, there are positive and negative impacts of seasonal migration at the household level. The important positive impacts of seasonal migration are improved economic condition, debt free lives, prestige and respect, and an ability to meet other social obligations. Seasonal migration has a big influence on poverty reduction. The higher wages earned at destinations were used to eradicate poverty and pay off the debts of migrants. One of the important drivers of seasonal migration was to escape from poverty.

Another important positive impact was an increase in spending on consumer products such as televisions, fridges, clothes and food. Seasonal migrants also used remittances to build bigger houses and purchase farm animals. This is aligned with existing literature (Murphy, 2006; Lakshmansamy, 1990; Oberai and Singh, 1980). However this increased spending has an impact on inequality. This observation is aligned with existing literature where others argue that seasonal migration increases inequalities (Mahmud & Osmani, 1980; De Haan, 1999a; Stark & Taylor, 1991). Other research argues that since mostly poor people undertake seasonal migration, inequalities would be reduced. However in this research, it was observed
that seasonal migrants tend to have infrastructure which compounds the extent of inequality in the villages.

The negative impacts of seasonal migration at household levels include an increase in psychological stress and pressure among wives and children, and changes in cropping pattern. When the male head of the family was absent, there was increased pressure on females to look after the family and farming. The absence of the male had negative impacts on households where the females had to do all the household activities. This observation is in line with existing literature (Connell et al, 1976; Irfan, 1986; De Haan, 1999). For instance in the semi-structured interviews, some of the female interviewees mentioned that the absence of their husbands not only affected them psychologically and mentally but also their children’s lives, especially their education. They said that children were not performing well in their studies because they were not able to give enough attention to their children’s education due to the increase work pressure. Also children had to help them with their household activities. In rural Indian villages, it is the men who do household work such as looking after their children’s education, helping them with studies, taking them to school; look after other household obligations such as paying electricity bills, and purchasing stationary items for houses. In the absence of men, these duties have to be carried out by women increasing pressure on their lives.

7.6.2 Impacts of seasonal migration at community level

The important positive impacts of seasonal migration at the village level the introduction of new skills and ideas, investment in agriculture, revival of the local economy (Russell et al, 1990; Taylor et al, 1996; Massey et al, 1993), caste disintegration (Levitt, 1998; de Haas, 2010; Lipton, 1980; Massey, 1990) and improvement in livelihoods (Amjad, 1989; International Organization for Migration, 2005; Conroy et al, 2001; Thanh, Anh, & Tacoli, 2004). Seasonal migrants have an opportunity to learn new skills and ideas at the destination places. Once they return to their village, they implement those ideas. In the interviews some of the interviewees
mentioned that because of seasonal migration there was an introduction of new crops and cropping patterns in the farming culture of villages.

Another positive impact is that the remittances will be spent in villages which help to revive the local economy. The migrants said that they spent their income in the villages by minimising their expenses at destination places. This suggested that the contribution of a seasonal migrant’s remittances to reviving the local economy, particularly via investment in agricultural practices is significant. The revival of agriculture results in a sprouting of other allied sectors. This finding was in accordance with existing literature (de Haan & van Rooij, 2010; Massey, et al., 1993; Taylor et al., 1996).

Caste disintegration and improvement in livelihoods, especially overall quality of lives in villages, is considered to be another important positive impact of seasonal migration. In the semi-structured interviews some of the lower caste seasonal migrants mentioned that because of seasonal migration their livelihood improved resulting in an increase in their social status and acceptance among higher castes. Existing literature has mentioned the improvement in livelihood of migrant families compared to non-migrant families (International Organization for Migration, 2005; Deshingkar, 2005; Godfrey et al., 2001; Conroy et al, 2001; Luttrell et al., 2004).

The negative impacts of seasonal migration at village level include tank abandonment, absence of able-bodied men, abandonment of traditional practices, inequalities, land abandonment and land sales leading to land absentee ownership (Nayak and Robson, 2010; Aide & Grau, 2004; Cocca, Sturaro, Gallo, & Ramanzin, 2012; Gellrich, Baur, Koch, & Zimmermann, 2007; Qin, 2010; Qin & Flint, 2012; Connell et al (1976). Seasonal migration leads to tank abandonment and tank disintegration. This happens because those who become seasonal migrants showed least interests in the upkeep of tanks and refuse to contribute money for tank rehabilitation work. The other reason is those who have enough money constructed their own wells for irrigation purposes. These people refuse to pay for, and participate
in, tank amelioration works. This led to tank abandonment and deterioration.

The absence of able bodied men and young adults were mentioned as other important negative impacts of seasonal migration. The villagers mentioned that because of seasonal migration there were less able bodied men. Consequences of this include an increasing crime rate in households occupied by only females and children. There was an absence of able bodied men and young adults during village festivals which affected village enthusiasm during these times and also the contribution of money to village festivals. Though the literature has talked about changes in social norms (de Haas, 2010; Lipton, 1980; Massey, 1990; Gardner & Osella, 2003) there is no mention of a deterioration of village social life such as village festivals because of seasonal migration.

7.6.2.1 Land abandonment - absentee land ownership and land sale

One of the negative impacts of seasonal migration at village level was land abandonment (absentee ownership) and land sales. This finding was in agreement with the literature (Aide & Grau, 2004; Cocca, Sturaro, Gallo, & Ramanzin, 2012; Gellrich, Baur, Koch, & Zimmermann, 2007; Qin, 2010; Qin & Flint, 2012). The reasons for land abandonment among seasonal migrants included loss of interest in practicing farming in favour of high wages at destination areas. In some cases the priority changes, that is instead of practicing active farming they will be undertaking passive farming. Here, active means growing labour intensive crops such as rice and cotton and passive means growing less labour intensive crops such as coconut, mango and teak plantations. Since land is a symbol of status most of the villagers prefer to keep land instead of selling it. Mostly females look after farming when it demands less physical work, as is the case with less labour intensive crops. In some cases the land will be leased to relatives or local villagers for a price. In the study area land was kept either as idle or growing less intensive crops.

In some cases the land was sold. The buyers of this land will be either another farmer or real estate companies. One of the growing lucrative
markets in India is real estate. Agents purchase land from villagers and convert this land for construction purposes. Indian laws require that agricultural lands should not be converted for real estate purpose but due to weak law implementation, land is often sold to real estate companies. Thus this research confirms others finding that seasonal migration leads to land abandonment and land sales in villages.

7.7 **Significance of the research**

The significance of this research could be summarized in four aspects: Firstly this is the first study examining seasonal migration in tank irrigation communities.

Secondly, most studies on tank irrigation focussed on the economic utility of the tank structure; moreover there are limited studies exploring tank irrigation and livelihood improvement and this is the first study examining tank irrigation communities from a social science perspective (Jegadeesan, M., & Fujita, K., 2009; Karthikeyan, 2010; Fujita, K., 2011; Jegadeesan, M., & Fujita, K., 2011). This study is important considering that 60% of the tank dependent communities are poor and tank irrigation plays a very critical role in their livelihood improvements.

Thirdly, this study contributes to the existing knowledge on seasonal migration and urbanization. The research also applied existing theories on migration and concludes that although there some migration theories that are applicable to the study context, it is timely to develop theories on migration by taking India as case study example. This study specifically highlighted the impact of modernization and the failure of government development policies to discourage seasonal migration among tank irrigation communities. Through this study an understanding of the impacts of seasonal migration and urbanization on traditional social and cultural norms of the village structure were also highlighted.

This study also made use of existing theoretical perspectives on seasonal migration which helped to analyse the complicated and intermingled relationship between state policies, social contexts, economic constraints, household and individual demand and aspirations. The research presented
offers new perspectives on seasonal migration utilising tank irrigated communities as a focus. For instance, this study found that seasonal migration is happening not only because of distress migration but also because of development oriented migration. The distress seasonal migration was happening mostly among agricultural farmers and middle aged married men where as the developmental oriented seasonal migration was happening among educated young villagers who could not find employment for their educational qualifications in addition to those who seek to live a city based lifestyle.

Finally this study provides an insight for future social policy making and also helps policy makers to find existing policy loop holes and modify accordingly. This research also helps in the understanding of seasonal migration since it was undertaken at a grass root level by focussing on one of the poorer communities who depend on tank irrigation for survival. Therefore, this research is timely since studies suggest that internal migration is showing increasing trends.

7.8 Recommendation for future research

There are several ways future research could build up on based on the findings presented. More research on seasonal migration at village level is needed in order to better capture the phenomenon. It is also noted that there are no studies focussing seasonal migration of tank irrigation communities. One of the strongest suggestions is to study seasonal migration of tank irrigation communities in India as a whole. Since tanks are widely presented in South India there is a need to undertake in depth research on seasonal migration of tank irrigation communities in South India. The other possible suggestion is to undertake research on seasonal migration among farmers, the role of irrigation and farming to influence seasonal migration, the role of government policies in seasonal migration, and the regional differences in trends and extent of seasonal migration.

There is no in depth research on the applicability of migration theories on seasonal migration especially on South Indian seasonal migration. It would
be interesting to study the influences of seasonal migration on rural restructuring that is currently underway in the Indian rural landscape.

The different drivers of seasonal migration based on gender and age also needs further study. There is also a need for collaborative and cross disciplinary studies on seasonal migration as seasonal migration happens for a variety of economic, political, cultural, social and demographic reasons. All these disciplines should combine in order to better understand seasonal migration. Though there are a couple of studies on seasonal migration as a response to distress, there are no studies on development induced seasonal migration among villagers, especially among village youths. The exploitation of seasonal migrants, especially women seasonal migrants, by the employers is another potential area of research.

Though migration theories explain the reasons behind migration, most were formulated for international migration. These theories were later applied for internal migration therefore migration theories for seasonal migration are areas of potential further research. I will argue that there should be migration theories for seasonal migration exclusively for Asia taking India as a case study example. It is possible that drivers of migration in Asia might be different from other parts of the world.

This research highlighted the pitfalls of existing migration theories. For instance, to explain seasonal migration among tank irrigated communities, this research made use of both classical and neo-classical economic theories of migration. However some short comings were observed. For instance, the study areas of Paphiapuram and Muruganeri villages were similar in terms of socio-economic development but there were a greater number of seasonal migrants from Muruganeri village than Paphiapuram village. If the wage differentials were the main drivers behind migration then the migration rate should be equal from both villages. This suggests that the neoclassical theory fails to account for the differences in migration rates from these two villages. Even though wage differentials are a good first indicator to understand migration decisions at the individual level, they are insufficient to explain the dynamics of migration happening in the villages. Similar to
other studies (Faist, 2000; Dustmann et al. 2003; de Haas 2008; Massey et al. 1998), the empirical evidence also indicates that it is not the poorest of the poor migrating. However the neoclassical argument says that it is the poorest who become migrants (Massey et al. 1998).

The other migration theory, new economics, was utilised predominantly to explain migration. The theory argues that the reasons for migration are both economic and non-economic considerations (Todaro & Smith, 2006). However this theory is criticised for its conceptual (Arango, 2000) and empirical grounds (Massey et al. 1998).

Other pitfalls with existing migration theories are that the theories were developed based on the migration processes in developed countries. Since the 1960s post-industrial migration has emerged as a global phenomenon. The increase in migration was made possible by the reduced costs of transportation, cheaper and rapid communication, increasing governmental intervention, increased circularity movements due to trade interdependence and globalization (Arango, 2000 & Massey, 1999). These changes in society necessitate that migration and migration theories have to be analysed in a broader regional scale.

The other drawbacks are that existing theories generally ignore immobility and do not explain reasons for lack of migration, and also that most of the migration theories suffer from a receiving regions bias and fail to explain the factors in sending regions and how these factors combine to produce different migration outcomes. They also fail to explain simultaneously the origins of migration and the degree to which it perpetuates or mitigates. It is argued that very little theory testing has been carried out in qualitative comparative work (Favell, 2008; Hollifield, 2008). Scholars such as Arango (2000) noted that migration theory development has hardly been cumulative. History of migration theory shows that migration theories were developed from separate unconnected theories, models or frameworks instead of a cumulative sequence of events (Arango, 2000).

Need for a new migration theory:

There are suggestions from scholars to advance migration theories combining with existing theoretical lines of thinking (Massey, 1999; de Haas, 2008, Castles, 2008). For instance, Skeldon (1997) proposed combining the new economics of migration and network theory. Others are
of the opinion that the influence of development (de Haas, 2009; Hammar et al 1997), globalization (Castles 2009a; Polanyi 2001), and livelihoods (Collinson, 2009) should also be considered when developing a new migration theories.

Having pointed out the drawbacks of existing migration theories it is suggested that detailed indepth research on migration theories is needed. This must be based on interdisciplinary research (Massey et al. 1993; Favell 2008; Bretell & Hollifield 2000; Castles, 2008). The new theory needs to analyse the interconnection between causes and consequences of migration (Stark 1991; de Haas 2008).

Thus the thesis suggests that a new approach is needed to study migration processes. An alternative migration theory that incorporates Asian migration as case studies that incorporate country specific or region specific institutions and structural variables, and also a greater emphasis on sending regions (in this case villages) is recommended. It is also timely that migration should be analysed as part of changing global processes and socio-economic changes. The empirical evidence, mainly semi-structured interviews, also suggests that migration should be seen as a part of social change in society. This study has shown that the decision to migrate was influenced by factors such as human capital endowments, skills, age, marital status, gender, occupation and labor market status, preferences and expectations suggesting that a new approach is needed to study the dynamics of migration”

Another potential area of research is role of seasonal migration in influencing village social structure and social norms. Goode (1963) argues that modernity and traditions are mutually exclusive. It is argued that as society modernizes, traditional values would decline and break down. The urbanisation process brought out by seasonal migration will have some influence on traditional village social structure either in a positive or negative way. There are no existing in depth studies on the influence of seasonal migration in village social structure and norms in South India. My research found that mostly young adults were opting to become seasonal migrants leaving the elderly people to look after their family. This undermines the role of the prominent position played by the elderly people
at home and in the village. It seems that with ever increasing social and spatial distance between elderly people and young seasonal migrants, there is a break down in the intergenerational connectivity. Although this research highlighted the role of seasonal migration in influencing village social structure, more research is required. For instance, in the semi-structured interviews some of the interviewees mentioned the influence of seasonal migration in undermining village culture (Ref. Chapter 6). However this needs to be further confirmed with other research.

Finally, network theory argues the role played by family members in promoting seasonal migration. However there are few studies examining the influence of friends in promoting seasonal migration. Through my research, there is some indication that the influence of friends encourages seasonal migration, however more research in this area is required.

7.9 Limitations of the research

The main limitation encountered to perform this research work are described below.

Firstly this study was carried out during summer and there are no data for remaining months. The data were collected during three months and this short time frame placed great restrictions on the quantity of data collected. Secondly, although the data were collected from four villages located in two different districts, they were not representative of India. The dynamics of seasonal migration might be different to other parts of India. Thus the findings from the study may not represent seasonal migration occurring in other parts of India. Thirdly this study mainly used qualitative semi-structured interviews with descriptive statistics in order to answer the research questions. Though due care was taken to verify the answer provided by the interviewee there are chances that their answers may not be representative of the realities due to external influences unknown to the researcher.

Finally, this study mainly examined seasonal migration focusing primarily on tank irrigation communities. There are possibilities that other types of migration might also be happening in these communities. It is important to
study internal migration of all types happening within communities in order to better understand trends, extent, pattern, drivers and their associated impacts with these communities. However it was beyond the scope of this research to study all types of internal migration.

7.10 Conclusion

It is possible that seasonal migration will increase in the future unless the Indian government develops rural areas and support the construction of infrastructure so that facilities and livelihoods in rural areas become as attractive as living in urban areas. Governments also have a responsibility to find a mechanism to make agriculture as a profitable venture. While formulating appropriate migration policies, this thesis also suggests that governments should formulate social welfare policies for rural elders, children and women. At present migrants are not provided with any social security at the destination areas. Due care must also be taken to protect migrant’s rights and their social care at the destination places. This research strongly suggests that there is a need for further research and detailed studies on seasonal migration among tank irrigation communities in order to better understand dynamics of seasonal migration in India in general and tank irrigation communities in particular.

There is still a long way to go to better understand complexity and dynamics of seasonal migration. It is hoped that this research will contribute to the better understanding and insight in to seasonal migration among tank irrigation communities.
References


and migration in the Sahel: case studies from Senegal, Burkina Faso, Mali and Sudan.


Guest, P. (1998). Assessing the consequences of internal migration: methodological issues and a case study on Thailand based on


Hancock, b. (1998) An Introduction to Qualitative Research. *Trent focus for research and development in primary health care: Trent Focus.*


Vasimalai (2012). [DHAN Foundation Director].


Appendices

Appendix A: Questions to villagers

Introduce purpose of the interview then ask questions;

Research participant name:
Age:
Sex:
Date of interview:
Time of interview:
Respondent address and phone number:
Social status: upper caste/ middle caste/lower caste
Economic stratum: Below poverty line/ above poverty line (Subjective judgment. Either I can ask participant himself to classify or I can ask others in the village)
Assets: land holding/ livestock/ others
Education level: illiterate/ literate/ primary/ secondary

1. Tell me about your family, village and what’s happening in the village (background information)

2. How long you been living in this village?

3. Have any of your family members moved to cities? What’s the reason? What makes you to stay here?

4. What’s your main source of income? What are the off farm income?

5. Have you noticed migration happening in these areas? Where do people move? Do they come back? How often they come back? Why this happening?

6. Do you know who moves? Rich or poor? Do you know the land holding capacity of the migrants?

7. Have you noticed any changes/impacts because of migration? Both at village and households level

8. What are the challenges faced by your household

9. Do you know the challenges faced by the village because of migration?

10. How do you manage your household’s expenses after agricultural season?
11. What you think about developmental intervention program implemented by the government

**Property history:**

12. How much land do you own? (Indicator of wealth)

13. When was the change in property management happened? Why it happened?

14. When did you buy your land? Did you buy from someone or inherited from your family? (Ask about inheritance pattern)

15. Is there any change in cropping pattern or the way the land is managed? When was the last time the changes were made and what was the reason for it?

16. Are there any particular months/year where more migration happened? If yes, why it so?

**Research participant family details:**

17. How many people in your family?

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18. Livelihood activities and sources of income including nonfarm income (Ask specifically income from migration)

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Social amenities in the village:

19. School facility, what levels? If no school then how children’s get education? Where do they go? How far is school from your village?

20. Health facility (Hospital). If there is no health facility, how far is the nearest one? How you go there (by walk or bus)?

21. Any other facilities in the village?

Any other comments would you like to add to help me in analyzing seasonal migration in your area.
Appendix B: Questions to seasonal migrants

Date of Interview: Place:

General profile:

Introduce purpose of the interview then ask questions;

1. General information of the respondents
   a. Name:  
   b. Age: 
   c. Sex: 
2. Social status: upper caste/ middle caste/lower caste 
3. Economic stratum: Below poverty line/ above poverty line (Before and after migration) 
4. Assets: land holding/ livestock/ others 
5. Education level: illiterate/ literate/ primary/ secondary 
6. Livelihoods options back home

Research participant family characteristics:

How many people in your family?

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Livelihood activities and sources of income including nonfarm income (Ask specifically income from migration)

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Back home situation before migration

1. When did you migrate first time and how was your household condition that time? 
2. What were the factors that made you to migrate and did your family members agree/ disagree with the decision to migrate? 
3. Can you please explain about your household’s livelihoods activities in a year? 
4. What are the major family expenditure and how you manage them?

Migration process

1. How did you prepare for migration? 
2. Who are the people you contact with during migration and their role? 
3. Are there any labour agent involved?
4. How do you decide your wages and duration of work?
5. Do you better off because of migration?
6. Would you go back to villages?
7. How often you go to villages

**Working condition in destination**
1. Please tell me about working conditions in city. Do you think working conditions in city is better than urban areas?
2. How long it takes to start your work after reaching destination?
3. How do you manage your food, cloth, shelter, medical facilities and education of your children?
4. Does friends helped you when you first came to city?

**Situation after migration**
1. When you decide that this is the time to return home?
2. Have you ever considered staying in the destination permanently?
3. Do you experience any adjustment problem in the village after return?
4. How do you spend your earning?
5. Is there any change in your household’s conditions because of migration?
   a) Economic b) Social c) Health d) Education
6. Have you ever considered not migrating and thinking about other livelihood options? If yes: what are the reasons If no: why not

**Government provisions during and after migration**
1. Are there any governmental provisions that you can avail in the destination?
2. What’s your opinion about government developmental intervention? Does it encourages/discourages migration
Appendix C: Questions to Agricultural officials

Introduce purpose of the interview then ask questions;

I would like to ask you the role played by your organisation in the village and your organization observation on some of the phenomenon happening in the village

1. Could you please explain to me the land use pattern in this village? Are there any changes in land use pattern

2. What is the role of your department in this village? What are the institutional provisions provided by the agric dept?

3. Are there any changes in land ownership? What are the drivers of those changes

4. Do you know anything about migration happening in the village? Who moves? Where do they go? When did it start? Are there any specific period where there is more migration than rest of the period? What are the inducing factors?

5. Are there any relation between caste and land holding capacity?

6. Are there any relationship between size of land holding and migration

7. Are there any developmental intervention program introduced by your dept? If yes, what are they and what’s their impact. If not, why?

8. Do you promote any particular crops? If so? Why?

9. What is the average land holding capacity of the villagers

10. Have the department noticed change in farming practices? What are the drivers of change in crop composition? Is it because of migration or due to something else like, globalization?

11. What are the emerging land use changes in this village? Why?

12. Are there any issues facing agriculture in this village? If so what are they? What are the actions taken by the agricultural department? If not why?

13. Are there any overlap between scheme introduced by the agricultural department and other departments like rural department, water development authority etc?

14. What are the future plans designed by the department for these village? (Name of the plan, their objectives)
15. What are the support measures provided by the agricultural department to farmers? What kind of advice the department give to farmers?

16. Are there any other issues with land use management, cropping pattern and community engagement in this village?

Appendix D: Interview guide for village elders

Village name:
Research participant name:
Date of interview:
Time of interview: Start: ....am / pm; completed: ....am/pm
Participant addresses and phone number:
I would like to talk to you about your memories on the role played by tank irrigation and how local people managed tanks in the past. I also want to know what you think of the changes happened to tanks and agriculture. In your view what you think of the reason that leads to changes?
Family Characteristics
1. How old are you?

2. How long have you lived in this village?

3. What is your primary occupation?

4. What is/are your additional occupation/s?

5. How many people in your family?

<table>
<thead>
<tr>
<th>Name and family name</th>
<th>Age</th>
<th>Gender</th>
<th>Relationship</th>
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6. How much lands do you or your family own? (Indicator of wealth)

7. Can you please describe tank irrigation, condition of the tanks and the contribution of tanks to agriculture in these regions? Do you think there are changes happened/ing? If yes, what are those changes? Why it’s happening?

8. Do you think growth of cities caused breakdown of traditional tank irrigation practices? What you think about governmental intervention program? How effective it was for encouraging/discouraging migration
9. Are there any changes in traditional practices used for protection of tanks? How did those changes happened? When it changed? Why it changed? Are these changes having any impact on quality of life? If yes, how? In what way? Positive or negative

10. Do you aware of migration happening in this place? If so? Why they move, where do they go? Who move? Young or old? What’s your opinion about these phenomenon’s?

11. What is your suggestion for the improvement of living standard in the village and reduce migration flows?

Appendix E: General Interview guide for other officials

Date: Place: Name: Organization

1. Introducing purpose of the interview.
2. How long and in what aspects you been working in the village? Can you explain your experience?
3. Which categories of people migrate and which category does not migrate?
4. Can you explain their condition before/after migration?
5. How is the migration process take place (who makes decision, who moves; rich or poor, who moves; young or poor, duration of work, wages, travelling)?
6. Who are the actors involved in this process? Are there any other actors other than family?
7. Why people prefer to migrate despite several government and nongovernment provisions available to them?
8. How do migrants invest their earning?
9. Can you compare the positive and negative outcomes between migrants and non migrant’s households?
10. In your opinion, what are the major factors responsible for people’s decision to adopt migration as livelihood strategy?
11. In what ways the benefit of migration can be maximized and the negative outcomes can be minimized?
12. What’s your opinion about the present migration policies/developmental intervention (whether it is supportive or discouraging for migrants)?
13. How can policy accommodate seasonal migration as household’s livelihoods strategy?
Appendix F: Household Survey Questionnaire
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Appendix G: Ethics committee approval

5 July 2013

Mr Vjayakumar Kuttipuram
School of Environmental Science
PO Box 740
ACTORY-WONDUNGA NSW 2560

Dear Mr Kuttipuram,

Thank you for the additional information provided in response to a request from the Human Research Ethics Committee (HREC).

The CSU HREC reviews projects in accordance with the National Health and Medical Research Council's National Statement on Ethical Conduct in Research Involving Humans.

I am pleased to advise that your project entitled "Importance Of Rural – Urban Migration In Task Dependent Communities Of South India" meets the requirements of the National Statement, and ethical approval for this research is granted for a twelve-month period from 5/7/2013.

The protocol number issued with respect to this project is HREC 2013/107. Please be sure to quote this number when responding to any request made by the Committee.

Please note the following conditions of approval:

- All Consent Form and Information Sheets are to be printed on Charles Sturt University letterhead. Students should liaise with their supervisor to acquire these documents prior to commencement of the study.
- You must notify the Committee immediately in writing should your research differ in any way from that proposed. Forms are available at: http://www.csu.edu.au/__data/assets/html_file/0002/2175985/dote_6-06.pdf
- You must notify the Committee immediately of any adverse events or outcomes not associated with your research, that might affect the participants and therefore ethical acceptability of the project. An Adverse Incidence Form is available from the website above.
- Amendments to the research design must be reviewed and approved by the Human Research Ethics Committee before commencement. Forms are available at the website above.

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Appendix H: Glossary of Terms

Caste
Social stratification characterised by endogamy. Caste system was widely practiced in Hindu culture. This caste classification was based on the four fold Varna system. The four Varna’s are; Brahmins (priests), Kshatriyas (rulers and warriors), Vaishyas (traders), Shudras (labourers). The untouchables were not included in the four fold Varna system. In the modern Indian terms Brahmins was classified as Forward caste; Kshatriyas, Vaishyas and Shudras as Backward caste or Most Backward caste depending on the sub caste. The untouchables were called as Schedule caste.

Village
A human settlement that is larger than a hamlet and smaller than a town. Generally, located in rural areas. The population size varied from few hundreds to few thousands. The 2011 census estimated 68.84% (833million) of the Indian population as living in rural villages.

Village officer
A government officer appointed by the regional government in order to carryout administrative duties including identification and collection of revenues

Panchayat
Local self government institution. The members were elected by the villagers.

Panchayat president
An executive elected to govern the Panchayat

Self-help group (S.H.G)
A village based small group composed of either men or women group. The main objective is to save and manage their finance
Nattammai
Informal community leader elected by a community. It is a ceremonial post and is based on tradition and caste

South-West Monsoon
There are two major rainy season in India – South west monsoon and North East monsoon

Member of the Legislative Assembly (MLA)
Elected representative to the legislative assembly

Informal work sectors
Informal work sectors are those enterprises owned by individuals or households that are not constituted as separate legal entities independent of their owners. Those who work in the informal work sectors won’t be protected by national labour legislation, income taxation, social protection and employment benefits such as paid annual leave and sick leave