

# **Analysis on Status of Farmers and Farm Labourers in Thondamuthur Block**

**Aarthi. R**

**20PEX001**

Thesis Submitted to



Avinashilingam Institute for Home Science and Higher Education for Women  
Coimbatore-641043

In Partial fulfillment of the requirements for the  
**Degree of Master of Science in Extension and Communication**

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MAY 2022

*SPajalatsdmi*  
Signature of Head of the Department

Signature of the External Examiner

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## CERTIFICATE

This is to certify that the dissertation entitled "**Analysis on Status of Farmers and Farm Labourers in Thondamuthur Block**" is submitted to the Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore - 641043 in partial fulfillment of the requirements for the award of the degree of **MASTER OF SCIENCE IN EXTENSION AND COMMUNICATION** is a record of original research work done by **AARTHI. R (20PEX001)**. During the period of the study in the Department of Home Science Extension Education, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore - 641043, under my supervision and guidance, it has not formed the basis for the award of any degree/ diploma/ associateship/ fellowship or similar title of other University.

*S. Jayalakshmi*

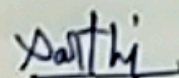
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## DECLARATION

I **Aarthi. R** hereby declare that the thesis, entitled "**Analysis on Status of Farmers and Farm Labourers in Thondamuthur Block**" submitted to the Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, in partial fulfillment of the requirements for the award of the **Master of Science in Extension and Communication** is a record of original and independent research work done by me during under the Supervision and Guidance of **Dr. S Rajalakshmi**, M. Sc, M. Phil, Ph. D, NET, Associate professor and it has not formed the basis for the award of any Degree/Diploma/Associateship/Fellowship or other similar title to any candidate in any University.



SIGNATURE OF THE CANDIDATE

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## **CHAPTER I**

### **INTRODUCTION**

**“The world tails the plough despite other pursuit even if one toils  
Farming remains foremost.”**

**-Thiruvalluvar**

Agriculture is the backbone of the Indian economy quoted by Mahatma Gandhi. Agriculture can be called the backbone of India's economic system because two-third of Indian population is engaged in the cultivation and it not only help to feed the people, but also supports the principal manufacturing industries with raw materials. Most of the part of India related from villages and villages directly depended on the farming so as a metaphor agriculture is kind of backbone of India. It is an oldest business in the world. Agriculture plays an important role in the process of economic development in India. India is considered as still developing country so the nation needs to be feed. Agricultural development as an integral part of overall economic development. India has a tradition that agricultural is considered as a most important element of economic development for all over nation. The traditional agriculture is basically sustainable and steady farming system that has been employed for a number of generations. It is able to produce the material required by its producers. Traditional farming includes Variety of household crops and livestock. This traditional system involving the rigorous use of local information and natural wealth supporting biological diversity by means of different practices conventional farmers centered on that using pesticides and other chemical to get a highest possible yield of crops.

Indian agricultural sector is at the crossroads. Because of the changes happens in all over the country. The major elemental changes are technological changes, generational changes, lack of knowledge on agriculture, climate changes, and mechanization. That growth and development of agriculture is very vital but nowadays, growth and development of agriculture is declining, which is really matter of great concern for all.

The agriculture sector plays an important role in Indian economic, political and society. Indian agricultural production for food staples is highly monsoon dependent and farm yields are generally below world averages. Low productivity is caused by many factors such as in adequate farmer education and training, heavy government rules and regulations, inefficient food distribution system, poor infrastructure which results in post-harvest loses for certain products, unpredictable weather, small average farm crisis

and domestic agriculture support programmes and subsidies that distort market signals and hamper investment.

The agricultural sector is slowly shifting from traditional farming to horticulture and livestock such as poultry, dairy and fishery production. The demand of fresh and processed products of all types is increasing as the population urbanizes income rise and conception habits change. According to international trade administration, India has developed export competitiveness in certain specialized products, making it the world's 9<sup>th</sup> largest exporter in agricultural and related products. Nearly one-half of total annual national income comes from agriculture. The use of agricultural land is reduced. During the last decade agriculture lands are converted into residential houses and factories hence the number of farm labourers has decreased and they have moved to urban areas.

The major agricultural products can be broadly grouped into foods, fibers, fuels and raw materials (such as rubber). Food classes include cereals (grains), vegetables, fruits, oils, meat, milk, eggs and fungi. Over one-third of the world's workers are employed in agriculture, second only to the service sector, although in recent decades, the global trend of a decreasing number of agricultural workers continues, especially in developing countries where smallholding is being overtaken by industrial agriculture and mechanization that brings an enormous crop yield increase.

Modern agronomy, plant breeding, agrochemicals such as pesticides and fertilizers, and technological developments have sharply increased crop yields, but causing ecological and environmental damage. Selective breeding and modern practices in animal husbandry have similarly increased the output of meat, but have raised concerns about animal welfare and environmental damage. Environmental issues include contributions to global warming, depletion of aquifers, deforestation, antibiotic resistance, and growth hormones in industrial meat production. Agriculture is both a cause of and sensitive to environmental degradation, such as biodiversity loss, desertification, soil degradation and global warming, all of which can cause decreases in crop yield. Genetically modified organisms are widely used, although some are banned in certain countries (**Patrick.N.L, 2022**).

Agriculture is the prime and traditional occupation for the people of Tamil Nadu. About 56% of the people of Tamil Nadu are farmers. Agriculture sector supplies food and fodder to the people and cattle, respectively. It is the source of raw material for many of the industries. Farmers select particular crops to be cultivated in a season, to suit soil and availability of water in that season. Thus, most farmers in Tamil

Nadu cultivate crops in three different seasons as given below: Sornavari (Kharif season –Chitthirai pattern), Samba (summer season -Adipattam) and Navarai (Rabi season –Karthigai pattern).

Cropping pattern refers to the proportion of land under cultivation of different crops at different points of time. This indicates the time and arrangement of crops in a particular land area. In India, the cropping pattern is determined by rainfall, temperature, climate, and technology and soil type. In order to obtain maximum yields, different patterns of cropping are practiced. The major cropping patterns include the following:

Monocropping reduces soil fertility and destroys the structure of the soil. Chemical fertilizers are required to upgrade production. This practice allows the spread of pests and diseases. When two or more crops are grown on the same land simultaneously, it is known as mixed cropping. For eg., growing wheat and gram on the same land at the same time is mixed cropping. This practice minimizes the risk of failure of one of the crops and insures against crop failure due to abnormal weather conditions. The crops to be grown together should have a different maturation time and different water requirements. One tall and one dwarf crop should be grown together. The nutrients required by one crop should be less than those required by the other. One crop should have deep roots, others should be shallow. All these criteria lead to a successful mixed cropping pattern. Intercropping is the practice of growing more than one crop on the same field at the same time in a definite row pattern. After one row of the main crop, three rows of intercrops can be grown. This increases productivity per unit area. Intercropping can be of different types: Row Intercropping, When the component crops are arranged in alternate rows it is known as row intercropping. It helps in optimum utilization of land space and suppression of weeds during the early stages of the main crop. Strip Intercropping, When two or more crops are grown in wide strips so that the two crops can be managed separately, it is known as strip cropping. However, the crops are close enough to interact. Relay Intercropping: In this type of intercropping, a second crop is planted when the existed crop has flowered but not harvested. For eg., Rice-Cauliflower-Onion-Summer gourds. Crop Rotation, In this pattern, different crops are grown on the same land in preplanned succession. The crops are classified as one-year rotation, two-year rotation, and three-year rotation, depending upon their duration. Legumes are included in the crop rotation programme to increase soil fertility. The crops which require high fertility level (wheat) can be grown after the legumes. The crops which require low inputs can be grown after the crops that require high inputs.

Among the food crops, paddy is the prime crop cultivated in all the districts of Tamil Nadu. The Kaveri delta (especially the undivided Thanjavur district) is known as the granary of south India. Pulses that

are grown in Tamil Nadu include Bengal gram, red gram, green gram, black gram and horse gram. Farming that is carried on small land holders that produce food crops for local consumption and not for external trade is known as subsistence intensive farming. Most farmers in Tamil Nadu practice subsistence intensive farming. With the availability of water for cultivation, farming methods are classified into three types namely (i) Wet farming, (ii) Dry farming, and (iii) Irrigation farming. Among the food crops non-food crops also cultivated, cotton is a major fibre crop grown in Tamil Nadu. Commercial crops like sugarcane, tobacco, oilseeds and spices like chillies, turmeric and coriander are grown in Tamil Nadu. Tea, coffee, rubber, pepper and cashew are the main plantation crops of Tamil Nadu. Plantation farming is yet another type of farming where crops are grown on large farms or estates. Plants like tea, coffee, rubber and pepper are grown as plantation crops on the hill slopes of Tamil Nadu. The Irrigation is essential part in agriculture, main sources of irrigation are canals, tanks and wells. Canals are man-made channels of water taken from a perennial river, dam or lake to supply water to the agricultural fields. Canal irrigation is the most important type in the basins of Kaveri and Tamiravaruni. Twenty seven percent of irrigated land in Tamil Nadu cultivates crops using canal irrigation. Market gardening in Tamil Nadu includes horticulture and floriculture (growing fruits, vegetables and flowers) in large scale for supply to the urban markets and also for export purposes. Districts such as Madurai, Nilgiris, Thiruvallur and Kancheepuram practice this type of farming.

Animal husbandry pattern in Tamil Nadu, Rearing animals for the production of milk, meat and hide is known as animal husbandry. Tamil Nadu Cooperative Milk Producers' Federation (AAVIN) produces milk and dairy products for the state. The poultry hub of Tamil Nadu is Namakkal, Erode, Coimbatore and Salem. Tamil Nadu produces 8394 million eggs during the year 2007-8. Per capita availability is 128 eggs per year. Mixed farming in Tamil Nadu, Mixed farming is one wherein land is allotted for more than one activity along with agriculture. The farmer grows two or three varieties of crops along with cattle rearing, poultry and fishing on a large land holding. This method is profitable to the farmer as it provides regular and continuous income. This type of farming is prevalent in the Kaveri delta.

After independence, there has been a steady development in all aspects of agriculture. Irrigation facilities were improved with the proper implementation of Five Year Plans in the state. Green revolution in terms of hybrid varieties and application of chemical fertilizers increased the production to a great extent. Abolition of Zamindari system, land tenuring, consolidation of farms, introduction of the land ceiling act and co-operative farming were the new reforms introduced after the independence. Recently, globalization has influenced the agricultural production positively in Tamil Nadu. In Tamil Nadu pattern of agriculture

was changing. The traditional methods of agriculture are slowly being replaced by scientific and technical methods. As a result of this, the merits of the traditional methods have vanished. The Agriculture University in Coimbatore and the M.S. Swaminathan Research Foundation are trying to fuse the tradition with the modern methods so as to obtain maximum produce in the long run.

The more fertile the soil the less will be the amount of land required in order to provide reasonable standard of living to the peasant family. In this connection, it is necessary to remember that those lands which have artificial irrigation facilities enjoy comparatively high fertility. Therefore, irrigated and fertile lands would be comparatively smaller. The size of economic holding will depend upon the method of cultivation. If farmers make use of agricultural machinery such as tractors, harvesters etc. The size of the economic holding will have to be large. On the other hand, if the farmers use less mechanized techniques he cannot manage more than a few hectares of land, say 6 to 8 hectares. The size of economic holding will also depend upon the type of crops raised. For instance and even a small farm of 2 or less hectares can provide full and continuous employment to an average agricultural family and provide it with reasonable level of living. On the other hand, require about 8 hectares, while sheep breeding will require still large size of holding.

A farmer is a person engaged in agriculture, raising living organisms for food or raw materials. The term usually applies to people who do some combination of raising field crops, orchards, vineyards, poultry, or other livestock. A farmer might own the farmed land or might work as a laborer on land owned by others, but in most developed economies, a farmer is usually a farm owner, while employees of the farm are known as farm workers, or farmhands. However, in other older definitions a farmer was a person who promotes or improves the growth of plants, land or crops or raises animals (as livestock or fish) by labor and attention. They may or may not be owners of the land, but generally, in the economy, we consider them as the owner of the land. Their land can be cultivated by themselves or by labourers hired by them **(Fgnievinski, 2022)**.

The farming sector is mostly classifies as a five categories. First category is farmers who have less than 1 hectare of land are called marginal farmers. Second category is small farmers, farmers who have 1 or 2 hectare of land. Third categories are farmers who have 2 to 4 hectare of land are called semi medium farmers. The forth category of farmers who have 4 to 10 hectare of land are called medium farmers and last but not the least fifth category is farmers who have 10 hectare and above land are called large farmers. The size of economic holdings depends upon various factors which may differ from region to region or even from locality to locality.

The census details were released by Union home minister in the presence of the registrar general of India and census commissioner, the statistics show that only 54.6 per cent of total workers in India are now part of the agriculture sector with a decline of 3.6 per cent as compared to 2001. Compared to 2001 census, there has been increase of 44 per cent in the male population of agricultural labourers, while for females the number has increased by 24.5 per cent. This rise in agricultural labour to the falling size of land holdings over time. The Planning Commission and industrial associations have long been complaining about a shortage of farm labour because of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) for a long time, but the figures in the census report present a completely different picture.

The trends for farming show that 14 per cent woman and 3.2 per cent of cultivators since 2001 have abandoned farming. This extrapolates to over 8.6 million people. Interestingly, the census office claims that over the past 50 years, the decline in population of cultivators was not significant enough for absolute numbers when compared to population increase. However, due to slow rate of population expansion in the past decade, the number stands out. As per the census of 2011, 263 million people are engaged in the agriculture sector and over half of them are now agricultural labourers, a trend observed for the first time in the past 40 years (**Jyotika Sood 2013**).

An average farming household in India earned Rs 10,218 per month in 2018-2019, up from Rs 6,426 a month in 2012-2013. This represents a nominal income growth of about 60 per cent over six years. However, after adjusting for inflation using the rural consumer price index, farmers' incomes have grown only 21 per cent in real terms in the period, according to a Business Standard analysis. India's real gross domestic product (real size of the economy) grew 52 per cent in the same period. But more importantly, the growth in income was such that it has probably made the average Indian farmer more of labourers. He now earns more from wages than from cultivation, and this has happened for the first time ever.

In 2012-2013, an average Indian farmer earned Rs 3,081 per month from cultivation. This grew to just Rs 3,798 in 2018-2019. Income from wages, on the other hand, doubled from Rs 2,071 to Rs 4,063 in six years. It must be noted that this is the net income, or the net earnings after removing the pay-out expenses done on that activity. This data represents the state of farm households before the coronavirus pandemic. That said, farming has taken a backseat in rural India at the aggregate level. While the number of farming households increased from 90 million to 93 million in six years, the number of families not engaged in farming rose from 66 million to nearly 80 million in the same period (2013-2019).

According to the Ministry of Statistics and Programme Implementation report 2019, also estimates imputed expenses of farm households, apart from pay-out expenses, which the previous reports of the series had not done. Adjusting for the imputed expenses, the net income from cultivation further drops to Rs 3,058 per month in 2018-2019. An average farm household in India owed Rs 74,121 worth of debt in 2018-2019, compared to Rs 47,000 in 2012-2013. Thus, as income grew 60 per cent over six years, average debt, too, rose with a similar degree, by 57 per cent. Indebtedness, or the share of farming households indebted, has remained steady. While it was 51.9 per cent in 2012-2013, the proportion marginally reduced to 50.2 per cent in 2018-2019. Apart from income and debt, physical characteristics of Indian farming have also changed, and in some cases, the long term trend has continued. Disintegration of land parcels has continued unabated for two decades, the report shows. But more worryingly, landlessness has increased. Average land held by a land owning farmer household has shrunk from 0.806 hectare in 2003 to 0.558 hectare in 2019. While the share of landless families among farming households had declined from 10 per cent in 2003 to 7.4 per cent in 2013, it has increased again over the period from 2013 to 2019, to 8.2 per cent. The report defines a household as an agricultural household if it earns more than Rs 4,000 per year from agricultural activities. **(Abhishek Waghmare 2021)**

In Tamilnadu economies agricultural based and major part of farm labour in the labour force work are engaged in agriculture and traditional industries like coir and handloom. A significant proportion of the labour force in agricultural sectors comprises men. Men will able leave from agriculture and seek new employment elsewhere when the encountered low income from agriculture women have remind however in agricultural sector traditional practice of paying wages to women at half the rates of men where accepted till date in India

There are broadly three categories of agricultural workers in India: Small and marginal farmers who have very small holdings whose income from their own land is quite inadequate and hence they are forced to work on the farms of others to make both the ends meet, Tenants who work on the land taken on lease but this is not their main source of income. The major source of income is by way of wages for working on the lands of others and Share croppers who, besides sharing the produce of land cultivated by them, also work as labourers.

According to the census 2011, there were about 23, 72,446 agricultural labourers in Tamil Nadu state which is 4.08% of India has 5, 81, 62,962 agricultural labourers of which 10, 34,184 were male labourers and 13,38,262 were female labourers in Tamil Nadu. The mechanization is caused high levels of under

employment and casualization in the agricultural sector which led its falling of incomes and increasing insecurity of agricultural employment more especially women are more threats in agriculture.

Agriculture plays a very important and essential role in industrial development of India. It is the source of raw materials for many industries. India's foreign trade is deeply associated with agriculture. Agriculture and related sectors such as forestry and fishery account for 19.9% of the country's Gross Domestic Production (GDP) expanding agriculture production increases the demand for other sectors notably fertilizers, pesticides, and machineries, transportation and communications and varying with the level of technology.

A farm labourers is one of the primary factors of agricultural production. It is considered to be important not only because it is productive but also it activates other factors and makes them useful for production purpose. The size of labour force in a country is determined by the number of people in the age group of 15-59 years as generally children below 15 years and old people above 59 years do not participate in production activity. As per census 2011, conducted by registrar general of India, the total number of agricultural workers in the country was 234.1 million (127.3 million cultivators and 106.8 million agricultural labourers).

Farm labourers mostly landless constitute the poorest segment of the Indian agricultural population. They belong to the economically backward and oppressed section of the society. They are mainly belonging to the Schedule caste (SC), Schedule Tribes (ST) and Backward communities (BC). They basically unskilled, unorganized and also unrecognized by the most of the schemes and policies drawn for agricultural sector. One of the most disquieting features of the rural economy of the India during several past decades has been its constantly increasing trend in the number of landless farm labourers factors for increasing landless was rapid growth of population, law of inheritance rise cost of agricultural inputs and decline of small scale industries have been responsible to this increase.

The first Agricultural Labour Enquiry Committee (ALEC) 1950-55 defined agricultural labour or farm labour as "Those people who are engaged in raising crops on payment of wages" (based on occupation). If half or more of a household has wage employment in agriculture then those households can be termed as agricultural labour households. The second Agricultural Labour Enquiry Committee (ALEC) 1956-57 enlarged the definition to include- "Those who are engaged in in agriculture and other agricultural occupations like dairy and livestock, farming, horticulture, bee keeping, poultry, etc." (based on the

income). According to national commission on labour “An agricultural labour is one who is basically unskilled and unorganized and has little for his livelihood other than personal labour”.

Development of rural infrastructure not only improves the agricultural production and also it develops farming communities in rural households. Increased level of rural infrastructure and agricultural infrastructure in particular region would lead to extend investment in allied sectors which can produce high value added products provision of initial level of agricultural infrastructure or enhancement of the different kind of cropping pattern that would generate some indirect positive benefits which is called as social benefits. These benefits are enjoyed not only by the regional economic activities but also by activities beyond the administrative and political boundaries of the region.

Rural infrastructure plays a very important role in supporting nation’s economic growth. It is the country encompasses rural roads, major dams and canal works for irrigation and drainage, rural housing, rural water supply, rural electrification, transportation and rural telecommunication connectivity. For, agricultural infrastructure also needs rural roads, storage facilities, irrigation, electrification, telecommunication and transport facilities. Basically rural infrastructure has the potential to provide basic amenities to people that can improve their quality of life.

As per the road statistics published by central government for the year 2012-13, rural roads span 60.39 km of every 100 km. The sad part is that most of these rural roads in the country are in bad shape i.e., they are of poor quality, potholed and unable to withstand the loads of heavy farm equipment, thereby, affecting the rural population’s quality of life and ability of the farmers to transport their produce to the market. Further, the rural surfaced road is just 33 per cent of the total rural road network in India and remaining are low quality roads which are highly vulnerable and inaccessible particularly during the rainy season. Thus, there is increasing need for surfaced rural roads in the country. Living conditions of people in rural areas has still not improved much and there are majority who live in kutcha houses which are highly vulnerable to rainfall, wind blow, fire and other environmental hazards. Hence, good rural housing infrastructure is needed in the country.

As per the Census 2011, still 45 per cent of the rural households are not connected with electricity and depend on kerosene and other means for lighting. Hence, rural electrification infrastructure is needed to make the lives of rural people better. Although there are schools in the rural areas but they lack in terms of the number of classrooms, availability of safe drinking water facilities, toilet facilities etc. Hence, the education infrastructure in rural India also needs a lot more improvement. It goes without saying that the health infrastructure is poorly developed in rural India. Even if it is there, there are no good doctors because

the rural areas have very low connectivity and doctors or skilled health workers are unable to access these areas. This poses a great threat to the lives of rural population in the country. As per the reports from Census 2011, merely 30 per cent of rural areas are covered with tap water supply. In addition, the sanitation facilities in the rural areas are also not adequate. Thus, there is huge scope for developing drinking water infrastructure and sanitation facilities in the rural areas.

The present study may explore the options for solving the problems of farmers and farm labourers by making detailed study assessing their socio-economic status, occupational status, challenges faced by farmers and farm labourers implementation of policies and programmes, rural infrastructure and suggest the strategies to improve the present situation.

### **SCOPE OF THE STUDY**

The purpose of this study is to analyse the farmers and farm labourers status, which includes a thorough analysis of socio economic status, occupational status and their living status, challenges faced by them in Thondamuthur Block. Among the various aspects that build the rapport with the farmers, farm labourers and keep them in their fold, the satisfaction level of the farmers and farm labourers is much more important to examine the dissatisfaction area in their work nature. Hence, the outcome of the present study will be of immense help to the government in bringing out the various aspects concerned with farmers and farm labourers which would definitely facilitate them to work out their appropriate strategies and promote and improve the farmers and farm labourers livelihood in all over Tamil Nadu state

### **LIMITATIONS OF THE STUDY**

The limitations of the study are:

1. The study is limited only to the Thondamuthur Block in Coimbatore district of Tamil Nadu.
2. Since, the study covers only agriculture field, the results obtained may or may not be applicable to other field of work.
3. The elicited opinion of farmers and farm labourers vary at all times, because of the individual differences due to Age, Gender, Attitude, Income, Profession and others.
4. The respondents' response was satisfactory, and the bias was minimized by several cross-checks made during the interview with them.

### **NEED OF THE STUDY**

The needs of the study are:

- Understand the key change that has been introduced through the schemes and how much it has reached the success level.

- Assess the level of satisfaction among farmers and farm labourers through agriculture.

## **OBJECTIVES OF THE STUDY**

The following objectives are framed for the purpose of present study. To

- Study the socio-economic status of farmers and farm labourers.
- Find out the different farming technologies, apps and portals utilized by farmers
- Identify the challenges faced by farmers and farm labourers.
- Assess the health status of farmers and farm labourers.
- Examine the knowledge level and usage on agricultural policies and programmes available for farmers and Farm labourers
- Know the village infrastructure of farmers and farm labourers.

## **HYPOTHESIS**

The following are the Hypotheses Ho (*Null Hypothesis*) of the present study:

Ho. 1 There is no significant relationship between a size of land holdings and choice of crops of farmers.

Ho. 2 There is no significant relationship between educational qualification and agricultural activities of farmers.

Ho. 3 There is no significant relationship between educational qualification and choice of occupation of farmers.

Ho. 4 There is no significant relationship between educational qualification and agricultural activities of farm labourers.

Ho. 5 There is no significant relationship between number of working days and annual income of farm labourers.

Ho. 6 There is no significant relationship between male and female wages of farm labourers

## **PLAN OF THE STUDY**

The report of the study has been presented under five chapters, as given below.

**Chapter 1:** A comprehensive introduction to the study of “Analysis the Status of Farmers and Farm Labourers in Thondamuthur Block” is dealt with in the First Chapter. The first Chapter provides the design of the study comprising introduction, objectives of the study, hypotheses of the study, scope of the study, limitations of the study and chapterization of the present study.

**Chapter 2:** The Second Chapter is exclusively devoted to a detailed study of the Review of Literature. This would really bring available studies in the field of agriculture.

**Chapter 3:** The Third Chapter is the Methodology chapter in which all the relevant scientific methods of the Research study and details about required data, selection of the area, sample size other significant analyses of study are given. This would definitely make the entire research study highly scopeful, precise and useful.

**Chapter 4:** The Fourth Chapter gives a results and discussion which is data analysis and interpretation.

**Chapter 5:** The Final chapter highlights the summary of key findings, suggestions and conclusion.

## CHAPTER II

### REVIEW OF LITERATURE

The Review of Literature for the title “**Analysis on Status of Farmers and Farm Labourers in Thondamuthur Block,**” are discussed under the following headings.

#### **A. Concept of Agriculture**

- a) **Contribution of Agriculture in Indian Economy**
- b) **Land Holdings in Agriculture**
- c) **Technological Development for Agriculture**
- d) **Policies and Programmes for Agriculture**

#### **B. Status of Farmers**

- a) **Definition of Farmers**
- b) **Classification of Farmers**
- c) **Existing Conditions of Farmers**
- d) **Technological Changes in Agriculture for Farmers**
- e) **Welfare Schemes and Policies for Farmers**
- f) **Challenges Faced by Farmers**

#### **C. Status of Farm Labourers**

- a) **Definition of Farm Labourers**
- b) **Classifications of Farm Labourers**
- c) **Existing Conditions of Farm Labourers**
- d) **Programmes and Schemes for Farm Labourers**
- e) **Challenges Faced by Farm Labourers**

#### **D. Related Research Studies**

##### **A. Concept of Agriculture**

##### **a) Contribution of Agriculture in Indian Economy**

**Albiero (2019)** stated modern technology can support agriculture development as well as preserve their sustainability. According to the author, the operational application of robotics technology will advance agricultural functions like the progress of crops, a collection of farm data, climatic change and their impact on crop yield. The automatic system generates greater efficiency in food grain production and productivity and minimizes the losses of input. The author also discussed the obstacle in the development of systems to

adopt agriculture conditions. Robotic technology is an upcoming trend and future requirement of a large agricultural sector of India.

**Surendra Singh (2020)** stated agriculture plays vital role in the process of economic development of less developed countries like, India. Besides providing food for the nation, agriculture absorbs labor, provides saving, contributes to the market of industrial goods and earn overseas exchange. The present study attempted to examine the performance of Indian agriculture during post green revolution period and economic reform period. A semi-log model was used to calculate compound annual growth rate of major food and non-food crops. Descriptive statistics were used to examine the land use pattern change and cropping pattern change. Fertilizer use ratio was calculated to examine the judicious use of chemical fertilizers. Study findings reveal that though, green revolution moved out from the food crisis arisen in the early sixties in some extent, but it also brought regional disparities in the resources use, productivity and cropping pattern. Promotional price policy for some cash crops leads to scarcity in others. Change in an environmental factors, along with economic and technological factors are increasing degree of the vulnerability in farm profits in particular and the livelihood of farmers in general. The present study suggested following policy implications. First, there is need of ultramodern technology that provides up-to-date weather information. Second, government should promote home-made bio fertilizers and organic farm practices.

#### **b) Land Holdings in Agriculture**

The report is based on data collected on number and area of operational holdings for different size classes/social groups and gender during Phase-I of Agriculture Census 2015-16.

- The total number of operational holdings in the country has increased from 138.35 million in 2010-11 to 146.45 million in 2015-16 showing an increase of 5.86%.
- The total operated area in the country has decreased from 159.59 million ha. in 2010-11 to 157.82 million ha. in 2015-16 showing a decrease of 1.11%.
- In a total of 146.45 million operational holdings in the country, the highest number of operational holders belonged to Uttar Pradesh (23.82 million) followed by Bihar (16.41 million), Maharashtra (15.29 million), Madhya Pradesh (10.00 million), Karnataka (8.68 million), Andhra Pradesh (8.52 million), Tamil Nadu (7.94 million), Rajasthan (7.66 million), Kerala (7.58 million) etc. As regards operated area, out of a total of 157.82 million ha., the highest operated area was contributed by Rajasthan (20.87 million ha), followed by Maharashtra (20.51 million ha.), Uttar Pradesh (17.45 million ha.), Madhya Pradesh (15.67 million ha.), Karnataka (11.81 million ha.) etc.

- The percentage increase in number of operational holdings in 2015-16 as compared to Agriculture Census 2010-11 worked out to 5.86%. Among states, the highest increase in holdings was observed in the case of Madhya Pradesh (12.74%) followed by Andhra Pradesh (11.85%), Maharashtra (11.58%), Rajasthan (11.12%), Kerala (11.02%), Meghalaya (10.90%), Karnataka (10.83%) and Nagaland (10.16%) etc.
- 14 out of 36 States/UTs in the country accounted for about 91.01% of the total number of operational holdings and about 88.19% of the total area operated in the country. These States were Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Tamilnadu, Telangana, Uttar Pradesh and West Bengal.
- The average size of operational holding has declined to 1.08 ha. In 2015-16 as compared to 1.15 in 2010-11.
- The percentage share of female operational holders has increased from 12.79% in 2010-11 to 13.96% in 2015-16 with the corresponding figures of 10.36% and 11.72% in the operated area. This shows that more and more females are participating in the management and operation of agricultural lands.
- The small and marginal holdings taken together (0.00-2.00 ha.) constituted 86.08% of the total holdings in 2015-16 against 85.01% in 2010-11 while their share in the operated area stood at 46.94% in the current census as against 44.58% in 2010-11.
- The Semi-medium and Medium operational holdings (2.00-10.00 ha.) in 2015-16 were only 13.35% with 43.99% operated area. The corresponding figures for 2010-11 census were 14.29% and 44.82%.
- The large holdings (10.00 ha. & above) were merely 0.57% of total number of holdings in 2015-16 and had a share of 9.07% in the operated area as against 0.70% and 10.59% respectively for 2010-11 census.
- A set of tables giving all India distribution of number of operational holdings and area operated and the state-wise breakup of distribution of the number of operational holdings and area operated by major size groups is presented in the tables that follow (**Agriculture census 2019**).

### c) Technological Development for Agriculture

**Ibrahim et al. (2020)** revealed that majority of the respondents were males and married with mean age of 46 years, with N28, 114.29 average monthly income and mean household size of 10 members. Most of the respondents (37.10%) attended secondary school, average farming experience among them was 20 years. Major source of agricultural information found from the study were radio (94.20%), town criers (78.8%) and GSM (76.90%) with majority of the respondents utilizing radio” often”, GSM “sometimes”

and town crier “most often”, while major problems against effective utilization of mass media in the study area were inadequate electricity supply, low income and low illiteracy status.

**Atri Mukherjee et al. (2022)**, viewed during the COVID-19 time, Indian agriculture has exhibited remarkable resilience. This article highlights the significant achievements of the sector even before the outbreak of COVID-19 and assesses that new emerging challenges warrant a second green revolution along with next generation reforms. Despite the success in terms of production that has ensured food security in the country, food inflation and its volatility remain a challenge, which requires supply side interventions such as higher public investment, storage infrastructure and promotion of food processing as per the empirical findings of this article.

Addressing these challenges would require a second green revolution focused on the agriculture water-energy nexus, making agriculture more climate resistant and environmentally sustainable. The use of biotechnology and breeding will be important in developing eco-friendly, disease-resistant, climate-resilient, more nutritious and diversified crop varieties. Wider use of digital technology and extension services would be helpful in information sharing and generating awareness among the farmers. Better Post-harvest loss-management and a revamp of co-operative movement through formation of Farmer Producer Organisations (FPOs) can arrest the volatility in food prices and farmers’ income and help harness the true potential of Indian agriculture.

#### **d) Policies and Programmes for Agriculture**

**TABLE I**  
**IMPORTANT AGRICULTURAL PROGRAMMES IN INDIA**

<b>Sl.No</b>	<b>Programmes</b>	<b>Launched year</b>
1.	PM kisan scheme	2018
2.	Pradhan mantri kisan maandhan yojana	2019
3.	Pradhan mantra fasal bima yojana	2019
4.	Kisan credit card scheme	1998
5.	Bashu kisan credit card scheme	2020
6.	Param pragat krishi vikas yojana	2015
7.	Pradhan mantra krishi sinchai yojana	2015
8.	Rashtriya krishi vikas yojana	2007
9.	Rajiv Gandhi kisan nyay yojana	2020
10.	Soil health card scheme	2015
11.	Rythu bandhu scheme	2016

12.	Livestock insurance scheme	2005
13.	Pradhan mantra kisan samman nidhi	2019
14.	Agriculture infrastructure fund	2020
15.	Mission organic chain for the north eastern region	2015

**Source: Agriculture census, Government of India (2019)**

**TABLE II**

**MINISTRIES AND PUBLIC INSTITUTIONS INVOLVED IN IMPLEMENTATION AND MONITORING OF AGRICULTURAL POLICIES IN INDIA**

<b>Particulars</b>	<b>Agencies at central level</b>	<b>Agencies at regional/state level</b>
Production	Ministries of Agriculture, Food Processing, Water Resource, Energy, and the ICAR	Ministries of Agriculture, Horticulture, Food Industry/ Processing, Irrigation, Power, SAUS
Prices	Ministries of Agriculture, Food Processing, Commerce, and Commission on Agricultural Costs and Prices	Ministries of Agriculture and Finance, SAUs
Marketing	Ministries of Agriculture, and Rural Development, APEDA, Directorate of Marketing and Inspections, NAFED, Food Corporation of India (FCI), Cotton Corporation of India (CCI) Central Warehousing Corporation (CWC), Jute Corporation of India (JCI), National Dairy Development Board (NDDB), Special marketing/processing corporations, Commodity Boards	Ministry of Agriculture, Directorate of Agricultural Marketing, State Level – Agricultural Corporation Marketing Federation, State Level – Agricultural Marketing Boards, Primary, Central and State level marketing societies/unions, Special marketing/processing societies, Tribal Cooperative Marketing Federation (TRIFED)
Credits	Ministry of Finance, Reserve Bank of India, and National Bank for Agriculture and Rural Development (NABARD)	Ministry of Finance, State Level Bankers Committee, Regional Offices of NABARD, Commercial Banks, Credit Cooperatives, Regional Rural Banks
Trade	Ministry of Commerce, Commodity Boards, Agricultural and Processed Food Export Development Authority (APEDA), National Agricultural Cooperative Marketing Federation	Agri Export Zones (AEZs), Ministry of Agriculture

	(NAFED)	
Research	Indian Council of Agricultural Research, Veterinary Council of India (VCI), Indian Council of Forest Research (ICFR), Central Agricultural Universities, Deemed Universities	State Agricultural Universities, Private Agricultural Colleges, Private Institutions and Autonomous Institutions
Education	Indian Council of Agricultural Research, Indian Institute of Management, Central Agricultural Universities, MANAGE, IRMA, NIAM	State Agricultural Universities, Private Colleges, Agricultural Agribusiness Management Institutes (e.g. CABM)
Extension	Ministry of Agriculture, Indian Council of Agricultural Research	State Agricultural Universities, Krishi Vigyan Kendras, Krishi Gyan Kendras, State Government Departments

**Source: V.P.S. Arora (2013)**

## **B. Status of Farmers**

### **a) Definition of Farmers**

A farmer is a person engaged in agriculture, raising living organisms for food or raw materials. The term usually applies to people who do some combination of raising field crops, orchards, vineyards, poultry, or other livestock. A farmer might own the farmed land or might work as a laborer on land owned by others, but in most developed economies, a farmer is usually a farm owner, while employees of the farm are known as farm workers, or farmhands. However, in other older definitions a farmer was a person who promotes or improves the growth of plants, land or crops or raises animals (as livestock or fish) by labor and attention. Farming is an employment occupational type and their activity sector involved agriculture and field of employment is farm and agribusiness (**Dyer 2007**).

### **b) Classification of Farmers**

In agricultural census, the land holdings of farmers are categorized in five size classes. First category was farmers who have less than 1 hectare of land are called marginal farmers. Second category was farmers who have 1 or 2 hectare of land are called small farmers. Third category was farmers who have 2 to 4 hectare of land are called semi-medium farmers. Fourth category was farmers who have 4 to 10 hectare of land are called medium farmers. A fifth category was farmers who have 10 hectare and above land are called large farmers (**Government of India, Ministry of Agriculture & Farmers Welfare 2019**).

### **c) Existing Conditions of Farmers**

**Amarendra Pratap Singh *et al.* (2014)** Point out that land is the main source of agricultural production and provides livelihood security for 65 per cent of the people. Since the Green Revolution, the country has produced enough food to feed itself, but it has not yet been able to wipe out mass hunger. Currently, 40 per cent of the population is malnourished - a decline of only 10 per cent in the past three decades. Following a series of neoliberal economic reforms in 1991, India's GDP has doubled, but despite this, about 53 million more people now go to bed hungry every night. Food prices have recently increased adversely affecting small farmers and poor families, who spend more than 60 per cent of their incomes on food. Unfortunately, small-scale producers have not benefited from high retail prices for food either. The country is in the midst of both an agrarian crisis and a nutrition crisis.

**Harshada P. Kalola (2016)** pointed in this study available data suggest that agricultural credit has been rising in recent years as a share of both the value of inputs and the value of output. There are wide regional disparities in the disbursement of agricultural credit by scheduled commercial banks. At the same time the share of agricultural GDP in total GDP is falling. In this context, this paper examines the credit policy of the India. Credit helps farmers invest in creating assets to generate output and income through deploying science, technology and modern methods of business management. Investments in farm can generate farm income sustainably when credit is simultaneously adequately supported by backward and forward linkages, viz. inputs of production, technology and services. The World Bank in its sector policy paper as back as in 1975 has aptly reiterated "credit is often a key element in the modernization of agriculture. Not only can credit remove financial constraint but it also accelerates the adoption of new technology. Credit facilities are also an integral part of the process of commercialization of the rural economy. However, no amount of credit even at the most reasonable rates can guarantee higher productivity or income among the rural poor, as the success depends upon many factors including the availability of inputs and services, sound credit policies, well-managed institutions and appropriate delivery channels". This paper briefly highlights Indian agricultural credit. So overall agricultural credit has impacted economic condition of farmers positively.

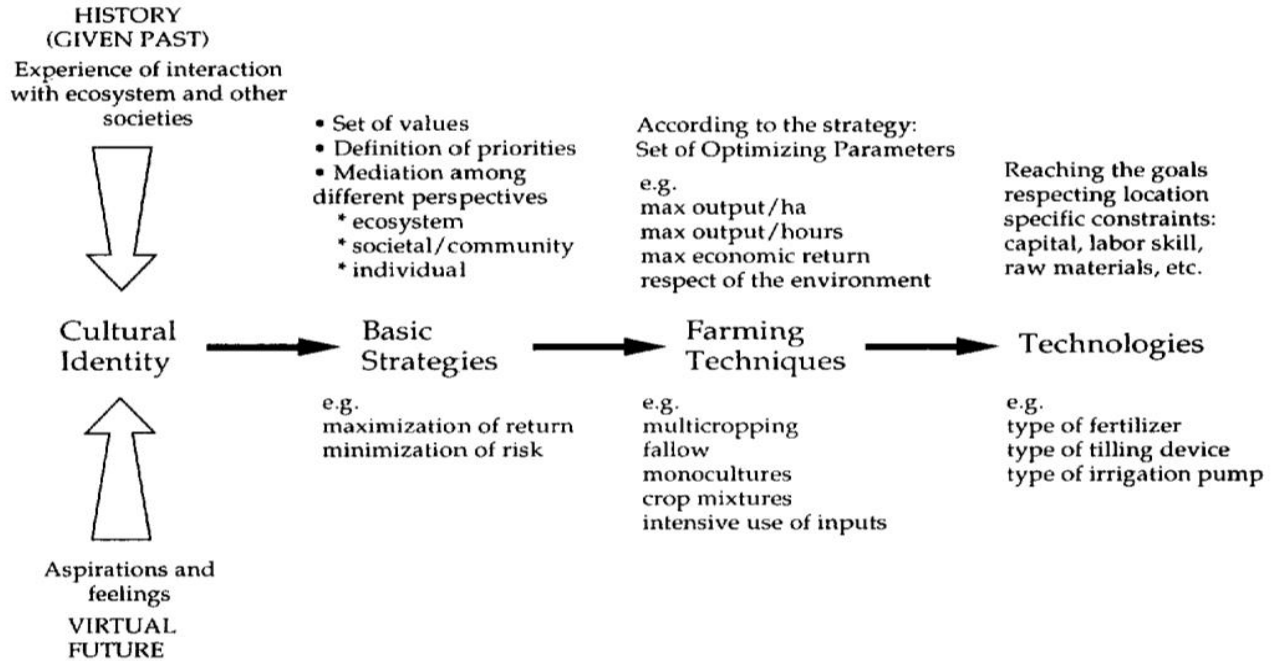
#### **d) Technological Changes in Agriculture for Farmers**

**Sheikh Mohammed Mamur Rashid *et al.* (2016)** pointed the purpose of this research was to identify the obstacles that Bangladeshi farmers encountered while using e-Agriculture services. Primary data were collected in Bhatbour Block of Dhighi union under Sadar Upazila of Minikganj District where the local government had been implementing the e-Agriculture pilot project since 2011. Data were collected from 1 September, 2015 to 30 September, 2015. Descriptive statistics, multiple regression (B) method were used for analysis. Findings discovered that lack of knowledge on e-Agriculture was the major problem that

affected the farmers in the study area. In addition to that, the study also revealed that education, participation in training, usages of e-Agriculture, attitude towards e-Agriculture and availability of e-Agriculture had significant contribution towards the problems faced by farmers' in using e-Agriculture. In addition to that, the researchers recommend that the NGO's and local government bodies should create awareness to the farmers via organization of local seminars and training programs on availability and usefulness of e-Agriculture service.

**Rachel Posner (2017)** says this study examined how farmers perceive their participation in Sahaja Aharam, a farmer producer company based in Hyderabad, Telangana. Through qualitative interviews with seven farmers who are formally involved in this FPC, it was evident that involvement in the Sahaja Aharam programs has changed the lives of farmers in many ways. Many farmers received assistance in converting from chemical farming to organic farming, which allowed them to benefit financially, environmentally, and in their personal health and happiness. Additionally, Sahaja Aharam links their participating farmers to markets through which they receive a higher producer price, shortening the typically large gap between consumer price and producer price found in markets throughout India. Overall, through these benefits, the small farmers involved in this FPC were able to improve their livelihood. Through providing access to fair-paying markets, knowledge of organic farming, and other forms of support, Sahaja Aharam as an FPC has allowed its members to find greater success in their farming practices and overall lives. However, through the interviews it was made clear that small farmers in Telangana still face many challenges.

**FIGURE I**  
**THE PROCESS OF TECHNOLOGICAL CHOICE IN AGRICULTURE**



Source: M. Giampietro / *agriculture, ecosystems and Environment* 65 (1997)

Upendra *et al.* (2020) expressed optimization of agricultural practices for enhanced crop yield is considered to be essential phenomena for the countries like India. In order to strengthen the economy and also to meet the food demand for the exponentially growing population, optimizing the agricultural practices has become necessity. In India, weather and geographical conditions are highly variable and were thought to be the major bottleneck of agricultural practices to achieve improved crop yield. Agricultural practices in India are facing many challenges such as change in climatic conditions, different geographical environment, conventional agricultural practices; economic and political scenario. Economic loss due to the lack of information on crop yield productivity is another major concern in the country. These hurdles can be overcome by the implementation of advanced technology in agriculture. Some of the trends observed are smart farming, digital agriculture and Big Data Analytics which provide useful information regarding various crop yields influencing factors and predicting the accurate amounts of crop yield.

#### e) Welfare Schemes and Policies for Farmers

Singal (2010) pointed views that agriculture is the mainstay of the Indian economy. Agriculture and allied sectors contribute nearly 22 percent of the Gross Domestic Product (GDP) of India, where about 65 to 70 percent of the population is dependent on agriculture for their livelihood. Agricultural production mainly depends on the monsoon, as about 60 percent of the cultivated area in the country is rain fed. Agriculture is a major sector employing more than 60 percent of the labour force in rural India A majority (more than two-

third) of the farming community belongs to the small and marginal category, hence, have little means of subsistence and most of them are poverty stricken Government programmes like MSP subsidy on fertilizers/chemicals, and so on, must be continued for some more years (5-10 years) of the liberalization policies/programmes adopted on merit basis.

**Bodh (2015)** expressed in his study says that Government implements various programmes/schemes viz. Rashtriya Krishi Vikas Yojana (RKVY), National Food Security Mission (NFSM), Bringing Green Revolution to Eastern India (BGREI) etc. with the objective of increasing production and productivity of rice, wheat and other crops. In addition Indian Council of Agricultural Research (ICAR) and State Agricultural Universities (SAU) have developed a number of improved varieties of food grains crops to enhance production and productivity of food crops. Government has also taken steps for increasing investment, improving farm practices, rural infrastructure and delivery of credit, technology and other inputs, extension, marketing etc. to improve agriculture production and productivity. Other measures taken by the Government include incentivisation through higher Minimum Support Prices of agricultural commodities, increase in credit flow to agriculture sector, interest subvention on crop loans etc.

#### **f) Challenges Faced by Farmers**

**Parmeshwar Udmale *et al.* (2014)** Recurring drought is a major challenge in the Drought Prone Area of Maharashtra State in India. Agriculture (e.g., rain fed cropping and livestock) is the major income activity of over 64% of the state's population. The objective of this study is to understand the rural farming community's perception of drought impacts on their socio-economic activities and environment, their adaptation at the household level and opinions on government drought mitigation measures. This study is based on both secondary and primary data collected via a survey of 223 farming households. The results show that decrease in yield of cereals, horticultural crops, livestock production and loss of employment, all associated with decreased income of farmers, were the most immediate economic impacts of drought. Social impacts such as population migration, impacts on health and schooling of children, hopelessness and sense of loss, conflicts in society for water, and malnutrition due to changed food preferences were also reported. The environmental impacts such as increases in average atmospheric temperature, pasture-forest degradation, deteriorated water quality, damage to fish habitat-wild life, and groundwater depletion were perceived by farmers to high extent. In spite of good perception of severity of drought impacts by farmers and their familiarity with various adaptation options, the preference given for their adoption in agriculture was not good enough. Also to mitigate drought, the government provided various mitigation measures, but the level of satisfaction amongst farmers was low. It is expected that this study will help policy makers to develop more appropriate drought adaptation policies in India.

## **C. Status of Farm Labourers**

### **a) Definition of Farm Labourers**

The **Agricultural Labour Enquiry Committee, 2017** defines agricultural labourers as those who derive their main sources of income by working on farms of others for a wage. Agricultural labourers are the most unorganized and exploited class of the rural population of the country.

### **b) Classification of Farm Labourers**

The first agricultural enquiry committee had classified agricultural workers into two categories: (i) attached labourers, and (ii) casual labourers. Attached labourers are attached to some cultivator household on the basis of a written or oral agreement. Their employment is permanent and regular. All workers not falling in the category of attached labourers constitute casual workers. They are free to work on the farm of any farmer and payment is generally made to them on a daily basis. Agricultural labourers can be broadly divided into family labourers, hired labourers and bonded labourers. Family labourers category belongs to small farmers who are not financially sound to hire labour. Small farmers are hiring labour during peak seasons such as transplanting, weeding and harvesting. When labour is required in abundance and the operations have got to be completed in a short period of time. Hired labour can further be categorized in two groups; casual labour and attached labour. Attached workers who are more or less in continuous employment, are under some sort of contract with the employers during the period of employment, while casual workers are employed on daily wages for particular operations which lasts only for a short period. While attached workers are often employed on contract, mostly oral contract, extending over a longer period that is quarterly, half yearly or yearly. The wages of attached labourers are generally lower than those of casual labourers who are employed on piece work basis. Bonded labourers are also a special class of agricultural labour who are at the bottom of the agricultural ladder in India. The prominent feature of this system is that a man pledges himself or sometimes a member of his family against a loan. Inability to pay back the loan results in the attachment of that person to the creditor till such time when the loan is finally paid (**Hemant Singh 2016**).

### **c) Existing Conditions of Farm Labourers**

**Rudrappa (2014)** stated this study clearly indicates that though there have been number of infrastructural policies of government of Karnataka; there are significant disparities in infrastructural development in Bengaluru rural district. Insufficient rural infrastructure has resulted in slow and tardy economic growth. Establishment of soft infrastructure like roads and railway lines will provide backward and forward linkages for rural development in Bengaluru rural district.

**Saqib khan (2015)** stated historically, the rural labour process in Thane was marked by two dominant forms of control -veth begar and lagna gadi- which led to brutal exploitation of Adivasi labourers. Veth or veth beggar was the term for the system of forced labour extracted from tenants by landlords. The system was a consequence of the tenants 'dependence on landlords not only for cultivation but also for subsistence, for not less than five months in a. The landlords extracted such forced labour for as many days as they wished, with many Adivasis having to contribute as much as a fortnights labour in a month. Shamrao Parulekar and Godavari Parulekar, communists, freedom fighters, and Kisan Sabha activists, were closely associated with this struggle. The basic reasons for the revolt were the • \Warlis• e abominable condition of wretchedness and their suppression by tyrant landlords.. The Warli revolt resulted in major gains for the Adivasis of Thane: an end to the system of forced labour (veth begar) and bonded labour (lagna gadi); fixe wages for grass cutting and other forest-based work of four and two anas a day respectively; and payment of substantial rent arrears. Landlords were forced to pay Rs 3.50 and Rs 4.00 as daily wages for grass-cutting in jungles and the coastal strip, and a system of wages was devised by the Kisan Sabha whereby all labourers, irrespective of whether they did piece work or were daily workers, would receive Rs 1.25 a day as wages for daily casual work. The revolt also led to an —awakening of the Warli's pride and self-consciousness as a human being.

#### **d) Programmes and Schemes for Farm Labourers**

**Selva Maheshwari et al. (2011)** stated this study conducted in the Thanjavur district of Tamil Nadu, has identified the problems being faced by dairy farmers due to scarcity of farm labour for agricultural and livestock production. The study is based on the data collected from 40 selected respondents involved in crop production and dairying in the study area during the year 2008-09 through primary survey. The study has revealed that the implementation of Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) has provided employment opportunities to rural workers and has checked the migration of farm labour from villages to cities and nearby industrial townships. All the eligible family member of landless dairy farmers had the job cards, but medium and large dairy farmers possessing agricultural land, prefer to work at their own farms. These farmers have reported that they were facing acute shortage of labourers during peak paddy planting and harvesting due to MGNREGS. The labour wages have increased significantly from Rs 60 to Rs110 per day since the implementation of MGNREG scheme. It has been observed that milch animals of some landless/small dairy farmers are being maintained by the children or aged family members, as majority of adult family members prefer the MGNREGS jobs to earn wages. These adult members have complained about not getting 100-day wage employment as per provisions of scheme. The wage payments are also delayed after completion of work and they face problems in getting

the job cards. The study has concluded that the minimum wages under MGNREGS should be increased cautiously keeping in view its impact on agricultural/ livestock activities.

**Shabana Anjum (2017)** indicate Farm workers in India are characterized by low income, poor working and living standard, irregularity in employment, absence of social security measures and welfare laws because of which they are vulnerable to socio-economic hardship. They are also denied of minimum wages and their work is more of casual and contractual nature and also suffers from low productivity syndrome. The rural indebtedness of the farmers because of adverse seasonal conditions and dependence, lack of remunerative market, non-availability of adequate institutional support for financial assistance and the expenditure on prevailing social customs are the problems faced by Indian farmers. There are many labour welfare schemes and social security laws for the organized labour but few for unorganized farm workers. Indian farm workers face serious disadvantages as compared to workers in other sector. They lack regularity in employment, social security benefits and faces low wages and poor working conditions. Different legislations are enacted to improve the condition of working class but most of them are for the workers in the organized sectors. Even in the most awaited Unorganized Workers Social Security Act, 2008, farm workers are actually excluded from the very definition of ‘unorganized worker’. Though there are many other schemes for the welfare of workers like The National Social Assistance Programme (NSAP), Rashtriya Swasthya Bima Yojna (RSBY), Janani Suraksha Yojna, Aam Aadmi Bima Yojna etc but they don’t reach to all needy workers as most of them are for the workers below poverty line. So their vulnerability and insecurity need to be addressed through an Integrated Social Security Scheme and umbrella legislation for ensuring a minimum level of protection to the workers in farm sector. Different other acts need to extend their coverage to agricultural workers too.

#### **e) Challenges Faced by Farm Labourers**

**Rastogi *et al.* (2010)** pointed out pesticides are used extensively throughout the world in agriculture and in pest control as well as for community health purposes. Organophosphate (OP) pesticide self-poisoning is an important clinical problem in rural regions of the developing world that kills an estimated 200,000 people every year. Unintentional poisoning kills far fewer people but is an apparent problem in places where highly toxic OP pesticides are available. Neurologic dysfunction is the best documented health effect of pesticide exposure. High-level exposure has both acute and long-term neurologic signs and symptoms, and adverse effects have been reported in most type of pesticides, including organophosphate (OP), carbamate, organochlorine, and pyrethroid insecticides, herbicides, fungicides, and fumigants. Acute OP pesticide exposure can involve in wide range of both central and peripheral neurologic symptoms.

Increased neurologic symptom prevalence may provide early evidence of neurologic dysfunctions, before clinically measurable signs are evident.

**Siddhanath M. Gade *et al.* (2019)** stated that the major problems in agricultural labourers and measures taken by Indian Government for agricultural labourers. Secondary data has collected by researchers from various government websites and research articles. It is found that the minimum or inadequate wage is the major like fixation minimum wage, programme and scheme for providing employment, abolition of bonded labour, special agencies for development etc. from the research is concluded that, agricultural labourers faced various problems and issues like low wage for women in agricultural sector, inadequate wage, modernization of agricultural works, high incidence of child labour, improper employment and working conditions, indebtedness and increase in migrant labour etc. also government take varicose measures for this problems like fixation of minimum wage providing land to landless labour, programme and schemes for providing employment, abolition of bonded labour, special schemes for providing employment and special schemes for development etc.

#### **D. Related Research Studies**

**Krishnaveni (2011)** expressed agriculture in India is the vertical backbone of the country and is regarded as the largest sector of the country's economic activity. Agriculture at present provides livelihood, to 65-70 percent of the total population. The sector provides employment to 58.4 percent (268.1 million) of country's workforce and is the single largest private enterprise. Agricultural labourers mostly landless constitute the poorest segment of Indian agricultural population. They belong to the economically backward and oppressed section of the society. They are basically unskilled and unorganized and work in farmers of prosperous big fanners as casual workers on wages for a large part of the year. One of the most disquieting features of the rural economy of India during the past several decades has been its constantly increasing trend in the number of landless labourers. The phenomenon of under employment, under development and surplus population are simultaneously manifested in the daily lives and living of agricultural labourers.

**Roy *et al.* (2013)** stated Socio-economic status (SES) is a combined measurement of economic and social position of an entity compared to others in society. It influences the accessibility to the resources, livelihood pattern, food & nutritional security etc. It often predicts the psychological and behavioural components of a sample viz. knowledge, attitude, perception, adoption, change-proneness, level of aspiration, risk bearing ability, economic motivation etc. Present study tried to investigate SES of hill farmers to correlate it with their adoption of improved farm practices which were meant for higher yield, return, proper utilization of natural resources, sustainable livelihood security and food & nutritional enrichment. The study was conducted in Bhagar Tola and Maniagar villages of Dhauladevi block in Almora

district of Uttarakhand during 2011-12. Sixty farmers were selected randomly. Ten variables viz. category, age, education, occupation, social participation, landholding, herd size, farming experience, annual income and material possession were selected to assess the SES. Data was collected through a structured interview schedule by personal interview method. The study showed that 58 percent of the respondents were in SC category and rests were in unreserved category. The average age of the respondents was 42 years and most were having medium education level (63.33%). Agriculture was the sole occupation of 25 percent farmers whereas others had subsidiary occupations like labour, shop keeping, driving etc. Majority were found having medium level of social participation (78.34%). The average landholding was 0.40 ha and most were having a medium herd size (66.67%). The respondents had an average farming experience of 19 years. Most of the farmers had medium levels of annual income (55%) and material possession (60%). In totality, the study revealed that 26.67 percent of farmers belonged to low SES category, 55 percent of farmers belonged to medium SES category and 18.33 percent farmers belonged to high SES category.

**Jajuo *et al.* (2014)** viewed during the last two decades, the agricultural situation in the district has under gone a qualitative changes, the present approach of the farmers is inadequate for familiarizing the entire family with modern agricultural technology. Thane district is near to Mumbai and sub-urban. It is a challenge to agrarian community to produce to fulfill the increasing demand of the city population. Multi cropping increasing production and productivity and demand driven production is the challenge. With increasing civilization agriculture land is reducing day by day. Changing traditional mind set of farmers and general reluctance of new generation towards farming is also a challenge. District is known for horticulture production because of the agro climatic and soil properties.

**Narayanamoorthy *et al.* (2014)** viewed the economics of cultivation of the same crop under two diverse environments, viz. irrigated and less-irrigated regions, Also, the trends in profitability of the crops under irrigated and less-irrigated conditions are studied. The authors have selected five important crops namely bazra, maize, gram, groundnut and cotton and has used cost of cultivation data published by the Commission on Agriculture Cost and Prices(CACP) for the period 1971-72 to 2010-11. The present study has used the cost C2 as it covers all the variables and fixed costs for computing profitability out of different cost concepts(A1, A2, A2+FL, B1, B2, C1, C2, C2\* and C3) used by CACP for estimating costs and returns. The author has also deflated the cost and returns by the consumer price index for agricultural labourers (CPIAL) with 1986-87 base to see how the costs and returns have changed in real terms. For the crop bajra (Pearl millet) the authors have selected three states Rajasthan, Uttar Pradesh and Gujarat as they are the leading producer states of bajra of which they have selected Rajasthan because of its lower irrigation

coverage (4.51%) and Gujarat for its higher irrigation coverage (22.17%). The results had shown that at no point of time (triennium averages) during 1971-72 to 2010-11, bajra was profitable even under the irrigated conditions primarily because of a substantial rise in the cost C2, from Rs.1843/ha in TE 1973-74 to Rs. 4141/ha in TE 2010-11. The bajra crop grown under the rainfed conditions in Rajasthan was also seen to be yielding negative returns and had shown the economic un-viability of bajra in both irrigated and less-irrigated states. Same results have been found for the other cereal crop selected under the present study.

**Shalini raghav *et al.* (2014)** stated adoption of new farm technology is very crucial for agriculture productivity and development. Farmer's perception of new agricultural technology influences their decision to adopt the same. The main of this study is to examine the socio-economic status of farmers and their perception about technology adoption using a case study of Udham Singh Nagar district of Uttarkhand. The study is based on personal interview and group discussion with sample farmers of the district. The study finds that marginal and small farmers are reluctant to use new technology because it increase the cost of production, whereas relatively large farmers believe that technologies are good to them it terms of high yield, less pests and more benefit. The study suggests that there is need of government assistance to promote the participation of farmers particularly female ones in agricultural training and workshop. It is important to note that male farmers should encourage the involvement of females in their farm related discussion and decisions which would strengthen the family bondage as well as help them to take right decisions. Interaction with ADO /Ag. A scientist should be encouraged in the study area. Farmers who were educated and had basic exposure in the area of science and technology had a strong preference for the adoption of new technology had a strong preference for the adoption of new technology in their field. The result shows that there is a need to give more emphasis on education of farmers as education plays vital role in determining the adoption of new technology. It is clear from the discussion with farmers that they want to be trained on crop production and plant protection for the crops. The specifically want to have an intensive course for pest management in paddy and sugarcane production. These finding shows that the government can still play an important role in improving the adoption of technology and consequently increasing the productivity and production major crops in the study area.

**Sankarapandian (2015)** opined that the new agriculture technology adopted has helped in revolution sing Indian agriculture. The new agricultural strategy has been characterized by the adoption of High Yielding Variety (HYV) of seeds, fertilizers, pesticides, irrigation, machinery, improved implements and soil conservation. In order to feed the increasing population there arises a need to increase food grain production in general and agricultural production per unit of land in particular. The green revolution which

heralded the transition of agriculture from the traditional to a modern technology, promised increased agricultural output. The different natural and physical resource endowments, standards of use efficiency, prices, and constraints and pace and levels of adoption of the new technology would lead to the choice of different factor proportions. This warrants an analysis of impact of new technology on cost, return, net return distribution, yield determination, yield gap, input demand, supply responsiveness and labour absorption of small and large farmers adopting new technology and traditional farmers.

**Suresh babu (2015)** expressed overall, agricultural labourer's suffer under highly insecure and vulnerable working conditions. There are no social security measures to provide risk coverage and ensure maintenance of basic living standards in times of crisis such as unemployment or health issues. There are no laws to ensure that they work under suitable working conditions and are not subject to any health hazards. There has been some change in the nature and incidence of bonded labour in India as a result of various factors, including the impact of social change and social movements, economic modernization and state intervention.

**Sivaraj et al. (2016)** indicate that majority (43%) of the respondents in Kalingarayan basin had medium level mass media exposure, whereas in Ponnaniyar basin 40.00 per cent of the respondents were under high level of mass media exposure followed by medium and low. Different media would have been sought by the respondents for getting information on agricultural aspects. Even though most of the respondents were literates, limited availability of magazines, journals and periodicals related to agriculture and the problems on their subscription were acting as the limiting factors for accessing agricultural information. Leveraging traditional mass media and modern ICT technologies will help in the long run to increase the awareness levels among farming communities and help in devising and disseminating suitable coping mechanisms.

**Aziz et al. (2018)** stated that less than fifty (48.33%) of the respondents belonged to middle aged category (35-50 years) while 55.83% of the respondents were literate in the study area. The data further showed that majority (70.83%) of the respondents were owner cultivator whereas 65.00% of the respondents were small farmer possessing land up to 12.5 acres. The data regarding relationship of age, education, tenancy status and size of landholding of the respondents showed significant relationship with awareness of agricultural short messages telecast on TV by government agencies. The data further showed that education, tenancy status and size of landholding of the respondents showed significant relationship with adoption of agricultural short messages while age of the respondents showed non-significant relationship with adoption of agricultural short messages telecast on TV by government agencies.

**Thangarasu (2018)** stated overall, agricultural labourers suffer under highly insecure and vulnerable working conditions. There are no social security measures to provide risk coverage and ensure maintenance of basic living standards in times of crises such as unemployment or health issues. There are no laws to ensure that they work under suitable working conditions and are not subject to any health hazards. The only law that applies to agricultural labourers is the Minimum Wages Act, which is supposed to address their working conditions. Even this existing legislative provision is more often observed in the breach, and therefore fails to provide much relief to the agricultural labourers except in some states where the unions of such workers are strong or where there is low landlessness leading to a somewhat tight labour market. There has been some change in the nature and incidence of bonded labour in India as a result of various factors, including the impact of social change and social movements, economic modernization and state intervention. While these processes have impacted positively on the unfree status of labour in traditional agriculture and in some other sectors, the incidence of bonded labour still remains high. Despite the law abolishing bonded labour, release and rehabilitation of bonded labourers has been a slow process, primarily because of the difficulty in identifying cases of forced labour.

**Umarani (2021)** expressed the present study conducted that the socio-economic problems faced by the malatali tribes are very high. The Malayali tribes are most backward in terms of development, education, and health. The study found that the most of the issues are facing by the Malayali tribes in kolli hills related to their livelihood such as lack of health facilities, the Malayali tribes has to travel more than 10km to get medical assistance from the government hospital. It shows the poor access of medical services in the study area. The study noted that the tribal farmers are excluded from the mainstream society through the low level achievement of human and social indicators.

## **CHAPTER III**

### **METHODOLOGY**

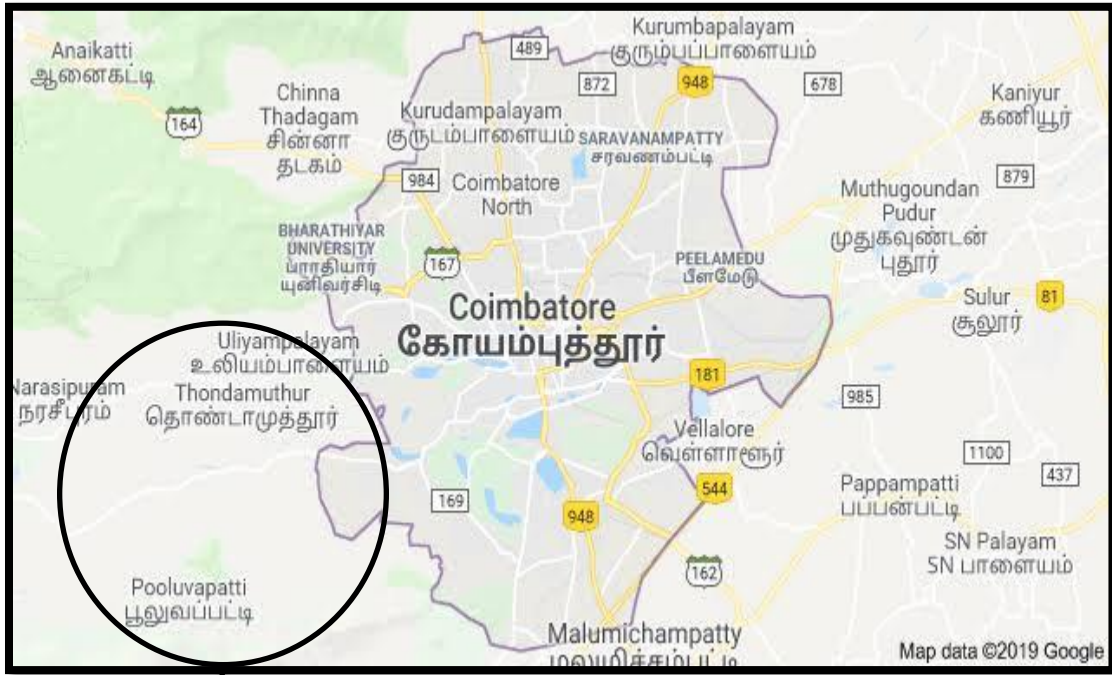
Methodology is a contextual framework for research a coherent and logical scheme based on views, beliefs, and values, that guides the changes of research. It is the specific procedures or techniques used for identify, select, process and analyze information about a topic. This specifies the frame work of research design, sampling procedure, methods of collection and analysis of data. The methodology pertaining of the study on **Analysis on Status of Farmers and Farm Labourers in Thondamuthur Block** is discussed under the following areas:

- A. Selection of the Area**
- B. Selection of the Sample and Size**
- C. Selection of Methods and Tools**
- D. Obtaining Ethical Clearance**
- E. Collection of Data**
- F. Analysis and Interpretation of the Data**

#### **A. Selection of the Area**

The area selected for the present study is Thondamuthur Block located in Coimbatore district, (Tamil: கோயம்புத்தூர், Tamil pronunciation: kōyampuththūr) Tamilnadu state. Coimbatore is one of the major metropolitan cities in the Indian state of Tamil Nadu. It is located on the banks of the Noyyal River and it is surrounded by the Western Ghats. Coimbatore is the second largest city in Tamil Nadu and the 16th largest urban agglomeration in India as per the census 2011. It is administered by the Coimbatore Municipal Corporation and is the administrative capital of Coimbatore District. Being a hub of textile industry in South India, the city is known as the “Manchester of South India”. It was ranked the 7th best city in India in the Ease of Living index 2020.

**FIGURE II**  
**LOCALE OF THE STUDY**



**Thondamuthur Block**

**Source: Google map 2022**

Thondamuthur is a suburban of Coimbatore city in the Indian state of Tamil Nadu. It comes under the Coimbatore Corporation. Thondamuthur is located 15 km west from the District headquarters Coimbatore, there are three routes available to reach Thondamuthur, through Vadavalli (15 km), through Perur (15 km), through Gandhi Park, Vedapatti (14 km). Thondamuthur is the residential and agricultural area. The major occupation of Thondamuthur block is agriculture, land allied activities and majority of the population occupation are farmers and farm labourers. Total boundaries of Thondamuthur block were 29.58km.

**TABLE III**  
**DEMOGRAPHIC DETAILS OF THE COIMBATORE DISTRICT**

<b>Demographic details of the Coimbatore district</b>		
<b>Description</b>	<b>Number</b>	<b>Population %</b>
<b>Total population</b>	<b>3458045</b>	<b>100.00</b>
Male	1729297	50.00
Female	1728748	49.99
Rural population	839105	24.27
Urban population	2618940	75.73
<b>Workers Details in Coimbatore District</b>		
<b>Description</b>	<b>Number</b>	<b>Workers %</b>
Total Main Workers	1443252	41.74
<b>Cultivators</b>	<b>75411</b>	<b>2.18</b>
<b>Agricultural Labourers</b>	<b>201351</b>	<b>5.82</b>
Household Industry, Manufacturing, Processing, Servicing, Repairs	44582	1.30
Other workers	1121908	32.44
Marginal Workers	124698	3.60
Workers	1567950	45.34
Non-Workers	1890095	54.66
<b>Total population</b>	<b>3458045</b>	<b>100.00</b>

**Source: Census 2011, Govt of India**

Thondamuthur is head of Thondamuthur Panchayat union there are 10 village Panchayats are included in the Union. Those are: Devarayapuram, Ikkaraibooluvampatti, Jagirnaickenpalyam, Madampatti, Madavarayapuram, Narasipuram, Perur Chettipalayam, Theethipalayam, Thennammanallur, Vellaimalaipattinam. The farmers and farm labourers were selected 10 villages from Thondamuthur block of Coimbatore.

## **B. Selection of the Sample and Sample Size**

### **Selection of the Sample**

A Sample refers to a smaller, manageable version of a larger group. It is a subset containing the characteristics of a larger population (Will Kenton, 2021). The Terminology “sampling” indicates the selection of a part of a group or an aggregate, with a view to obtain information from the sample. Sampling involves selecting a relatively small number of elements from a large defined group (Ranjith, 2009). Random sample is one where each items in the universe has an equal chance of known opportunity of being selected (Pillai et al., 2012).

The major occupations in the Thondamuthur are Farmers, Farm labourers, Household Industry Manufacturing, Processing, Servicing and Repairs. So the researcher selected one of the major sector of

employment of Thondamuthur, those are farmers and farm labourers. The study was conducted with Farmers and Farm Labourers as majority of the population are dependent on agricultural work for income generation. The Sample of Farmers and Farm Labourers from total population of Thondamuthur block were selected randomly for the study because of unbiased representation and each member gets equal opportunities to participate the study. The sample selected for the research was farmers and farm labourers from villages situated in Thondamuthur Block.

### Sample Size

Sample Size is a count of individual samples or observation in any statistical setting, such as a scientific experiment or a public opinion survey (Jon Zamboni 2018).

The total number of sample size was selected 200 and sample was collected among the Farmers were 100 and Farm Labourers were 100. This study was conducted with both men and women Farmers and Farm Labourers in the study area. Among the total number of population in Thondamuthur block 31% of them were involved in agricultural and farming activities (farmers and farm labourers).

**TABLE IV  
SELECTION OF SAMPLE (Population of Thondamuthu Block)**

Description	Number	Population %
<b>Population of Thondamuthur block</b>		
Total population	3837	100
Male	1887	49
Female	1950	51
Total household	1105	-
<b>Population of farmers</b>		
Farmers	313	100
Male	197	63
Female	116	37
<b>Population of Farm labourers</b>		
Farm labourers	884	100
Male	402	45
Female	482	55

**Source: Census 2011, Govt. of India**

**TABLE V  
SAMPLE SIZE**

Name of the village	No. of Farmers		No. of Farm Labourers	
	Male	Female	Male	Female
Devarayapuram	5	5	5	5
Ikkaraibooluvampatti	5	5	5	5
Jagirnaickenpalyam	5	5	5	5
Madampatti	5	5	5	5
Madavarayapuram	5	5	5	5
Narasipuram	5	5	5	5
Perur Chettipalayam	5	5	5	5
Theethipalayam	5	5	5	5
Thennammanallur	5	5	5	5
Vellaimalaipattinam	5	5	5	5
<b>Total no. of Respondents</b>	<b>100</b>		<b>100</b>	

From each member, samples were selected through cluster sampling method. Among 1197 farmers and farm labourers 200 (16%) has selected as a sample for the study. The farmers and farm labourers are drawn from each village respectively. Among 200 Farmers and Farm Labourers 20 has selected as a sample for the case study.

### **C. Selection of Methods and Tools**

A survey is a process of collecting data from the existing in the study area (Kumar, 2014). The survey method was used as a method for the study. The interview schedule was used as a tool for the study. Interview method is one of the powerful tools to collect information in social research. The interview techniques is a verbal method of securing data especially in the field research connected with social problems. It is a direct method of enquiry (Smiriti Chand, 2013).

The investigated prepared a detailed interview schedule including demographic profiles, general information's, occupational profile, various welfare facilities and extend of utilization of the measures provided. The data were collected through self-structure Interview schedule. The interview schedule prepared for collecting information of the present study is enclosed in Annexure I. The method selected for the present study was survey method and the tool prepared for the study was Interview schedule.

### **D. Obtaining Ethical Clearance**

The application form explaining the design and protocols used in the research study was subjected to the Institutional Human Ethics Committee (Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore) and Ethical clearance was obtained with the reference number AUW/IHEC/RM-21-22/XPD-01 from Institutional Human Ethics Committee, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore and enclosed in Annexure II.

## **E. Collection of Data**

Primary data is the type of data that is collected as first-hand information and facts from the respondents by an investigator. Secondary data refers to data that is collected by someone other than the primary user it includes censuses, information collected by government departments.

The researcher collected both primary and secondary data. The primary data directly collected through personal interviews with the randomly selected farmers and farm labourers. Secondary data can be found that information which is collected from journals, books, reports from government institutions magazines, reviews, articles, e-books etc.

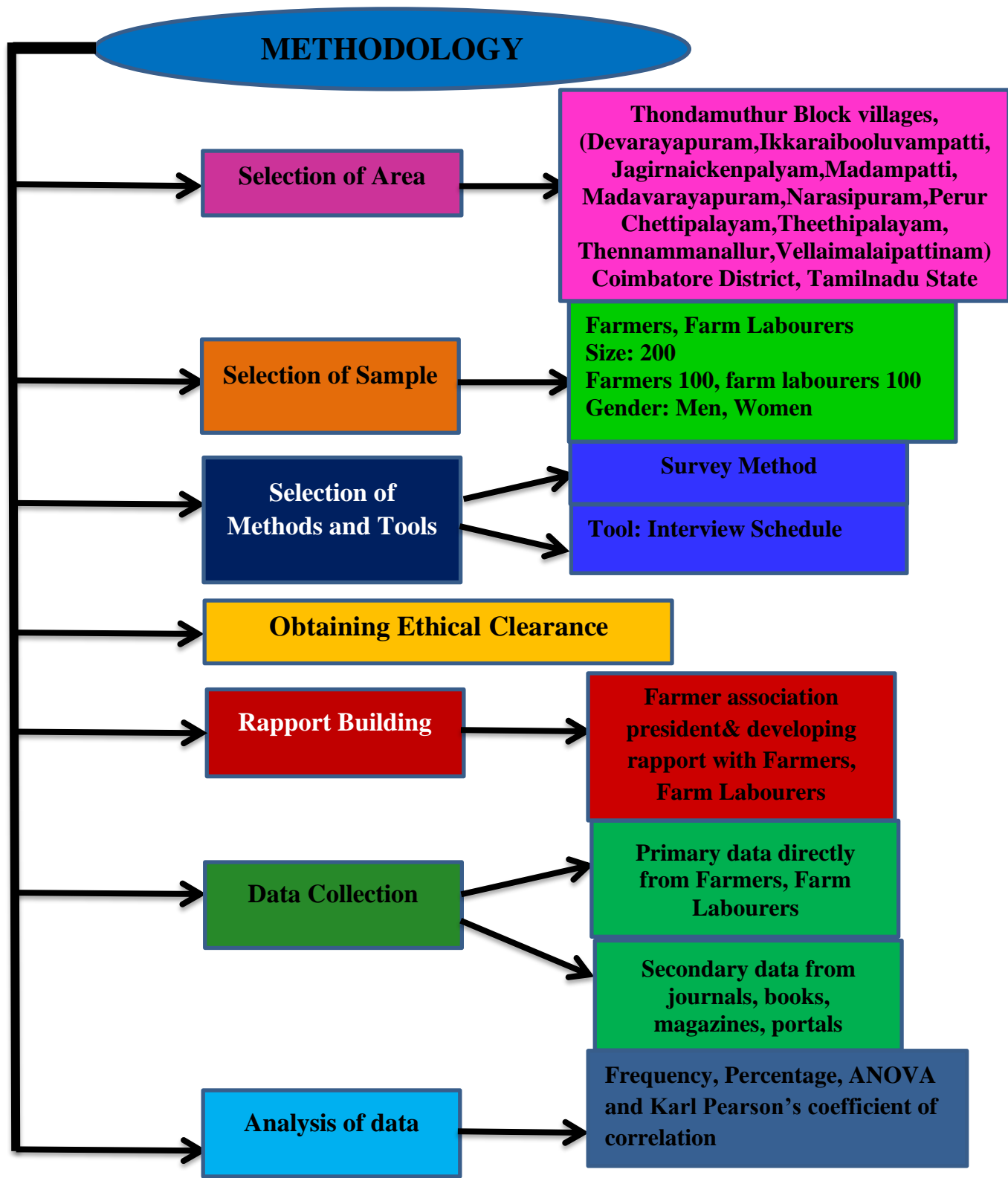
The investigator visited each selected farmers, farm labourers and made them understand about the purpose of the study. The respondents actively participated and cooperated for data collection.

## **F. Analysis and Interpretation of the Data**

Survey with Interview Schedule was administered to collect the relevant information. After data has been collected, it is essential to organize the information in a systematic manner in order to obtain the desired results and make interpretation scientifically. Data analysis and interpretation is the process of assigning meaning to collected information and determining the conclusions, significance and implication of the findings.

The collected data were subjected to statistical analysis with percentage analysis, standard deviation analysis, frequency analysis and Karl Pearson's Coefficient of Correlation method. Pie and bar diagrams were also prepared for representations of the data while interpretation helps to find out the relationship by using the percentage through the availability of accurate and resizable data for the present study. Percentages, frequency counts, ANOVA score and Karl Pearson's Coefficient of Correlation score were used for the data analysis and determine the relationship between the series.

The data collected were consolidated, tabulate, interpreted and presented in the chapter IV.



**FIGURE III**  
**METHODOLOGY FLOWCHART**

**FIGURE IV**  
**INTERVIEW WITH THE FARMERS**



**FIGURE V**  
**INTERVIEW WITH THE FARM LABOURERS**





**FIGURE VI**

**FIELD OF FARMERS AND FARM LABOURERS**



**CHAPTER IV**  
**RESULTS AND DISCUSSION**  
**PART 1**

The results pertaining to the study entitled on “**Analysis on Status of Farmers in Thondamuthur Block**” are discussed under the following heads:

**A. Socio Economic Status of Farmers**

**B. Status of Farmers**

- i. Information about Land and Household
- ii. Details about Livestock
- iii. Agricultural Activities Performed by Farmers in their Field
- iv. Information about Irrigation
- v. Cropping Pattern Followed by Farmers
- vi. Pesticides and Fertilizers Used by Farmers
- vii. Information on Savings and Credits of Farmers
- viii. Membership Details of Farmers
- ix. Daily Work Schedule of Farmers

**C. Details on Agricultural Infrastructure and Marketing for Farmers**

**D. Village Infrastructure for Farmers**

**E. Knowledge and Usage of Government Policies, Programmes**

- i. Knowledge on Schemes and Programmes
- ii. Source of Information about Agriculture
- iii. Benefits Obtained from Schemes

**F. Utilizations of Farming Technologies, Apps and Portals**

- i. Utilization of Farming Technologies
- ii. Utilization of Agricultural Apps and Portals

**G. Challenges Faced by the Farmers**

- i. Problems Faced by Farmers
- ii. Challenges Faced by Farmers

**H. Well-being of Farmers**

**I. Occupational Status of Farmers**

## A. SOCIO ECONOMIC PROFILE OF FARMERS

The socio-economic profile of the farmers explains about the profile which includes the educational backgrounds, age, size of the family and cultural backgrounds of the farmers in each village. The socio-economic profile of the farmers is presented in table VI.

**TABLE VI**  
**SOCIO ECONOMIC PROFILE OF FARMERS**

Sl.No	Aspects		F (N=100)	%
1.	Age (years)	21 to 35 years	27	27
		36 to 50 years	64	64
		51 to 60 years	9	9
2.	Gender	Male	50	50
		Female	50	50
3.	Community	BC	54	54
		ST	38	38
		SC	8	8
3.	Religion	Hindu	99	99
		Muslim	1	1
4.	Educational qualification	Primary	19	19
		Secondary	41	41
		HSC	16	16
		Degree	2	2
		Illiterate	22	22
5.	Marital status	Married	81	81
		Unmarried	6	6
		Widowed	12	12
		Divorced	1	1
6.	Type of family	Nuclear	91	91
		Joint	9	9
7.	Type of house	Bamboo house	1	1
		Cement house and tile roof	71	71
		Thatched house	28	28
8.	Family income per annum	Less than 1 lakh	41	41
		1-5 lakh	52	52
		More than 10 lakh	7	7
9.	Experience in farming	1- 10 years	34	34

		11-20 years	52	52
		21 years and above	14	14
10.	Occupation of family members	Private job	15	5.38
		Government job	2	0.85
		Entrepreneur	9	3.14
		Agricultural worker	98	41.70
		Farmer	86	36.59
		None	29	12.34

The data of age reveal that majority sixty-four per cent of the farmers are belong to the age group 36 to 50 years. Fifty per cent of the farmers that half of the population were male and rest of the half of the population that is fifty per cent were female. Fifty-four per cent of the Farmers belong to the community of BC category. Majority forty one per cent of the farmers have done secondary education. Fifty-two per cent of the farmers annual income of family were range between Rs. 1 lakh to 5 lakhs. Majority fifty-two per cent of the farmers had 11 to 20 years of farming experience.

## B. STATUS OF FARMERS

### i. Information about Land and Household

The details regarding nature of land holding and household, holding area, size of holding area, type of land holding, type of soil holding, use of farming tool and topography of land are furnished in the table VII.

**TABLE VII**

### INFORMATION ABOUT LAND AND HOUSEHOLD

Sl.No	Land and household details		F (N=100)	%
1.	Ownership of land	less than 1Hector	15	15
		1.0to 2.0 Hector	32	32
		2.0 to 4.0 Hector	22	22
		4.0 to 10.0 Hector	20	20
		10.0 Hector and above	10	10
2.	Type of ownership of land	Tenant	18	18
		Own	82	82
3.	Type of land	Wet	39	39
		Garden	52	52
		Dry	9	9
4.	Type of soil	Black	25	25
		Red	74	74

		Clay	1	1
5.	Topography- Plots of the fields are	Contiguous	77	77
		Scattered	23	23
6.	Farming tools *	Wooden Plough	30	9.23
		Tractor	15	4.62
		Sickle	36	11.08
		Motor	50	15.38
		Bamboo Basket	75	23.08
		Pesticides and fertilizer sprayer	36	11.08
		Pick Axe	33	10.15
		Hoe (Kudal)	29	8.92
		Bullock cart	21	6.46
7.	Use of farming tool	Own use	91	91
		For rent	9	9
8.	Ownership of the house	Own house	91	91
		Rent house	9	9
9.	Households have a latrine, bathroom facility	Yes	92	92
		No	8	8
10.	Types of fuel use for cooking	Wood	15	15
		Kerosene	22	22
		Gas	62	62
		Electricity	1	1
11.	Where is your farm located from house	Near the house	37	37
		Near village	55	55
		Far from my village	8	8
12.	How do you reach the farm	Through walking	36	36
		Through bike	58	58
		Through bus	6	6
13.	Who will tack care of household works	Men	3	3
		Women	93	93
		Both men and women	4	4

\*Multi response    F=Frequency    %=Percentage

The inference drawn from data shows that thirty-two per cent of the farmers were belong to the small farmers. Majority eighty-two per cent of the farmers were have own land for farming activities. Among the hundred farmers majority seventy-seven per cent of the farmers have contiguous land. Majority ninety-one

per cent of the farmers have their own farming tools. Majority ninety-one per cent of the farmers were living in their own house. Sixty-two per cent of the farmers are having gas connections for cooking. Fifty-five per cent of the farmers agricultural land were near to the village. Fifty-eight per cent of the farmers reach the farm with their bike. Among the farmers ninety-three per cent of the farmers household work taking care by women.

## ii. Details about Livestock

The details relating to livestock status of the farmers is furnished in the Table VIII.

**TABLE VIII**  
**DETAILS ABOUT LIVESTOCK**

Sl.No	Livestock details		F (N=100)	%
1.	Do you own livestock	Yes	95	95
		No	5	5
2.	If yes who will take care of them	Men	7	7
		Women	68	68
		Both men and women	20	20
		None	5	5
3.	Livestock ownership *	Cow	60	26.20
		Buffalo	4	1.77
		Bullock	26	11.35
		Goat	79	34.49
		Hen	46	20.08
		Fish	9	3.93
		Nil	5	2.18
4.	Have animal shed in your home/ farm	Yes	95	95
		No	5	5
5.	Who will do milching from cow at home	Men	12	12
		Women	47	47
		Both men and women	36	36
		None	5	5
6.	Where do you sell / use milk of livestock	Milk society	63	63
		Distribution to every house	20	20
		Own household use	12	12
		Nil	5	5

The data shows that majority ninety-five per cent of the farmers have livestock. Among farmers sixty-eight per cent of the farmers said that women were taking care of the livestock. Majority ninety-five per cent of the farmers have own shed in their home/ farm. Sixty-three per cent farmers sell milk in milk societies.

### iii. Agricultural Activities Performed by Farmers in their Field

The agricultural activities performed by farmers in their field are discussed in the table IX.

**TABLE IX**

#### **AGRICULTURAL ACTIVITIES PERFORMED BY FARMERS IN THEIR FIELD**

<b>Sl.No</b>	<b>Agricultural activities</b>	<b>F (N=100)</b>	<b>%</b>	
1.	Reason of became a farmer *	Ancestral work	23	8.55
		Have own land	44	16.36
		Low level of Education	63	23.42
		No other skills	31	11.52
		Interest in Agricultural Work	60	22.30
		Easy to obtain	35	13.01
		Large size of family	13	4.83
2.	Type of farming practice applied	Organic	36	36
		Inorganic	64	64
3.	Type of agricultural work *	Cleaning land	35	12.68
		Use of Fertilizer	53	19.20
		Diggings	29	10.51
		Use of Pesticides	18	6.52
		Harvesting	45	16.30
		Watering	31	11.23
		Plantation	16	5.80
		All types of work	49	17.75
4.	Style of ploughing	Manual and Bullock	64	64
		Manual and Tiller	33	33
		Manual tiller and bullock	3	3
5.	Employ agricultural labourers for farming works	Yes	88	88
		No	12	12
6.	Did you provide farming tools for farm works	Yes	83	83
		No	17	17
7.	If yes, daily wages paid for men farm	500	55	55

	workers (Rs)	600	37	37
		None	8	8
8.	Daily wages paid for women farm workers (Rs)	300	54	54
		500	39	39
		None	7	7
9.	If no, who would help in the farm	Husband	36	36
		Wife	41	41
		Children	13	13
		None	10	10
10.	Who will be have a decision making authority on farming activities in your family	Men	52	52
		Women	29	19
		Both men and women	19	19
11.	Your involvement of other agricultural production activities	Vermiculture	28	28
		Gobar gas / biogas	10	10
		None	62	62
12.	Agricultural activities give maximum income	Farming	88	88
		Farm labour	12	12
13.	How many days do you have to work in a year (no of days)	Below 100	1	1
		100-200	25	25
		201-250	44	44
		251-300	12	12
		301– above	18	18

\*Multi response F=Frequency %=Percentage

The inference drawn from data shows that 23.42% of the farmers choice of the occupation were low level of education. Sixty-four per cent of the farmers are doing inorganic farming. The data indicates that 19.20% per cent of farmers doing as farm work were fertilizer work. Majority eighty-eight per cent of the farmers were felt farming gives maximum output with minimum input.

#### iv. Information about Irrigation

The information about irrigation of the farmers is discussed in the table X.

**TABLE X**  
**INFORMATION ABOUT IRRIGATION**

Sl.No	Irrigation details		F (N=100)	%
1.	Source of irrigation water	Rain	16	16
		Well	54	54
		Bore well	28	28
		River	2	2
2.	If it is well do you own it	Yes	82	82
		No	18	18
3.	Type of irrigation	Canal	30	30
		Dug well	40	40
		Tube well	19	19
		Drip	11	11
4.	Irrigation method	Manually	83	83
		Mechanical	17	17
5.	Is there any subsidy for water and electricity usage	Yes	89	89
		No	11	11
6.	Do you had/have water scarcity	Yes	85	85
		No	15	15
7.	If yes, reason *	Overuse	27	10.67
		Drought	52	20.55
		Lack of government planning	62	24.51
		Urbanization	57	22.53
		Lack of rain	55	21.74
8.	Improved methods of irrigation led agricultural development	Yes	84	84
		No	16	16

The data shown that majority fifty-four per cent of farmers source of irrigation were well water. Majority eighty-two per cent of the farmers own well. Forty per cent of the farmers have type of irrigation were dug well. Majority eighty-five per cent of the farmers were said they have water scarcity. Majority eighty-four per cent of the farmers agreed that improved methods of irrigation have led agricultural development.

**v. Cropping Pattern Followed by Farmers**

The details relating to cropping pattern followed by farmers is furnished in the table XI.

**TABLE XI**  
**CROPPING PATTERN FOLLOWED BY FARMERS**

Sl.No	Crop pattern	F (N=100)	%	
1.	Cropping pattern	Single	42	42
		Double	51	51
		Multiple	7	7
2.	Name of the crops cultivated *	Coconut	49	13.06
		Sugarcane	20	5.33
		Banana	64	17.06
		Fruits Trees	38	10.13
		Vegetables	62	16.53
		Turmeric	34	9.06
		Groundnut	11	2.93
		Cholam	95	25.33
3.	If you cultivate cholam mention the purpose	For livestock	54	54
		For sale	41	41
		None	5	5
4.	Whether crop pattern changed from year to year	Yes	88	88
		No	12	12
5.	Who will do choose crop pattern	Men	41	41
		Women	39	39
		Both	20	20
6.	Type of cropping system you use	Mono-cropping	25	25
		Crop rotation	51	51
		Sequential cropping	20	20
		Intercropping	3	3
		Stir cropping	1	1
7.	Cultivate seasonal crops	Yes	82	82
		No	18	18
8.	Plant medicinal plants	Yes	22	22
		No	78	78

The data explains that fifty-one per cent of the farmers use double cropping pattern. Majority 25.33% of the farmers cultivate cholam. Majority eighty-eight per cent of the farmers were changing cropping pattern from year to year. Forty-one per cent of the farmers said that their cropping pattern was

chosen by men. While among farmers fifty-one per cent of the farmers were following crop rotation. The data depicts that majority eighty-two per cent of the farmers were follow seasonal cropping system. Whereas majority seventy-eight per cent of the farmers not doing medicinal plants.

**vi. Pesticides and Fertilizer Used by Farmers**

The pesticides and fertilizer used by farmers is discussed in the table XII.

**TABLE XII**  
**PESTICIDES AND FERTILIZER USED BY FARMERS**

Sl.No	Aspects		F (N=100)	%
1.	Type of pesticides and fertilizers used	Organic	36	36
		Inorganic	64	64
2.	If organic, reason	Cheap and best	7	7
		Traditional & Easily available	35	35
		Good yield	25	25
		It avoid soil pollution	16	16
		Eco friendly	9	9
		None	8	8
3.	If inorganic, reason	Cheap and best	33	33
		Easily available	49	49
		Good production	12	12
		None	6	6
4.	Nature of seeds	Nature hybrid	35	35
		Traditional preservative seeds	52	52
		HYV seeds	13	13
5.	Purchase seeds from cooperative society	Yes	-	-
		No	100	100

F=Frequency    %=Percentage

The data depicts that majority sixty-four per cent of the farmers are using inorganic pesticides and fertilizers for the crops. The data shows that fifty-two per cent of the farmers were using traditional preservative seeds. One-hundred per cent of the farmers not purchasing seeds from cooperative society.

**vii. Information on Savings and Credits of Farmers**

### Details on Savings of Farmers:

The details on savings of the farmers are furnished in the table XIII.

**TABLE XIII**  
**DETAILS ON SAVINGS FARMERS**

Sl.No	Saving details		F (N=100)	%
1.	Source of income	Farming	34	34
		Allied activity	29	29
		Farming tools	26	26
		Cattle	6	6
		Labour	3	3
		Other family member	2	2
2.	Type of savings	Cash in hand	26	26
		Commercial bank	29	29
		Insurance policy	3	3
		Postal deposit	33	33
		Chit fund	4	4
		Co-operative Society	5	5
3.	Mention the purpose of savings *	Invest in any kind of asset	28	11.24
		Child education	53	21.29
		Meet regular needs	75	30.12
		Meet daughter's marriage	57	22.89
		Meet any unforeseen events	26	10.44
		Health purpose	10	4.02
4.	Income from cultivation per annum (Rs)	Below 50,000	21	21
		50,000 -2,00,000	77	77
		Rs 3,00,000 – and above	2	2
5.	Income through animal (Rs) Husbandry per annum	Up to 75000	49	49
		75000-1,25,000	32	32
		1,25,000-2,00,000	17	17
		None	2	2
6.	Purpose of agricultural loan	Development of Land	44	22.56
		Digging of Well	41	21.03
		For Tube Well	51	26.15
		Purchase of Pump Set	39	20.00
		Purchase livestock	20	10.26

The data explains that thirty-four per cent of the farmers are earn only from farming activities. Thirty-three per cent of the famers have savings in postal deposit Majority seventy-seven per cent of the farmers annual income from cultivation was Rs. 50,000 to 2, 00,000. Whereas forty-nine per cent of the farmers annual income from animal husbandry were upto Rs.75, 000.

**Details on Credit of Farmers:**

The credits taken by farmers are discussed in the table XIV.

**TABLE XIV  
DETAILS ON CREDITS OF FARMERS**

Sl.No	Credit details		F (N=100)	%
1.	Satisfied with the income that earn from agriculture	Yes	31	31
		No	69	69
2.	Debt aspects *	Loans from SBI or its associates	16	6.83
		Loan from Cooperative Societies	30	12.82
		Loan from money-lenders	41	17.52
		Loan from Relatives	48	20.51
		Ancestral Loan	57	24.35
		Jewels Loan or Mortgages	41	17.52
		L.I.C.	1	0.45
3.	Purpose of Loan *	House Loan	30	17.34
		Modernization of farming	71	41.04
		Purchase of agricultural inputs	59	34.10
		Education loan	13	7.52

The data inferences that sixty-nine per cent of the farmers were not satisfied with the income earn from agriculture. Majority 24.35% of the farmers had ancestral loans. Whereas 34.10% of the farmers purpose of the loan were purchase agricultural inputs.

**Source and Purpose of Loan Received by Farmers:**

The details relating to source and purpose of loan received by the farmers are furnished in the table XV.

**TABLE XV  
SOURCE AND PURPOSE OF LOAN RECEIVED BY FFARMERS**

Sl.N o	Source	Agriculture purpose		Non-agriculture purpose		Personal needs	
		F	%	F	%	F	%
1.	Co-operative bank *	96	96	3	3	1	1

2.	Commercial bank *	42	42	42	42	16	16
3.	Private money lenders *	37	37	28	28	35	35
4.	Jewel loan *	49	49	26	26	25	25

The data explains that majority ninety-six per cent of the farmers got loan from co-operative society for agricultural purpose. Forty-two per cent of the farmers got loan from commercial banks for agricultural. Thirty-seven per cent of the farmers got loan from private money lenders for agricultural purpose. Forty-nine per cent of the farmers got jewel loan for agricultural purpose.

### viii. Membership Details of Farmers

The membership of farmers in kind of organization is discussed in the table XVI.

**TABLE XVI**  
**MEMBERSHIP DETAILS OF FARMERS**

Sl.No	Information on Membership	Yes		No	
		F	%	F	%
1.	Panchayat union	11	11	89	89
2.	Co-operative societies	96	96	4	4
3.	Self-help group(SHG)	25	25	75	75
4.	Farmers discussion group	27	27	73	73
5.	Mahila Mandals	98	98	2	2
6.	Farmers market	75	75	25	25
7.	Farmer association	20	20	80	80

The data exhibits that majority eighty-nine per cent of the farmers are not having membership in panchayat union. Majority ninety-six per cent of the farmers have membership in co-operative societies. Majority seventy-five per cent of the farmers have membership in farmers market. Majority eighty per cent of the farmers do not have membership in farmers association.

### ix. Daily Work Schedule of Farmers

The daily work schedule of farmers was discussed in the table XVII.

**TABLE XVII**  
**DAILY WORK SCHEDULE OF FARMERS**

Time	Rural men	F (N=50)	Rural women	F (N=50)
5 am	Wake up	26	Wake up	34
5:30 am	Cleaning animal shed, feeding animals	32	Cleaning animal shed and household activities	31
6 am to	Drinking tea or coffee and	34	Kitchen work, Drinking tea or	47

8 am	eating breakfast		coffee and eating breakfast	
9 am	Daily labour	45	Daily labour	42
12:30 pm	Feeding animals	37	Kitchen work	44
1:30 pm	Lunch	40	Lunch	36
2 pm	Daily labour	42	Daily labour	40
4 pm	Going or sending produce to the market	23	Taking rest	24
6 pm	Went to milk society	39	Milking from cow	37
7 pm	Spending time with village people or family	27	House hold activities	44
8 pm	Feeding animals	41	Kitchen work	41
9 pm	Dinner	31	Dinner	32
10 pm	Sleep	48	Sleep	50

F=Frequency

The above table of data reveals the daily work routine works of farming men and women; despite above table was indicated that majority of the work routine of farmers.

### C. DETAILS ON AGRICULTURAL INFRASTRUCTURE AND MARKETING FOR FARMERS

The details on agriculture infrastructure and marketing for farmers were discussed in the table XVIII.

**TABLE XVIII**

#### **DETAILS ON AGRICULTURAL INFRASTRUTURE AND MARKETING FOR FARMERS**

Sl.No	Agricultural infrastructure		F (N=100)	%
1.	Where do you purchase agricultural inputs (fertilizer, seeds, pesticides)	Government shops	49	49
		Private shops	50	50
		Through online	1	1
2.	Aware of subsidy provided by government on agricultural inputs	Yes	92	92
		No	8	8
3.	Do you sell agricultural products	Yes	93	93
		No	7	7
4.	If yes where do you sell	Uzhavar sandai	33	33
		Market	45	45
		Through online	10	10
		Retail shop	5	5
		None	7	7
5.	Period of selling agricultural	Immediately after harvest	50	50

	products	Store and sell in off season	41	41
		Make processed and sell	9	9
6.	Availability of storage or warehouse facility	Yes	79	79
		No	21	21
7.	Is it available for you to access all the time	Yes	78	78
		No	22	22
8.	Types of storage facilities available in your village	Own storage facility	83	83
		State warehousing corporation	4	4
		Food corporation of India	10	10
		None	3	3
9.	Have transportation facility to transfer the agricultural produce	Yes	93	93
		No	7	7
10.	Mode of transportation to transfer the agricultural products?	Two wheeler	43	43
		Tempo or Lorry	51	51
		Through walk	6	6
11.	Is it transportation facilities accessible for all the time	Yes	83	83
		No	17	17
12.	Do you have road connectivity to transfer the agricultural products	Yes	94	94
		No	6	6
13.	Do you have processing facilities like transform, package, grade	Yes	23	23
		No	77	77
14.	Do you have institutional infrastructure in your block	Agricultural research center	23	23
		Extension & education technology	33	33
		Information & communication services	15	15
		Financial services	20	20
		Marketing	9	9
15.	Do you have farming input based infrastructure in your block *	Seeds	42	20.49
		Fertilizer	61	29.76
		Pesticides	63	30.73
		Farm equipment's	30	14.63
		Machinery	9	4.39

The data explains that fifty per cent of the farmers are purchase input for farming activities from private shops. Majority ninety-two per cent of the farmers are aware of subsidy provided by government for agricultural input. Eighty-three per cent of the farmers said transportation facility was accessible for all the time to transfer agricultural products. Majority seventy-seven per cent of the farmers not having processing facilities like transform, package and grade.

#### D. VILLAGE INFRASTRUCTURE FOR FARMERS

The village infrastructure for farmers about kind of road, drinking water, availability of schools, getting post mail are discussed in the table XIX.

**TABLE XIX**  
**VILLAGE INFRASTRUCTURE FOR FARMERS**

Sl.No	Village infrastructure	F (N=100)	%	
1.	Type of road	Mud road	11	11
		Black toper road	62	62
		Concrete road	27	27
2.	How is the condition of the roads	Good	12	12
		Satisfactory	82	82
		Poor	6	6
3.	Major means of transport	Public transportation	80	80
		Own transportation	20	20
4.	Availability of electricity	Yes	98	98
		No	2	2
5.	Availability of drinking water	Yes	78	78
		No	22	22
6.	Sanitation facility available in your household	Yes	88	88
		No	12	12
7.	Availability of primary / secondary schools in the village	Yes	67	67
		No	33	33
8.	Availability of health service center in the village	Yes	66	66
		No	34	34
9.	Post office facility	Yes	81	81
		No	19	19
10.	Availability of Anganwadi Centre in the village	Yes	74	74
		No	26	26
11.	e-connection in the village	Yes	78	78
		No	22	22
12.	Telephone/ phone availability	Yes	94	94
		No	6	6

F=Frequency      %=Percentage

The data revealed that sixty-two per cent of the farmer's type of road in village was black topped road. Seventy-eight per cent of the farmers have internet connection in the village. Majority ninety-four per cent of the farmers have telephone or phone.

## E. KNOWLEDGE AND USAGE OF GOVERNMENT POLICIES, PROGRAMMES

### i. Knowledge on Schemes and Programmes

The knowledge about schemes and programmes are discussed in the table XX.

**TABLE XX**  
**KNOWLEDGE ON SCHEMES AND PROGRAMMES**

Sl.No	Knowledge on schemes & programmes	Yes		No	
		F	%	F	%
<b>Schemes</b>					
1.	MGNREGA	40	40	60	60
2.	Agricultural mechanization programme	31	31	69	69
3.	Rashtriya krishi vikas yojana	12	12	88	88
4.	Gramin bhandaran yojana	11	11	89	89
5.	National food security mission	16	16	84	84
6.	National agriculture insurance scheme	30	30	70	70
7.	National Health Mission	25	25	75	75
8.	Pradhan mantri gram Sadak yojna	16	16	84	84
9.	Weather based crop insurance scheme	16	16	84	84
<b>Programmes</b>					
10.	Farmers training	31	31	69	69
11.	Subsidy for livestock	25	25	75	75
12.	National policy for farmers	20	20	80	80
13.	Do you have Kisan Credit Card	6	6	94	94
14.	Benefit from Agricultural Department	35	35	65	65
15.	Agricultural Technology & management agency	25	25	75	75
16.	Horticulture and Soil schemes	24	24	76	76
17.	Subsidy for agricultural equipment's & machineries	22	22	78	78

The data concluded that sixty per cent of the farmers do not have knowledge about MGNREGA programmes. Seventy per cent of the farmers do not know of National agriculture insurance scheme. Seventy-five per cent of the farmers not aware of National health mission programme for the farmers health

safety. Sixty-nine per cent of the farmers have not attended farmers training programme. Seventy-five per cent of the farmers do not know about Subsidy for livestock. Seventy-eight per cent of the farmers not know of subsidy for agricultural equipment's and machineries.

**ii. Source of Information about Agriculture**

The source of information about agriculture is discussed in the table XXI.

**TABLE XXI**  
**SOURCE OF INFORMATION ABOUT AGRICULTURE**

Sl. No	Source of information	Yes		No	
		F	%	F	%
1.	Farmers Internship Programme	85	85	15	15
2.	Agro Exhibition	51	51	49	49
3.	Farmer's meet	76	76	24	24
4.	Agricultural university portals	54	54	46	46
5.	Government Departments	69	69	31	31
6.	Newspaper and Magazines	73	73	27	27
7.	Internet	27	27	73	73
8.	Gram Panchayat	82	82	18	18
9.	Farmers call center and SMS broadcast services	79	79	21	21
10.	Television agriculture Programmes	80	80	20	20
11.	Radio News	83	83	17	17
12.	NGOs	70	70	30	30
13.	Govt. Awareness Programmes in Villages level	73	73	27	27
14.	Tamil Nadu Agricultural University	73	73	27	27
15.	Tamil Nadu Govt. Agricultural Department	27	27	73	73
16.	Indian Council of Agricultural Research (ICAR)	27	27	73	73

The data indicated that eighty-five per cent of the farmers obtain information through farmers internship programme. Seventy-three per cent of the farmers obtain information through newspapers, magazines. Seventy-three per cent of the farmers do not obtain information with internet. Seventy-three per cent of farmers obtain information through government awareness programmes in villages.

**iii. Benefits Obtained from Schemes**

The details relating to benefits obtained by schemes of the farmers are furnished in the table XXII.

**TABLE XXII**  
**BENEFITS OBTAINED FROM SCHEMES**

Sl. No	Benefits	Yes		No	
		F	%	F	%
1.	Schemes improved livelihood of farmers	34	34	66	66
2.	Schemes provide security for life	26	26	74	74
3.	Schemes provide economic support	67	67	33	33
4.	Schemes provide agricultural inputs	19	19	81	81
5.	Schemes provide social support such as conducting support group, discussion meet, etc.	2	2	98	98
6.	Benefits availed from the scheme have been utilized for farming	81	81	19	19
7.	Govt. schemes promote social & economic development of farmers	64	64	36	36
8.	Satisfied with the wage/ income that earn from agriculture	66	66	34	34
9.	Satisfied with information provided by role players for schemes	74	74	26	26

The data shows majority sixty-six per cent of the farmers felt schemes were not improving livelihood of farmers. Sixty-six per cent of the farmers were satisfied with the wage/income that are earned from agriculture. While seventy-four per cent of the farmers are satisfied with the information provided by role players for schemes/programmes.

## **F. UTILIZATIONS OF FARMING TECHNOLOGIES, APPS AND PORTALS**

### **i. Utilization of Farming Technology**

The utilization of farming technology is discussed in the table XXIII.

**TABLE XXIII**  
**UTILIZATION OF FARMING TECHNOLOGY**

Sl.No	Farming technology	Yes		No	
		F	%	F	%
1.	Tractor	87	87	13	13
2.	Oil engine	85	85	15	15
3.	Electric motor	88	88	12	12
4.	Pumpset	91	91	9	9
5.	Hand sprayer	74	74	26	26
6.	Duster	60	60	40	40
7.	Country plough	52	52	48	48
8.	Bose plough	43	43	57	57
9.	Power tiller	52	52	48	48
10.	Levelling board	45	45	55	55

11.	Puddler	48	48	52	52
12.	Seed drill	43	43	57	57
13.	Sickle	41	41	59	59

F=Frequency    %=Percentage

The data revealed that eighty-seven per cent of the farmers are utilizing tractor for farming activities. Eighty-five per cent of the farmers are utilizing oil engine equipment for farming. Fifty-seven per cent of the farmers are not utilizing Bose plough equipment. Fifty-two per cent of the farmers are utilizing power tiller equipment for farming.

#### ii. Utilization of Agricultural Apps and Portals

The utilization of agricultural apps and Portals by farmers are discussed in the table XXIV.

**TABLE XXIV**  
**UTILIZATION OF AGRICULTURAL APPS AND PORTALS**

Sl.No	Agricultural apps	Yes		No	
		F	%	F	%
1.	Kisan suvidha app	34	34	66	66
2.	IFFCO Kisan Agriculture app	17	17	83	83
3.	RML Farmer – Krishi Mitr app	15	15	85	85
4.	Pusa Krishi app	10	10	90	90
5.	Agri app	38	38	62	62
6.	Crop Insurance app	35	35	65	65
7.	Agri- market app	40	40	60	60
8.	Shetkari mitra app	17	17	83	83
9.	Fasal salah app	13	13	87	87
10.	Kheti-Badi app	16	16	84	84
<b>Agricultural portals</b>					
11.	Digital Green portal	51	51	49	49
12.	e-Arik portal	45	45	55	55
13.	Lifeline India portal	26	26	74	74
14.	VASAT portal	44	44	56	56
15.	e-NAM portal	53	53	47	47
16.	AGRISNET portal	48	48	52	52
17.	ASHA portal	46	46	54	54
18.	TNAU agritech portal	54	54	46	46
19.	e-velanmani portal	66	66	34	34

The data concluded that sixty-six per cent of the farmers are not using Kisan suvidha agricultural app. Eighty-three per cent of the farmers are not utilizing shetkari agricultural app. Eighty-seven per cent of the farmers are not using fasal salah agricultural app. agricultural app. Seventy-four per cent of the farmers are not using lifeline India agriculture portal. Majority sixty-six per cent of the farmers are using e-velanmai agricultural site.

## G. CHALLENGES FACED BY THE FARMERS

### i. Problems Faced by the Farmers

The details relating to the problems faced by farmers are furnished in the table XXV.

**TABLE XXV**  
**PROBLEMS FACED BY FARMERS**

Sl. No	Problems expressed	Yes		No	
		F	%	F	%
1.	Market prices of crops are sufficient	97	97	3	3
2.	Should farmers independent to decide the market value of their crops	75	75	25	25
3.	Subsides provided for farmers are necessary and Subsidies needed to carry on	79	79	21	21
4.	Pesticides polluting soil and water resources	66	66	34	34
5.	Values of pesticides should be verified and dangerous pesticides should be banned	74	74	26	26
6.	Decreasing level of Ground water is a serious problem	77	77	23	23
7.	Farmers enhanced to use Organic Farming & commercial crops needs to preferred	77	77	23	23
8.	People needs to work in Fields are more than want	75	75	25	25
9.	Training to farmers should be provided	77	77	23	23
10.	Commission agent system of marketing process is best for farmers	74	74	26	26
11.	Direct payment of crops value should be made to farmers	73	73	27	27
12.	Insurance of farmer, his family necessary and Insurance of crops also needed	69	69	31	31
13.	Farmers needed Agriculture Loans, but Interest rates should be low	73	73	27	27
14.	Small farmers require special attention by Govt.	70	70	30	30
15.	Govt. should enhance farmers to start assisted works like Dairy, Poultry, Fishery, etc.	76	76	24	24
16.	Agricultural tools harvesters, Tractors, needed to supply on subsidy basis	76	76	24	24
17.	Water and Soil testing labs in rural areas	75	75	25	25
18.	Water resources are enough for irrigation	78	78	22	22
19.	Electricity supply enough for Agriculture sector and it needs to be free	78	78	22	22

20.	Crops should purchase by private and govt. agencies	72	72	28	28
21.	Information provided by Agricultural Research University and institutions enough	24	24	76	76
22.	Farmers needed special packages in case of natural disasters (Droughts, Floods )	80	80	20	20
23.	Rain plays a vital role in Agriculture so lack of rains affects the productivity badly	74	74	26	26
24.	Labor is not easily available and much expensive	75	75	25	25
25.	Do you feel difficulty in Agricultural works	72	72	28	28

The data implies that ninety-seven per cent of the farmers felt that market prices for agricultural products were sufficient. Seventy-five per cent of the farmers felt farmers should be independent to decide the market value of their crops. Seventy-five per cent of the farmers indicate labors for farming works are not easily available and it is much expensive. Seventy-two per cent of the farmers felt difficulty in agricultural works.

## ii. Challenges Faced by Farmers

The challenges faced by farmers are discussed in the table XXVI.

**TABLE XXVI**  
**CHALLENGES FACED BY FARMERS**

Sl.No	Challenges	Yes		No	
		F	%	F	%
1.	Failure of monsoon	83	83	17	17
2.	Lacks proper irrigation facility	67	67	33	33
3.	Sub divided and fragmented land holding	78	78	22	22
4.	Seasonal nature of farming	69	69	31	31
5.	Low social status	30	30	70	70
6.	Low income from farming	68	68	32	32
7.	Low prices of agriculture product	70	70	30	30
8.	Lack of credit facilities	31	31	69	69
9.	Conversion of agriculture land into non-agricultural purpose	70	70	30	30
10.	Effects of new agricultural policy	69	69	31	31
11.	Political intervention	74	74	26	26
12.	Poor implementation of Government scheme	79	79	21	21
13.	High cost of seeds and fertilizer	78	78	22	22
14.	Lack of knowledge on agricultural technologies	72	72	28	28

15.	Lack of information on schemes, policies & programmes	86	86	14	14
16.	Lack of financial support	35	35	65	65
17.	Poor linkage to the extension personal	78	78	22	22
18.	Health problems	29	29	71	71
19.	Lack of social participation	73	73	27	27
20.	Lack of agricultural input availability	48	48	52	52
21.	Lack of internet connectivity	64	64	36	36

The data described that eighty-three per cent of the farmers felt problem due to failure of monsoon. Sixty-seven per cent of the farmers expressed lack of proper irrigation facility was a challenge of farmers. Seventy-three per cent of the farmers expressed they are having a lack of social participation. Fifty-two per cent of the farmers not felt lack of agricultural input availability. Sixty-four per cent of the farmers have lack of internet connectivity because of they are living in rural areas.

## H. WELL-BEING OF FARMERS

The well-being of farmers is discussed in the table XXVII.

**TABLE XXVII**  
**WELL-BEING OF FARMERS**

Sl.No	Aspects	F (N=100)	%	
1.	Have you felt any of these from too many worries in the last few weeks *	Hard to breath	21	16.15
		Dizzy	54	41.54
		Get angry or wild real quick	24	18.46
		Too many bad moods	22	16.92
		Trouble sleeping	9	6.92
2.	Do you take any medications	Yes	29	29
		No	71	71
3.	Do you have trouble sleeping and awful dreams	Yes	25	25
		No	75	75
4.	Have you been feeling tired or having little energy	Yes	78	78
		No	22	22
5.	If yes, reason	Poor physical health	28	28
		Workload	45	45
		Stress	14	14
		None	13	13
6.	Have you lost interest on doing farm works	Yes	53	53
		No	39	39

		Sometimes	8	8
7.	Feel isolated from peer group because of workload	Yes	86	86
		No	14	14
8.	After completing the farm works what would you do *	Watching TV	50	21.28
		Reading books/ newspaper	49	20.85
		Playing with children/ grand child	39	16.60
		Chat with peer group	29	12.34
		Cooking	36	15.32
		Cleaning the house	32	13.62
9.	How often do you take trips or tour for entertainment	Very often	40	40
		Rare	51	51
		Never	9	9
10	If no, reason *	To tack care of Farm, livestock	27	22.31
		Health issues	32	26.45
		Not interested	43	35.54
		Cannot afford	17	14.05
		None	2	1.65
11.	Food pattern (morning)	Ice briyani	40	40
		Rice and kolambu	49	49
		Idlly with chutney	11	11
12.	Food pattern (afternoon)	Full meals	17	17
		Rice and kolambu	83	83
13.	Food pattern (night)	Rice with kolambu	28	28
		Chappathi with chutney	39	39
		Idlly or dosai	33	33
14.	When do you prefer non-veg foods	Weekly once	55	55
		Weekly thrice	43	43
		Full week	2	2
15.	Dress pattern	Dhoti and shirt	50	50
		Saree	50	50
16.	Mention the festival you celebrate most	Pongal	74	74
		Diwali	13	13
		Workers day	12	12
		Farmers day	1	1

The data implies that seventy-one per cent of the farmers are not taking medications. Fifty-five per cent of the farmers prefer non-veg weekly once. Fifty per cent of the farmers dress pattern was dhoti and

shirt and fifty per cent of the farmers dress pattern was saree. Whereas seventy-four per cent of the farmers most celebrated festival was Pongal.

## I. OCCUPATIONAL STRESS OF FARMERS

The details relating to occupational stress of the farmers are discussed in the table XXVIII.

**TABLE XXVIII**  
**OCCUPATIONAL STRESS OF FARMERS**

Sl. No	Occupational stress	Yes		No	
		F	%	F	%
1.	Are you feeling stress while doing farming works?	85	85	15	15
2.	I have unpleasant feeling when I cannot control the market prices.	87	87	13	13
3.	I cannot pay attention to the prevention of land, soil, water, noise and air pollution because I do not have knowledge & sufficient money.	87	87	13	13
4.	Due to the financial pressure and debt load, I frequently have mood swings and lose my emotion stability	86	86	14	14
5.	Because of economic problem, I start smoking, drink alcohol, skip food	62	62	38	38
6.	Due to the money problem, unable to afford for health care or physical check-up.	84	84	16	16
7.	My stress is due to the greatest expense of tractors, sowing machine, harvesters and transport trucks	85	85	15	15
8.	I am unpleasant when the prices of agricultural products have been pushed down below the cost of production, but the prices of inputs have gone up.	82	82	18	18
9.	I borrowed money from various financial Institutions for investment for rice farm and for family expense but I cannot return the money back.	79	79	21	21
10.	I do not have my own field; instead, I rent from landlords in a high rent rate.	84	84	16	16
11.	I do not have enough money for the next cycle of agricultural production.	88	88	12	12

The data depicts majority eighty-five per cent of the farmers are feeling stressful while doing farming works. Eighty-seven per cent of the farmers are agreed to that they have unpleasant feeling when I cannot control the market prices. Whereas eighty-eight per cent of the farmers are agreed to the statement “I do not have enough money for the next cycle of agricultural production”.

## PART II

The results pertaining to the study entitled on “**Analysis on Status of Farm Labourers in Thondamuthur Block**” are discussed under the following heads:

**A. Socio Economic Status of Farm Labourers**

**B. Basic Information about Farm Labourers**

**C. Village Infrastructure of Farm Labourers**

**D. Occupational Status of Farm Labourers**

- i. Occupational Stress of the Farm Labourers
- ii. Daily Work Schedule of Farm Labourers

**E. Agricultural Activities Performed by Farm Labourers**

**F. Migration for Agricultural Works of Farm Labourers**

- i. The Reasons for Farm labourers Migrate from Agricultural Works

**G. Facilities Provided by Land Owners for Farm Labourers**

**H. Knowledge and Usage of Government Schemes, Programmes**

- i. Knowledge on Schemes and Programmes
- ii. Reasons for Keeping farm Labourers in Agriculture
- iii. Programmes for Farm Labourers

**I. Well-being of Farm Labourers**

**J. Challenges Faced by farm Labourers**

- i. Problems Faced by Farm Labourers

**A. SOCIO ECONOMIC STATUS OF FARM LABOURERS**

The socio-economic status of the farm labourers explains about the profile which includes the educational backgrounds, age, size of the family and cultural backgrounds of the members in each group.

The socio-economic status of the farm labourers are presented in table XXIX.

**TABLE XXIX**  
**SOCIO ECONOMIC STATUS OF FARM LABOURERS**

Sl.No	Aspects		F (N=100)	%
1.	Age	Upto 20 years	1	1
		21 to 35 years	35	35
		36 to 50 years	48	48
		51 to 60 years	16	16
2.	Gender	Male	50	50

		Female	50	50
3.	Community	OBC	36	36
		ST	9	9
		SC	55	55
4.	Religion	Hindu	100	100
5.	Educational qualification	Primary	30	30
		Secondary	37	37
		HSC	8	8
		Degree	1	1
		Illiterate	24	24
6.	Marital status	Married	90	90
		Unmarried	4	4
		Widowed	5	5
		Divorced	1	1
7.	Type of family	Nuclear	90	90
		Joint	10	10
8.	House	Own house	49	49
		Rent house	28	28
		Tenant house	23	23
9.	Type of house	Bamboo house	3	3
		Cement tile roof house	76	76
		Thatched house	21	21
10.	Occupation of family members	Private job	15	5.38
		Government job	2	0.85
		Entrepreneur	9	3.14
		Agricultural worker	98	41.70
		Farmer	86	36.59
		None	29	12.34

F=Frequency    %=Percentage

The data of age reveals that majority forty-eight per cent of the farm labourers are belong to the age group of 36 to 50 years. Fifty per cent of the farm labourers that were half of the population are female and fifty per cent of farm labourers are male. Thirty-seven per cent of the farm labourers have done secondary education. Majority forty-nine per cent of the farm labourers are living in own house.

## **B. BASIC INFORMATION ABOUT FARM LABOURERS**

The basic information about farm labourers is discussed in the table XXX.

**TABLE XXX**  
**BASIC INFORMATION ABOUT FARM LABOURERS**

Sl.No	Basic information		F (N=100)	%
1.	Members of family engaged in Agriculture work	Only Self	46	46
		With spouse	36	36
		With parents	12	12
		With spouse and children	6	6
2.	If your children are studying type of school/ collage	Government school	82	82
		Private school	18	18
3.	Children engaged in agriculture, no of children	1-2 children	6	6
		None	94	94
4.	Experience of family in agriculture work	Upto 5 years	34	34
		6 to 10 years	46	46
		Above 10 years	20	20
5.	Are you only depends on Agriculture	Yes	76	76
		No	24	24
6.	If No, State the source of income of other members	Salaried	24	24
		None	76	76
7.	No. of days of work in agriculture in a month	5-10 days	39	39
		11-20 days	47	47
		More than 20 days	14	14
8.	How many days do you get work in a year	Below 100	8	8
		100-200	26	26
		200-250	41	41
		250-300	19	19
		300 – above	6	6
9.	Income through agriculture work per annum	Up to 75000	38	38
		75000-1,25,000	55	55
		1,25,000-2,00,000	7	7
10.	Income through animal husbandry per annum	Up to 75000	39	39
		None	61	61
11.	Nature of Work	Local Agricultural Labourers	77	77
		Migrated Agricultural Labourers	23	23
12.	Category of Farm Labourers	Landless	65	65

		Land Holder	35	35
13.	Own land	1-4 hector	35	35
		None	65	65
14.	Are you doing seasonal and unseasonal agricultural works	Yes	29	29
		No	71	71
15.	If yes, What you have do unseasonal agricultural time	MGNREGA	20	20
		Constructional works	9	9
		None	71	71
16.	Did land owners provide the farming tools	Yes	68	68
		No	11	11
		Sometimes	21	21
17.	If no, mention the tool you bring for agricultural work	Hoe	38	38
		Billhook	43	43
		Pesticide and fertilizer sprayer	13	13
		None	6	6

The data inferences that forty-six per cent of the farm labourers only themselves engaged as farm labourers. Twelve per cent of the farm labourers engaged as farm labourers with parents. Majority eighty-two per cent of the farm labourers children was studying in government schools. Fifty-five per cent of the farm labourers annual income through agriculture was 75.000 to 1.25.00 rupees. Sixty-five per cent of the farm labourers category was landless labourer.

### C. VILLAGE INFRASTRUCTURE OF FARM LABOURERS

The details relating to village infrastructure of the farm labourers is furnished in the table XXXI.

**TABLE XXXI**

#### **VILLAGE INFRASTRUCTURE OF FARM LABOURERS**

Sl. No	Village infrastructure		F (N=100)	%
1.	Type of road	Mud road	12	12
		Black top	71	71
		Concrete	17	17
2.	Condition of the roads	Good	11	11
		Satisfactory	84	84
		Poor	5	5
3.	Major means of transport	Public transportation	72	72
		Own transportation	28	28
4.	Availability of electricity	Yes	97	97

		No	3	3
5.	Availability of drinking water facilities	Yes	70	70
		No	30	30
6.	Sanitation facility available in your household	Yes	85	85
		No	15	15
7.	Availability of Primary and secondary schools in the village	Yes	65	65
		No	35	35
8.	Is there health service Centre are available in the village	Yes	64	64
		No	36	36
9.	Post office facility	Yes	82	82
		No	18	18
10.	Availability of Anganwadi Centre in the village	Yes	64	64
		No	36	36
11.	e-connection in the village	Yes	58	58
		No	32	32
12.	Have Telephone/ phone	Yes	93	93
		No	7	7
13.	Member of co-operative society	Yes	18	18
		No	82	82

The data revealed that seventy-one per cent of the farm labourers type of road in village was black topped road. Eighty-four per cent of the farmers are satisfied with the road quality. Sixty-four per cent of the farm labourers are have health service Centre are available in their villages. Majority eighty-two per cent of the farm labourers are not members of any co-operative society.

#### **D. OCCUPATIONAL STATUS OF THE FARM LABOURERS**

The occupational status of farm labourers is discussed in the table XXXII.

**TABLE XXXII**  
**OCCUPATIONAL STATUS OF FARM LABOURERS**

<b>Sl.No</b>	<b>Particular</b>		<b>F (N=100)</b>	<b>%</b>
1.	Nature of Work	Casual Labourers	76	76
		Annual Free Labourers	24	24
2.	Nature of Household Employment	Agricultural Employment	76	76
		Non Agricultural employment	24	24
3.	The Experience of work on Agricultural labourship	1 to 5 years	16	16
		6 to 10 years	37	37

		11 to 15 years	29	29
		16 to 20 years	8	8
		21 to 25 years	4	4
		More than 25 years	6	6
4.	Causes of the choice of this occupation *	No Substitute work	43	15.75
		Landless	32	11.72
		Low level of Education	64	23.44
		No other skills	37	13.55
		Interest in agricultural work	45	16.48
		Easy to obtain	37	13.55
		Large size of family	15	5.49
5.	Pre-Occupation before agricultural Labourship	Agricultural Labourship	43	43
		Private Service	16	16
		Porters	9	9
		Farming	20	20
		Animal Husbandry	11	11
		Domestic Work	1	1
6.	Daily working hours	5 to 6	56	56
		7 to 8	42	42
		9 to 10	2	2
7.	Working month in a year	2 to 4	21	21
		5 to 7	26	26
		8 to 12	53	53
8.	Highest peak period of work in the last year	June to October	29	29
		November to February	55	55
		March to May	16	16
9.	Daily wages received from agricultural activities per day	300	30	30
		400	20	20
		500	10	10
		600	40	40
10.	Working hours in time	9:30 am to 5:00 pm	38	38
		9:00 am to 3:00 pm	40	40
		8am to 2:00 pm	22	22

\*Multi response F=Frequency %=Percentage

The above table reveals that seventy-six per cent of the farm labourers nature of work was casual labourers. Seventy-six per cent of the farm labourers nature of household employment was agricultural employment. Forty per cent of farm labourers wage was 600 rupees per day.

**i. Occupational Stress of Farm Labourers**

The occupation stress of farm labourers is discussed in the table XXXIII.

**TABLE XXXIII**

**OCCUPATIONAL STRESS OF FARM LABOURERS**

Sl. No	Occupational stress	Yes		No	
		F	%	F	%
1.	Are you feeling stress while doing farm works?	82	82	18	18
2.	I have unpleasant feeling when I cannot control the market prices of agricultural products.	53	53	47	47
3.	Due to the financial pressure and debt load, I frequently have mood swings and Lose my emotional stability	49	49	51	51
4.	Because of economic problem, I start smoking, drink alcohol, skip food and take sleeping pills.	68	68	32	32
5.	Due to the money problem, I am unable to afford health care or physical check-up.	54	54	46	46
6.	My stress is due to the greatest technological improvement of tractors, sowing machine, harvesters & transport trucks	54	54	46	46
7.	I borrowed money from various financial Institutions for family expense but I cannot return the money back.	38	38	62	62
8.	I do not have my own field; I can't do agriculture on my own land	57	57	43	43
9.	I do not have enough money to expense for the unforeseen circumstances.	42	42	58	58

The data depicts majority eighty-two per cent of the farm labourers are feeling stressful while doing farming works. Whereas fifty-eight per cent of the farm labourers are not agreed to the statement “I do not have enough money to expense for the unforeseen circumstances”.

**ii. Daily Work Schedule of Farm Labourers**

The daily work schedule of farm labourers are discussed in the table XXXIV.

**TABLE XXXIV**

**DAILY WORK SCHEDULE OF FARM LABOURERS**

Time	Rural men	F (N=50)	Rural women	F (N=50)
5 am	Wake up	32	Wake up	38
5:30 am	Drinking tea or coffee	28	Household activities	31

6 am	Taking bath	30	Kitchen work, Drinking tea or coffee	42
8 am	Eating breakfast	35	Eating breakfast	35
9 am	Farm laboring	43	Farm laboring	42
12:30 pm	Lunch	43	Lunch	47
1:30 pm	Farm laboring	43	Farm laboring	47
2 pm	Farm laboring completed	35	Farm laboring completed	47
4 pm	Taking rest	28	Going home doing household works	43
6 pm	Drinking tea or coffee	47	Drinking tea or coffee	38
7 pm	Spending time with village people or family	33	House hold activities	48
8 pm			Kitchen work	
9 pm	Dinner	42	Dinner	40
10 pm	Sleep	48	Sleep	43

The table reveals the daily work routine of farm labourer of both men and women; despite above table indicates that majority of the farm labourers work routine.

#### E. AGRICULTURAL ACTIVITIES PERFORMED BY FARM LABOURERS

The agricultural activities performed by farm labourers are discussed in the table XXXV.

**TABLE XXXV**

#### **AGRICULTURAL ACTIVITIES PERFORMED BY FARM LABOURERS**

Sl.No	Agricultural activities		F (N=100)	%
1.	Type of agricultural work *	Cleaning Land	31	10.65
		Use of Fertilizer	46	15.81
		Diggings	22	7.56
		Use of Pesticides	25	8.59
		Harvesting	41	14.08
		Watering	29	9.97
		Plantation	47	16.15
		All types of work given by landholder	50	17.18
2.	Distance of work form residential place	Up to 2 KM	10	10
		3 to 4 KM	24	24
		5 to 6 KM	24	24
		More than 6 KM	42	42
3.	Are you doing substitute work	Yes	29	29
		No	71	71
4.	If yes, name the work	Poultry	1	1

		Animal Husbandry	28	28
		None	71	71
5.	If no why?	No desire	26	26
		Other engagement	47	47
		Not available	22	22
		Health issues	5	5
6.	Causes of doing substitute work	To earn more income	26	13.27
		Large size of family	42	21.43
		For repayment of loan	47	23.98
		Interest in agriculture	35	17.86
		No other skill	19	9.69
		No other substitute work	27	13.78
7.	Livestock *	Cow	18	18
		Goat	22	22
		None	60	60

The data indicates that 17.18% of the farm labourers were doing all types of agricultural work given by the land holders. Majority seventy-one per cent of the farm labourers were not was doing substitute works. Majority seventy-one per cent of the farm labourers were not doing substitute works.

#### F. MIGRATION FOR AGRICULTURAL WORKS OF FARM LABOURERS

The migration for agricultural works of farm labourers is discussed in the table XXXVI.

**TABLE XXXVI**

#### **MIGRATION FOR AGRICULTURAL WORKS OF FARM LABOURERS**

Sl.No	Migration for agricultural works		F (N=100)	%
1.	Are you migrated for agriculture work	Yes	28	28
		No	72	72
2.	If yes, No of migrations so far from your native place	10 to 20 times	28	28
		None	72	72
3.	If no, is it you working in your surrounded village itself	Yes	72	72
		No	28	28

The data implies that seventy-two per cent of the farm labourers were not migrated for agricultural work. Majority seventy-two per cent of the farm labourers are not migrated for agricultural works. Majority seventy-two per cent of the farm labourers are working on surrounding village itself.

#### i. The Reasons for Farm Labourers Migrate from Agricultural Works:

The reasons for farm labourers migrate from agricultural works are discussed in the table XXXVII.

**TABLE XXXVII**

**REASON FOR FARM LABOURER MIGRATE FROM AGRICULTURAL WORKS**

Sl.No	Reasons	Yes		No	
		F	%	F	%
1.	Unemployment	82	82	18	18
2.	Poor Salary / Wages	64	64	36	36
3.	Lack of Job Security	71	71	29	29
4.	Poor Job satisfaction	64	64	36	36
5.	Absence of Social Status	14	14	86	86
6.	Lengthy Working Hours	18	18	82	82
7.	Bad Working Conditions	15	15	85	85
8.	Abuse of women Labour	10	10	90	90
9.	Poor Health	32	32	68	68
10.	Poor Sanitation Facility	21	21	79	79
11.	Lack of Incentive / Bonus	90	90	10	10
12.	Scope for future development	63	63	37	37

The data depicts that eighty-two per cent of the farm labourers expressed agreed to the reason for quitting or migrating work to another work was unemployment in field of agriculture. Sixty-three per cent of the farm labourers described yes to the reason on scope for future development.

**G. FACILITIES PROVIDED BY LAND OWNERS FOR FARM LABOURERS**

The facilities provided by land owners for farm labourers are discussed in the table XXXVIII.

**TABLE XXXVIII**

**FACILITIES PROVIDED BY LAND OWNERS FOR FARM LABOURERS**

Sl.No	Facilities		F (N=100)	%
1.	Facilities provided through Landowner *	Provision of snacks, tea	99	48.07
		Provision of equipment	63	30.58
		Provision of transport charges	44	21.35
2.	Is there any trade union of farm labourers in your villages	Yes	8	8
		No	92	92
3.	Behavior of landowner to farm labourers	Good	49	49
		Satisfactory	51	51
4.	Do you have any Addictions	Yes	38	38
		No	62	62

5.	If yes, specify	Drug (drinking)	19	19
		Tobacco (smoking)	19	19
		None	62	62
6.	Do you get bonus from landowners	Yes	32	32
		No	68	68
7.	If yes, Type of bonus	Money	13	13
		Sweets	19	19
		None	68	68
8	Community assets accessibility	All	100	100

The data inferred that 48.07% of the farm labourers reveal facilities provided by land owners was snacks and tea. Majority one-hundred per cent of the farm labourers have accessibility of all community assets such as community halls, roads, schools, colleges, hospital, etc.

## H. KNOWLEDGE AND USAGE OF GOVERNMENT SCHEMES, PROGRAMMES

### i. Knowledge on Schemes and Programmes

The detail relating to knowledge of schemes and programmes of the farm labourers are furnished in the table XXXIX.

**TABLE XXXIX**

### KNOWLEDGE ON SCHEMES AND PROGRAMMES

Sl.No	Knowledge on Programme/schemes	Yes		No	
		F	%	F	%
1.	MGNREGA	72	72	28	28
2.	Chief minister solar powered greenhouse scheme	23	23	77	77
3.	National Health Mission	13	13	87	87
4.	Pradhan mantri gram Sadak yojna	8	8	92	92
5.	Subsidy for livestock	11	11	89	89
6.	Farm labourers training	-	-	100	100
7.	Do you have Kisan Credit Card	-	-	100	100
8.	Benefit from Agricultural Department	17	17	83	83
9.	Agricultural Technology and management agency	15	15	85	85
10.	Are you covered under Provident Fund scheme	16	16	84	84
11.	Do you have any insurance	-	-	100	100

The data reveals that seventy-two per cent of the farm labourers are have knowledge and benefited from MGNREGA programmes. Majority seventy-seven per cent of them are not having knowledge. Eighty-nine

per cent of the farm labourers not benefited by subsidy for livestock scheme. One-hundred per cent of the farm labourers not have any kind of insurance policies.

## ii. Reasons for Keeping Farm Labourers in Agriculture

The reasons for keeping farm labourers in agriculture are discussed in the table XL.

**TABLE XL**

### **REASONS FOR KEEPING FARM LABOURERS IN AGRICULTURE**

Sl. No	Reasons	Yes		No	
		F	%	F	%
1.	Govt. can fix the fare wages to fulfill food & accommodation	83	83	17	17
2.	Provide Training for unskilled farm labourers	-	-	100	100
3.	Providing Insurance Scheme	-	-	100	100
4.	Providing Pension scheme	-	-	100	100
5.	Job security / Regular Employment	51	51	49	49
6.	Good working environment	62	62	38	38
7.	Incentive for treatment of farm labourers	37	37	63	63
8.	Bonus or incentive scheme	-	-	100	100
9.	Health and sanitary	45	45	55	55
10.	Safety Measurers	52	52	48	48
11.	No skills to do other works	62	62	38	38
12.	Illustrate	62	62	38	38
13.	Ancestral work	60	60	40	40
14.	Unavailability of other works	63	63	37	37

The data from above table shows that reasons for keeping farm labourers in agriculture was eighty-three per cent of the farm labourers expressed yes to the statement of Government can fix the fare wages to fulfill food and Accommodation and seventeen per cent of them are expressed no to that statement. Sixty-three per cent of the farm labourer been in farm work was unavailability of other works because they were live in rural area.

## iii. Programmes for Farm Labourers

The details relating to programmes for farm labourers are explained in the table XLI.

**TABLE XLI**  
**PROGRAMMES FOR FARM LABOURERS**

Sl.No	Programmes	F (N=100)	%	
1.	Attended skill development training programme	Yes	3	3
		No	97	97
2.	Are you member in any of the following organization (If yes please specify the name of the organization) *	Self Help Groups (SHG)	36	23.68
		Caste based societies	53	34.86
		Political Parties	60	39.49
		All	3	1.97
3.	Do you seek any help from Government organization	Yes	92	92
		No	8	8
4.	Government schemes could promote social and economic development of farm labourers	Yes	93	93
		No	7	7
5.	MGNREGA (Daily) wage	Rs 210	69	69
		No idea	31	31
6.	Do you have Employee State Insurance(ESI) card	Yes	100	100
		No	-	-
7.	If no reason you think	Unrecognized sector by gov.	37	37
		Temporary workers	53	53
		Seasonal workers	10	10
8.	Know about social security schemes for farm labourers	Yes	1	1
		No	99	99
9.	Benefited by social security schemes	Yes	1	1
		No	99	99

\*Multi response F=Frequency %=Percentage

The above table shows that ninety-seven per cent of the farm labourers have not attended any skill development training programme. Majority ninety-nine per cent of the farm labourers don't know about social security schemes. Majority ninety-nine per cent of them were not benefited by social security scheme.

#### **I. WELL-BEING OF FARM LABOURERS**

The well-being of farm labourers is discussed in the table XLII.

**TABLE XLII**  
**WELL-BEING OF FARM LABOURERS**

Sl.No	Aspects	F (N=100)	%	
1.	Have you felt any of these from too many worries in the last few weeks *	Hard to breath	13	9.77
		Dizzy	61	45.86
		Get angry or wild real quick	28	21.05
		Too many bad moods	18	13.53
		Trouble sleeping	13	9.77
2.	Do you take any medications	Yes	18	18
		No	82	82
3.	Have trouble sleeping and awful dreams	Yes	17	17
		No	83	83
4.	Feeling tired or having little energy	Yes	24	24
		No	76	76
5.	If yes, reason *	Poor physical health	30	24.39
		Workload	46	37.40
		Stress	27	21.95
		None	20	16.26
6.	Have you lost interest on doing farm works	Yes	41	41
		No	50	50
		Sometimes	9	9
7.	Feel isolated from peer group because workload	Yes	31	31
		No	69	69
8.	After completing the farm works what would you do *	Watching TV	58	23.77
		Reading books/ newspaper	30	12.30
		Playing with children/ grand child	44	18.03
		Chat with peer group	26	10.66
		Cooking	48	19.67
		Cleaning the house	38	15.57
9.	How often do you take trips or tour for entertainment	Very often	8	8
		Rare	36	36
		Never	56	56
10.	If not, reason	Tack care of Farm &livestock	13	13
		Health issues	27	27
		Not interested	39	39
		Cannot afford	21	21
11.	Food pattern (morning)	Ice briyani	46	46
		Rice and kolambu	43	43

		Idly with chutney	11	11
12.	Food pattern (afternoon)	Full meals	17	17
		Rice and kolambu	83	83
13.	Food pattern (night)	Rice with kolambu	20	20
		Chappathi with chutney	40	40
		Idly or dosai	40	40
14.	When do you prefer non-veg foods	Weekly once	47	47
		Weekly thrice	49	49
		Full week	4	4
15.	Dress pattern	Dhoti and shirt	50	50
		Saree	50	50
16.	Mention the festival you celebrate most	Pongal	66	66
		Diwali	34	34

The data implies that 45.86% of the farm labourers felt dizzy while they are working. Majority eighty-two per cent of the farmers are not taking any medications. Forty-nine per cent of the farm labourers prefer non-veg was weekly thrice. Fifty per cent of the farm labourers dress pattern was dhoti, shirt. Sixty-six per cent of the farm labourers celebrate the festival most was Pongal.

## J. CHALLENGES FACED BY FARM LABOURERS

The challenges faced by farm labourers are discussed in the table XLIII.

**TABLE XLIII**

### CHALLENGES FACED BY FARM LABOURERS

Sl.No	Particulars	F (N=100)	%	
1.	Face agricultural problems	Yes	67	
		No	33	
2.	Have difficulty in obtaining work from Agriculture	Yes	66	
		No	34	
3.	Satisfied with the wage/ income that earn from agriculture	Yes	63	
		No	37	
4.	Debt aspects *	Loans from Banks	41	18.64
		Loan from money-lenders	43	19.55
		Loan from Relatives	24	10.95
		Mortgages	14	6.33
		Ancestral Loan	15	6.88
		Jewels Loan	83	37.65

5.	Purpose of Loan *	House Loan	40	24.10
		Education loan	60	36.14
		Vehicle loan	50	30.12
		Children marriage	16	9.64
6.	Have any health problems	Yes	23	23
		No	77	77
7.	If yes what type of health problem	Musculoskeletal disorders	3	3
		Cardiovascular disorder	1	1
		Chemical hazards	10	10
		Skin disorders	7	7
		Heat stress	2	2
		None	77	77
8.	How do you manage *	Own money	43	25.44
		Using jewels	83	49.12
		Loan	29	17.16
		Money lenders	14	8.28
9.	Have a health insurance	No	100	100
10.	Agricultural policies, programmes is only for farmers	Yes	94	94
		No	6	6
11.	Farm labourers are unorganized sector in society and government	Yes	91	91
		No	9	9

The data highlighted that sixty-seven per cent of the farm labourers face agricultural problems. Sixty-six per cent of the farm labourers have difficulty in obtaining agricultural works. Whereas ninety-one per cent of the farm labourers had thought that they were unorganized sector from government.

**i. Problems Faced by Farm Labourers:**

The problems faced by farm labourers are discussed in the table XLIV.

**TABLE XLIV**  
**PROBLEMS FACED BY FARMERS**

Sl.No	Problems	Yes		No	
		F	%	F	%
1.	Unemployment	79	79	21	21
2.	Poor Salary / Wages	63	63	37	37
3.	Lack of Job Security	64	64	36	36
4.	Poor Job satisfaction	59	59	41	41
5.	Absence of Social Status	54	54	46	46

6.	Lengthy Working Hours	48	48	52	52
7.	Bad Working Conditions	48	48	52	52
8.	Abuse of women Labour	10	10	90	90
9.	Poor Health	53	53	47	47
10.	Poor Sanitation Facility	21	21	79	79
11.	Absence of Incentive / Bonus	90	90	10	10
12.	Scope for future development	63	63	37	37
13.	Unorganized by government	89	89	11	11

The data reveals that majority seventy-nine per cent of the farm labourers are facing unemployment problem. Majority ninety per cent of the farm labourers are facing lack of incentive/bonus problem. Majority sixty-three per cent of the farm labourers are facing scope for future development problem. Majority eighty-nine per cent of the farm labourers are facing unorganized by government problem.

### **TESTING HYPOTHESIS**

Ho. 1 There is no significant relationship between a size of land holdings and choice of crops.

The results of ANOVA test indicated that  $p$ -value 0.1734 so there is a no significance of land holding and choice of crop for farmers. It is found that the null hypothesis is accepted at 5 percentage level of significance as the  $p$ -value is above than 0.05. Therefore it is no significance between farmers land holding and choice of crop. The results of the Pearson correlation coefficient indicated that there is a no significant negative relationship between land holding and choice of crop for farmers ( $r(3) = .716, p = .173$ ). Hence the null hypothesis is accepted, establishing a no significant relationship between land holding and choice of crop of the farmers. So the table of ANOVA and Pearson Correlation Coefficient indicated that there is a no significant relationship between land holding and choice of crop cultivation of farmers.

Ho. 2 There is no significant relationship between educational qualification and agricultural activities of farmers.

The results of ANOVA test indicated that  $p$ -value 0.0932 so there is a significant of educational qualification and agricultural activities of farmers. It is found that the null hypothesis is rejected at 5 percentage level of significance as the  $p$ -value is less than 0.05. Therefore it is significance that the farmers educational qualification and agricultural activities. The results of the Pearson correlation coefficient indicated that there is a significant relationship between educational qualification and agricultural activities farmers ( $r(3) = .945, p = .015$ ). Hence the null hypothesis is rejected, establishing a significant relationship between educational qualification and agricultural activities of the farmers. So it is fond that there is a significant relationship between educational qualification and agricultural activities of farmers.

Ho. 3 There is a no significant relationship between educational qualification and choice of occupation of farmers.

The results of ANOVA test indicated that  $p$ -value 0.2016 so there is no significant of land holding and choice of crop for farmers. It is found that the null hypothesis is rejected at 5 percentage level of significance as the  $p$ -value is above than 0.05. Therefore it is no significance that the farmers land holding and choice of crop. The results of the Pearson correlation coefficient indicated that there is a no significant positive relationship between educational qualification and choice of occupation of farmers ( $r(3) = .202, p = .745$ ). Hence the null hypothesis is rejected, establishing a non-significant positive relationship between educational qualification and choice of occupation of the farmers. So there is a no significant but positive relationship between educational qualification and choice of occupation of farmers.

Ho. 4 There is no significant relationship between educational qualification and agricultural works of farm labourers.

The results of ANOVA test indicated that  $p$ -value 0.1172 so there is a no significant of land holding and choice of crop for farmers. It is found that the null hypothesis is rejected at 5 percentage level of significance as the  $p$ -value is above than 0.05. Therefore it is no significant that the farmers educational qualification and agricultural works. The results of the Pearson correlation coefficient indicated that there is a non-significant large positive relationship between educational qualification and agricultural activities of farm labourers ( $r(3) = .783, p = .117$ ). Hence the null hypothesis is rejected, establishing a no significant positive relationship between educational qualification and agricultural works of the farmers labourers. So it is found that there is a no significant but positive relationship between an educational qualification and agricultural activities of farm labourers.

Ho. 5 There is no significant relationship between number of working days and annual income of agricultural labourers.

The results of ANOVA test indicated that  $p$ -value 0.04334 so there is a significance of number of working days and annual income of farm labourers. It is found that the null hypothesis is rejected at 5 percentage level of significance as the  $p$ -value is less than 0.05. Therefore it is significance that the farm labourers number of working days and annual income. The results of the Pearson correlation coefficient indicated that there is a significant negative relationship between number of working days and annual income of farm labourers ( $r(3) = -0.5585, p = .04334$ ). Hence the null hypothesis is rejected, establishing a significant relationship between number of working days and annual income of the farm labourers. So there

is a significant but large negative relationship between number of working days and annual income of the farm labourers.

Ho. 6 There is no significant difference between male and female daily wages of farm labourers.

The results of ANOVA test indicated that  $p$ -value 0.42598 so there is a significant of gender and wages of farm labourers. It is clear that the null hypothesis is rejected at 5 percentage level of significance as the  $p$ -value is less than 0.05. Therefore it is significant that the farm labourers gender and wages. The results of the Pearson correlation coefficient indicated that there is a significant negative relationship between gender and wages farm labourers ( $r(3) = -.5585, p = .42598$ ). Hence the null hypothesis is accepted, establishing a significant negative relationship between gender and wages of the farm labourers. So there is a significant but negative relationship between male and female wages of farm labourers.

## CHAPTER V

### SUMMARY AND CONCLUSION

This chapter presents the summary of findings, suggestions and conclusion. The concepts and methodology are formulated according to the objectives of the study with the help of comprehensive reviews of previous studies. The secondary data about the status of farmers and farm labourers were collected from the journals, books, websites and the Thondamuthur block profile.

For primary data, 100 farmers and 100 farm labourers in Thondamuthure block, Coimbatore district were identified. The data were collected from the farmers and farm labourers with the help of interview schedule. The collected data were analyzed with the help of appropriate tools to examine the purpose of savings, difficulty in obtaining work from agriculture, satisfied with the wage/income earn from agriculture, knowledge on schemes and challenges faced in the field of farmers and farm labourers in Thondamuthur Block. The study entitled on “**Analysis on Status of Farmers and Farm Labourers in Thondamuthur Block**” was undertaken by the Investigator with the following objectives:

- Study the socio-economic status of farmers and farm labourers.
- Find out the different farming technologies, apps and portals utilized by farmers
- Identify the challenges faced by farmers and farm labourers.
- Assess the health status of farmers and farm labourers.
- Examine the knowledge level and usage on agricultural policies and programmes available for farmers and Farm labourers
- Know the village infrastructure of farmers and farm labourers.

#### **Hypothesis:**

Ho. 1 There is no significant relationship between a size of land holdings and choice of crops of farmers.

Ho. 2 There is no significant relationship between educational qualification and agricultural activities of farmers.

Ho. 3 There is no significant relationship between educational qualification and choice of occupation of farmers.

Ho. 4 There is no significant relationship between educational qualification and agricultural activities of farm labourers.

Ho. 5 There is no significant relationship between number of working days and annual income of farm labourers.

Ho. 6 There is no significant relationship between male and female wages of farm labourers

To prepare the Interview schedule questionnaire a preliminary survey has been conducted by the researcher. To make it easy to understand, the necessary secondary data have also been collected and included wherever it is needed. The researcher has used statistical tools namely percentage, Standard deviation, ANOVA, Karl Pearson's Coefficient of Correlation for the statistical analyse. The findings of the study are briefly presented in this part.

## **MAJOR FINDINGS**

Findings of the study were containing two parts those are findings of farmers and findings of farm labourers.

### **FINDING OF FARMERS**

#### **A. Socio Economic Status of Farmers**

Majority sixty-four per cent belong to the age group 36 to 50 years. Fifty per cent were male and fifty per cent were female. Majority fifty-four per cent belong to the community of BC category. Forty-one per cent of the farmers completed secondary education. Fifty-two per cent of the farmers annual income of family was range between Rs. 1 lakh to 5 lakhs. Fifty-two per cent of the farmers had 11 to 20 years of farming experience.

#### **B. Existing Status of Farmers**

##### **i. Land and Household Details**

Thirty-two per cent of the farmers were small farmers. Majority eighty-two per cent of the farmers were have own land for farming activities. Majority ninety-one per cent of the farmers were living in their own house. Ninety-two per cent of the farmers had household latrine, bathroom facilities. Majority sixty-two per cent of the farmers are having gas connections for cooking. Fifty-five per cent of the farmers agricultural land were near to the village. Ninety-three per cent of the farmers household work taking care by women.

##### **ii. Details about Livestock**

Majority ninety-five per cent of the farmers have livestock. Majority sixty-eight per cent of the farmers said that women were taking care of the livestock. Majority 34.49% of the farmers have goats in their household.

##### **iii. Agricultural Activities Performed by Farmers in their Field**

23.42% of the farmers choice of the occupation was low level of education. Majority sixty-four per cent of the farmers are doing inorganic farming. 19.20% per cent of farmers doing as farm work were fertilizer work. Sixty-four per cent of the farmers style of ploughing was manual and bullock. Majority

eighty-eight per cent of the farmers said they employ farm labourers for farming activities. Fifty-two per cent farmers men having decision making authority for farming activities.

**iv. Irrigation Details**

Fifty-four per cent of farmers source of irrigation were well water. Forty per cent of the farmers have type of irrigation were dug well. Eighty-three per cent of the farmers were doing irrigation manually. Majority eighty-nine per cent of the farmers were benefited by subsidy provided for water and electricity. Eighty-five per cent of the farmers were said they have water scarcity.

**v. Cropping Pattern Followed by Farmers**

Fifty-one per cent of the farmers use double cropping pattern. 25.33% of the farmers cultivate cholam. Majority eighty-eight per cent of the farmers were changing cropping pattern from year to year. Fifty-one per cent of the farmers were following crop rotation.

**vi. Pesticides and Fertilizers Used by Farmers**

Sixty-four per cent of the farmers are using inorganic pesticides and fertilizers for the crops. Majority fifty-two per cent of the farmers were using traditional preservative seeds. One-hundred per cent of the farmers not purchasing seeds from cooperative society.

**vii. Information on Savings and Credits of Farmers**

**Saving Details of Farmers:**

Thirty-four per cent of the farmers are earn only from farming activities. Thirty-three per cent of the famers have savings in postal deposit. Seventy-seven per cent of the farmers annual income from cultivation was Rs. 50,000 to 2, 00,000. Forty-nine per cent of the farmers annual income from animal husbandry were upto Rs.75, 000.

**Credit Details of Farmers:**

Sixty-nine per cent of the farmers were not satisfied with the income earn from agriculture. 24.35% of the farmers had ancestral loans. 34.10% of the farmers purpose of the loan was purchase agricultural inputs.

**Loan Particulars of Farmers:**

Majority ninety-six per cent of the farmers got loan from co-operative society for agricultural purpose. Thirty-seven per cent of the farmers got loan from private money lenders for agricultural purpose. Forty-nine per cent of the farmers have jewel loan for agricultural purpose.

**viii. Membership of Farmers**

Ninety-six per cent of the farmers have membership in co-operative societies. Seventy-five per cent of the farmers have membership in farmers market. Eighty per cent of the farmers do not have membership in farmers association.

### **C. Agricultural Infrastructure and Marketing Details for Farming**

Fifty per cent of the farmers are purchase input for farming activities from private shops. Majority ninety-three per cent of the farmers are selling agricultural products. Eighty-three per cent of the farmers have own storage or warehouse facilities for agricultural products. Majority ninety-three per cent of the farmers expressed they have transportation facilities to transfer the agricultural products for to sale. Majority seventy-seven per cent of the farmers not having processing facilities like transform, package and grade. 30.73% of the farmers have pesticides as an input based infrastructure.

### **D. Village Infrastructure for Farmers**

Sixty-two per cent of the farmer's type of road in village was black topped road. Eighty per cent of the farmers major means of transport was public transportation. Ninety-eight per cent of the farmer's households were electrified. Seventy-eight per cent of the farmers have drinking water facilities near the household. Sixty-six per cent of the farmers are have health service Centre are available in their villages.

### **E. Knowledge and Usage of Government Policies, Programmes**

#### **i. Knowledge on Schemes and Programmes**

Sixty per cent of the farmers do not have knowledge about MGNREGA programmes. Seventy per cent of the farmers do not know of National agriculture insurance scheme. Seventy-five per cent of the farmers not aware of National health mission programme for the farmers health safety. Sixty-nine per cent of the farmers have not attended farmers training programme. Seventy-five per cent of the farmers do not know about Subsidy for livestock. Ninety-four per cent of the farmers do not have a Kisan credit card.

#### **ii. Source of Information about Agriculture**

Eighty-five per cent of the farmers obtain information through farmers internship programme. Seventy-six per cent of the farmers obtain information through farmers meet. Sixty-nine per cent of the farmers obtain information with government departments. Seventy-three per cent of the farmers obtain information through newspapers, magazines. Seventy-three per cent of farmers obtain information through government awareness programmes in villages.

#### **iii. Benefits Obtained from Schemes**

Majority sixty-six per cent of the farmers felt schemes were not improving livelihood of farmers. Seventy-four per cent of the farmers were expressed schemes was not provide security for life. Sixty-seven

per cent of the farmers are felt schemes were provide economic support. Eighty-one per cent of the farmers are expressed schemes are not provide agricultural inputs.

## **F. Utilizations of Farming Technologies, Apps and Portals**

### **i. Farming Technologies**

Eighty-five per cent of the farmers are utilizing oil engine equipment for farming. Eighty-eight per cent of the farmers are utilizing electric motor as equipment for farming activity. Ninety-one per cent of the farmers are utilizing pump set as equipment. Fifty-two per cent of the farmers are using country plough tool for farming. Fifty-seven per cent of the farmers are not utilizing Bose plough equipment. Fifty-two per cent of the farmers are utilizing power tiller equipment for farming.

### **ii. Utilization of Agricultural Apps and Portals**

Eighty-three per cent of the farmers are not using IFFCO kisan agriculture app. Eighty-five per cent of the farmers are not utilizing RML farmer- krishi mitr agricultural app. Ninety per cent of the farmers are not aware of pusa krishi agricultural app. Fifty-one per cent of the farmers are using digital green agricultural portal. Fifty-three per cent of the farmers are utilizing e-nam agricultural portal. Sixty-six per cent of the farmers are using e-velanmai agricultural site.

## **G. Challenges Faced by the Farmers**

### **iii. Problems Faced by Farmers**

Ninety-seven per cent of the farmers felt that market prices for agricultural products were sufficient. Seventy-five per cent of the farmers felt farmers should been independent to decide the market value of their crops. Seventy-two per cent of the farmers felt difficulty in agricultural works.

### **iv. Challenges Faced by Farmers**

Eighty-three per cent of the farmers felt problem due to failure of monsoon. Sixty-seven per cent of the farmers expressed lack of proper irrigation facility was a challenge of farmers. Sixty-eight percent of the farmers expressed that they got low income from farming. Seventy per cent of the farmers expressed that they got low prices for agricultural products.

## **H. Well-being of Farmers**

41.54% of the farmers felt dizzy sometimes while they are working. Seventy-one per cent of the farmers are not taking medications Fifty-three per cent of the farmers are sometimes lost interest on doing farm works. Fifty-five per cent of the farmers prefer non-veg weekly once. Fifty per cent of the farmers dress pattern was dhoti and shirt and fifty per cent of the farmers dress pattern was saree. Seventy-four per cent of the farmers most celebrated festival was Pongal.

## **I. Occupational Status of Farmers**

Eighty-seven per cent of the farmers are agreed to the statement “I have unpleasant feeling when I cannot control the market prices”. Eighty-six per cent of the farmers are agreed to the statement “Due to the financial pressure and debt load, I frequently have mood swings and lose my emotion stability”.

## **FINDINGS OF FARM LABOURERS:**

### **A. Socio Economic Status of Farm Labourers**

Forty-eight per cent of the farm labourers are belong to the age group of 36 to 50 years. Fifty per cent of the farm labourers that were half of the population are female and fifty per cent of farm labourers are male. Fifty-five per cent of the Farm labourers belong to the community of SC category. Thirty-seven per cent of the farm labourers have done secondary education. Forty-nine per cent of the farm labourers are living in own house

### **B. Basic Information about Farm Labourers**

Forty-six per cent of the farm labourers only themselves engaged as farm labourers. Forty-six per cent of the farm labourers family have 6 to 10 years of experience as farm labourers. Seventy-six per cent of the farm labourers are only depended on agriculture. Majority seventy-six per cent of the farm labourers source of income was agriculture. Forty-one per cent of the farm labourers get to work 200 to 250 days in a year. Fifty-five per cent of the farm labourers annual income through agriculture was 75.000 to 1.25.00 rupees. Majority sixty-one per cent of the farm labourers are not involved in animal husbandry.

### **C. Village Infrastructure of Farm Labourers**

Seventy-one per cent of the farm labourers type of road in village was black topped road. Seventy-two per cent of the farm labourers major means of transport was public transportation. Ninety-seven per cent of the farm labourers households were electrified. Seventy per cent of the farmers have drinking water facilities near the household. Sixty-four per cent of the farm labourers are have health service Centre are available in their villages. Majority eighty-two per cent of the farm labourers are not members of any co-operative society.

### **D. Occupational Status of Farm Labourers**

#### **iii. Occupational Status of the Farm Labourers**

Seventy-six per cent of the farm labourers nature of work was casual labourers. 23.44% cause of occupation was low level of education. Fifty-three per cent of the farm labourers get to work in 8 to 12 months in a year. Forty per cent of farm labourers wage was 600 rupees per day.

#### **iv. Occupational Stress of the Farm Labourers**

Sixty-two per cent of the farm labourers are not agreed to the statement “I borrowed money from various financial Institutions for family expense but I cannot return the money back”. Fifty-seven per cent of the farm labourers are agreed to the statement of “I do not have my own field; I can’t do agriculture on my own land”.

#### **E. Agricultural Activities Performed by Farm Labourers**

17.18% of the farm labourers were doing all types of agricultural work given by the land holders. Forty-two per cent of the farm labourers distance from work place to their residential place was more than 6km. Seventy-one per cent of the farm labourers were not was doing substitute works. Sixty per cent of the farm labourers do not own any kind of livestock.

#### **F. Migration from Agricultural Works of Farm Labourers**

Seventy-two per cent of the farm labourers were not migrated for agricultural work. Seventy-two per cent of the farm labourers are not migrated for agricultural works. Seventy-two per cent of the farm labourers are working on surrounding village itself.

##### **ii. The Reasons for Farm labourers Migrate from Agricultural Works**

Eighty-two per cent of the farm labourers expressed agreed to the reason for quitting or migrating work to another work was unemployment in field of agriculture. Sixty-four per cent of the farm labourers stated agreed to the reason of poor salary or wages. Seventy-one per cent of the farm labourers expressed agreed to the reason on lack of job security.

#### **G. Facilities Provided by Land Owners for Farm Labourers**

48.07% of the farm labourers reveal facilities provided by land owners was snacks and tea. Fifty-one per cent of the farm labourers satisfied with the behavior of land owners. Sixty-two per cent of the farmers do not have any kind of addictions.

#### **H. Knowledge and Usage of Government Schemes, Programmes**

##### **iv. Knowledge on Schemes and Programmes**

Seventy-two per cent of the farm labourers are have knowledge and benefited from MGNREGA programmes. Seventy-seven per cent of them are not have knowledge and benefited by Chief Minister solar powered greenhouse scheme. Eighty-seven per cent of the farm labourers are not benefited by national health mission. One-hundred per cent of the farm labourers not have any kind of insurance policies.

##### **v. Reasons for Keeping farm Labourers in Agriculture**

Sixty-two per cent of the farm labourers reason for them to keep in agriculture was no skills to do other works. Sixty-two per cent of the farm labourers reason for them to in farm work was they were illustrate. Sixty per cent of the farm labourers in farm works was because ancestral work. Sixty-three per cent of the farm labourer been in farm work was unavailability of other works because they were live in rural area.

#### **vi. Programmes for Farm Labourers**

39.49% of the farm labourers have membership in political parties. Majority ninety-two per cent of the farm labourers seek help from government organization through schemes. Ninety-three per cent of the farmers thought government schemes could promote social. One-hundred per cent of the farm labourers not have employee state insurance (ESI) card. Majority ninety-nine per cent of them were not benefited by social security scheme.

#### **I. Well-being of Farm Labourers**

45.86% of the farm labourers felt dizzy while they are working. Majority eighty-two per cent of the farmers are not taking any medications. Fifty per cent of them haven't lost interest on doing farm works. Forty-nine per cent of the farm labourers prefer non-veg was weekly thrice. Fifty per cent of the farm labourers dress pattern was dhoti, shirt and fifty per cent of the farm labourers dress pattern was saree. Sixty-six per cent of the farm labourers celebrate the festival most was Pongal.

#### **J. Challenges Faced by farm Labourers**

##### **ii. Challenges Faced by Farm Labourers**

Sixty-three per cent of the farm labourers satisfied with wage or income earn from agriculture. 37.65% of the farm labourers have jewels loan. One-hundred per cent of the farm labourers had no health insurance. Ninety-four per cent of the farm labourers had thought agricultural policies and programmes only for farmers. Ninety-one per cent of the farm labourers had thought that they were unorganized sector from government.

##### **iii. Problems Faced by Farm Labourers**

Fifty-four per cent of the farm labourers are facing lack of social status problem.. Majority ninety per cent of the farm labourers are facing lack of incentive/bonus problem. Sixty-three per cent of the farm labourers are facing scope for future development problem. Majority eighty-nine per cent of the farm labourers are facing unorganized by government problem.

#### **TESTING HYPOTHESIS:**

- ANOVA and Pearson Correlation Coefficient indicated that there is a no significant relationship between land holding and choice of crop cultivation of farmers.
- It is found that there is a significant relationship between educational qualification and agricultural activities of farmers.
- ANOVA and Pearson Correlation Coefficient indicated there is a no significant but positive relationship between educational qualification and choice of occupation of farmers.
- It is found that there is a no significant but positive relationship between an educational qualification and agricultural activities of farm labourers.
- ANOVA and Pearson Correlation Coefficient indicated there is a significant but large negative relationship between number of working days and annual income of the farm labourers.
- It is found that there is a significant but negative relationship between male and female wages of farm labourers.

## **SUGGESTION**

### **Suggestions for Government**

- ❖ The government needs to provide specific credit facilities for the farmers and farm labourers, because most of the farmers and farm labourers were get loan from money lenders even the interest may higher than other financial institutions.
- ❖ Government should provide warehousing facilities because if the farmers decide to postpone the sale of their produce warehouse was necessity and the charges also reasonable for storing agricultural produce.
- ❖ Villages in India are not well connected with cities and town through roads or railways. So the efficient transport facilities are needs to available to farmers throughout the year.
- ❖ Favouritism and nepotism are to be avoided in the implementation of government policies and programmes for farmers and farm labourers.
- ❖ Government needs to provide latest information regarding prices of various agricultural commodities prevailing in different markets. Although this is being done by government still there is a still have need to extend.
- ❖ Government effects should be made to reduce the presence of middleman. Hence arrangements should exist for grading, processing and standardization of agricultural produce.
- ❖ According to the study findings there is a minimum level of farmers and farm labourers have any kind of insurance. So the government needs to encourage or give awareness regarding the importance of insurance policies.
- ❖ Government needs to make sure the social security of farm labourers with at least in minimum level.

- ❖ Government needs to recognize the farm labourers as agricultural employees or workers because most of the agricultural programmes and policies farm labourers are not included as agricultural workers within their field itself.
- ❖ The farmers and agricultural labourers should be given awareness on the social welfare schemes on the agricultural development, housing, employment, etc. so as to get facilities from the Government.
- ❖ It is suggested to the Government to initiate different welfare schemes such as forfeiting of agricultural loans including interests, distribution of pesticides and HYV seeds at concessional rates, organize training programmes in modern technological applications, providing financial assistance to adopt and apply modern technological applications to agriculture, etc to farmers.

#### **Suggestions for Farmers and Farm labourers**

- ❖ Farmers need to be members of any kind of farmers associations because within the farmers association they may gain more information and support from the co-farmers.
- ❖ The farmers and farm labourers should know that females are also equal in all aspects in family and society and it is suggested to them to give equal importance to females in all the issues related to family, education, socio-economic, agricultural activities, political and other issues in family and society.
- ❖ The male farmers and farm labourers needs to getting involved in the household activities because female farmers and farm labourers also putting full effect in the field of agriculture and also they have to do household works so the involvement of male will ease the work of female.

#### **Suggestions for Policy makers**

- ❖ According to the study results majority of rural labourers was landless farm labourers. So the assets possessed by the farm labourers needs to be improved. Because they get justification for putting hard work in the field of agriculture.
- ❖ Self-employment training should be given to farm labourers for all to earn income during unemployment days. Because unemployment days of farm labourers needs to reduce.
- ❖ Most of the farmers and farm labourers did not aware of many programmes and policies implemented for them so policy makers should give some considerations before developing a programmes and policies. They have to include creating awareness also one of the goals of the programmes or policies.
- ❖ According to the finding farm labourers are felt they are unrecognized by most of the policies and programmes implemented for agriculture. So farm labourers need to recognize by schemes and policies as agricultural employees.

## **CONCLUSION**

Agriculture is called as oldest occupation in India. The implementation of many development projects in India are accomplished through intensive use of agriculture as a leading sector in the development process. The sustainability of agricultural development requires pragmatic ways of managing agricultural resources to attain development goals and maintain environmental qualities. Farmers are the responsible for feeding a rapidly growing Indian population. There are a lot of policies and programmes for farmers were implemented by still it is not enough. They face lots of crisis now a day such as lack of information, lack of agricultural infrastructure, lack of credits, lack of inputs but still they are continuing and standing as farmers. There are many policies and programmes needs to be implemented for the development of farmers, with the improvement of farmers rural area also may have a development.

Farm labourers suffer under highly insecure and vulnerable working conditions. There are no social security measures to provide risk coverage and ensure maintenance of basic living standards in times of crises such as unemployment or health issues. The successful implementation of employment generation schemes may uplift the status of farm labourers. Because majority farm labourers are don't own land. Organizing this unorganized farm labourers sector is the need of the hour because agriculture is called backbone of India. But without a farm labourers hard work agriculture may not be a backbone of India.

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## ANNEXURE I`

### PART I

#### An interview schedule to Analysis the Status of Farmers

1. Name:

2. Address:

3. Name of the Village:

4. Name of the Taluka:

5. Name of the District:

#### 6. SOCIO ECONOMIC PROFILE

Aspects		Tick below
Age (years)	21 to 35 years	
	36 to 50 years	
	51 to 60 years	
Gender	Male	
	Female	
Community	BC	
	ST	
	SC	
Religion	Hindu	
	Muslim	
	Christian	
Educational qualification	Primary	
	Secondary	
	HSC	
	Degree	
	Illiterate	
Marital status	Married	
	Unmarried	
	Widowed	
	Divorced	
Type of family	Nuclear	
	Joint	
Type of house	Bamboo house	
	Cement house and tile roof	
	Thatched house	
Family income per annum	Less than 1 lakh	
	1-5 lakh	
	More than 10 lakh	
Experience in farming	1- 10 years	
	11-20 years	
	21 years and above	

## FAMILY BACKGROUND

S.No	Name	Gender	Relationship	Educational qualification	Occupation

## 7. EXISTING STATUS OF FARMERS

Assets		Tick below
<b>Land and household details</b>		
Ownership of land	Marginal farmer (less than 1Hector)	
	Small farmer (1.0to 2.0 Hector)	
	Semi medium farmers (2.0 to 4.0 Hector)	
	Medium term farmer (4.0 to 10.0 Hector)	
	Large farmer (10.0 Hector and above)	
Type of ownership of land	Tenant	
	Own	
Type of land	Wet	
	Garden	
	Dry	
Type of soil	Black	
	Red	
	Clay	
Topography- Plots of the fields are	Contiguous	
	Scattered	
Farming tools	Wooden Plough	
	Tractor	
	Koyta	
	Leveler	
	Bamboo Basket	
	Winnower (Shoop)	
	Pick Axe	
	Hoe (Kudal)	
Use of farming tool	Bullock cart	
	Own use	
Ownership of the house	For rent	
	Own house	
Does the households have a latrine, bathroom facility	Rent house	
	Yes	
Types of fuel use for cooking	No	
	Wood	
	Kerosene	
	Gas	
Where is your farm located from house	Electricity	
	Near the house	
	Near village	
How do you reach the farm	Far from my village	
	Through walking	
	Through bike	
Who will tack care of household works	Through bus	
	Men	
	Women	

	Both men and women	
<b>Livestock</b>		
Do you own livestock	Yes	
	No	
If yes who will take care of them	Men	
	Women	
	Both men and women	
	None	
Livestock ownership	Cow	
	Buffalo	
	Bullock	
	Goat	
	Hen	
	Fish	
	Pig	
None		
Do you have animal shed in your home/ farm	Yes	
	No	
Who will do milking from cow at home	Men	
	Women	
	Both men and women	
	None	
Where do you sell / use milk of livestock	Milk society	
	Distribution to every house	
	Own household use	
	None	
<b>AGRICULTURAL ACTIVITIES OF FARMERS IN THE FIELD</b>		
Causes of the choice of this occupation	Ancestral work	
	Have own land	
	Low level of Education	
	No other skills	
	Interest in Agricultural Work	
	Easy to obtain	
Type of farming activity	Large size of family	
	Organic	
Type of agricultural work	Inorganic	
	Cleaning land	
	Use of Fertilizer	
	Diggings	
	Use of Pesticides	
	Harvesting	
	Watering	
	Plantation	
Style of ploughing	All types of work	
	Manual and Bullock	
	Manual and Tiller	
Did you employ agricultural labourers for farming works	Manual tiller and bullock	
	Yes	
Did you provide farming tools for farm works	No	
	Yes	
If yes, daily wages provided for men farm workers	No	
	500	
	600	

	None	
Daily wages provided for women farm workers	300	
	500	
	None	
If no, who would help in the farm	Husband	
	Wife	
	Children	
	None	
Who will be have a decision making authority on farming activities	Men	
	Women	
	Both men and women	
Your involvement of other agricultural production activities	Vermiculture	
	Gobar gas / biogas	
	None	
Which agricultural activities give maximum output with minimum input	Farming	
	Farm labour	
How many days do you have to work in a year	Below 100	
	100-200	
	200-250	
	250-300	
	300 – above	
<b>IRREGATION</b>		
Source of irrigation water	Rain	
	Well	
	Bore well	
	River	
If it is well do you own it	Yes	
	No	
Type of irrigation	Canal	
	Dug well	
	Tube well	
	Drip	
How do you irrigate	Manually	
	Mechanical	
Is there any subsidy for water and electricity usage	Yes	
	No	
Do you had/have water scarcity	Yes	
	No	
If yes, reason you think	Overuse	
	Drought	
	Lack of government planning	
	Urbanization	
	Lack of rain	
	None	
Do you agree that improved methods of irrigation have led to agricultural development in the villages?	Strongly agree	
	Agree	
	No opinion	
	Disagree	
	Strongly disagree	
<b>CROPPING PATTERN</b>		
Cropping pattern	Single	
	Double	
	Multiple	

Name of the crops cultivated	Coconut	
	Sugarcane	
	Banana	
	Fruits Trees	
	Vegetables	
	Turmeric	
	Groundnut	
	Cholam	
	Legumes	
	All	
If you cultivate cholam mention the purpose	For livestock	
	For sale	
	None	
Whether same crop is grown or changed from year to year	Yes	
	No	
Who will do choose crop pattern	Men	
	Women	
	Both men and women	
Type of cropping system you use	Mono-cropping	
	Crop rotation	
	Sequential cropping	
	Intercropping	
	Stir cropping	
Do you follow seasonal crops	Yes	
	No	
Do you plant medicinal plants	Yes	
	No	
<b>PESTICIDES AND FERTILIZER</b>		
You use what kind of pesticides/ fertilizers	Organic	
	Inorganic	
If organic, reason	Cheap and best	
	Easily available	
	Good yield	
	It avoid soil pollution	
	Eco friendly	
	None	
If inorganic, reason	Cheap and best	
	Easily available	
	Good production	
	None	
Nature of seeds	Nature hybrid	
	Traditional preservative seed	
	HYV seeds	
Do you purchase seeds from cooperative society	Yes	
	No	
<b>SAVINGS AND CREDIT</b>		
Income earn from agricultural sources	Farming	
	Allied activity	
	Farming tools	
	Cattle	
	Labour	
	Other family member	
Savings	Cash in hand	



## 8. AGRICULTURAL INFRASTRUCTURE AND MARKETING FACILITIES FOR FARMING

Particular		Tick below
Where do you purchase agricultural inputs (fertilizer, seeds, pesticides)	Government shops	
	Private shops	
	Through online	
Are you aware of subsidy provided by government on agricultural inputs	Yes	
	No	
Do you sell agricultural products	Yes	
	No	
If yes where do you sell	Uzhavar sandai	
	Market	
	Through online	
	Retail shop	
	None	
You sell agricultural products	Immediately after harvest	
	Store and sell in off season	
	Make processed and sell	
Do you have the storage or warehouse facilities in your village?	Yes	
	No	
Is it available for you to access all the time	Yes	
	No	
What types of storage facilities available in your village	Own storage facility	
	State warehousing corporation (SWCs)	
	Food corporation of India (FCI)	
	None	
Available storage or warehouse in your village	General warehouse	
	Special commodity warehouse	
	Storage building	
	Freezer storage building	
	Own storage building	
	None	
Do you have a transportation facilities to transfer the agricultural products from farm to sales	Yes	
	No	
What type of transportation are you using to transfer the agricultural products?	Two wheeler	
	Tempo or Lorry	
	Through walk	
Is it transportation facilities accessible for all the time	Yes	
	No	
Do you have road connectivity to transfer the agricultural products	Yes	
	No	
Do you have processing facilities like transform, package, grade	Yes	
	No	
Do you have institutional infrastructure in your block	Agricultural research	
	Extension & education technology	
	Information and communication services	
	Financial services	
	Marketing	
Do you have farming input based infrastructure in your block	Seeds	
	Fertilizer	
	Pesticides	
	Farm equipment's	
	Machinery	

### 9. VILLAGE INFRASTRUCTURE FOR FARMERS

Characteristics		Tick below
Kind of road	Earth	
	Black top	
	Concrete	
How is the condition of the roads	Good	
	Satisfactory	
	Poor	
Major means of transport	Both public and private transport	
	Own transportation	
Is there your household have Electrified	Yes	
	No	
Does the village have drinking water facilities	Yes	
	No	
Is sanitation facility available in your household	Yes	
	No	
Are there primary / secondary schools in the village	Yes	
	No	
Is there health service Centre are available in the village	Yes	
	No	
Do you get Post/mail frequently	Yes	
	No	
Is there Anganawadi Centre in the village	Yes	
	No	
Is there e-connection in the village	Yes	
	No	
Do you have Telephone/ phone	Yes	
	No	

### 10. KNOWLEDGE AND USAGE OF GOVERNMENT POLICIES, PROGRAMMES

Programme/schemes	Yes	No
MGNREGA		
Agricultural mechanization programme		
Rashtriya krishi vikas yojana		
Gramin bhandaran yojana		
National food security mission		
National agriculture insurance scheme		
National Health Mission		
Pradhan mantri gram Sadak yojna		
Weather based crop insurance scheme		
Farmers training		
Subsidy for livestock		
National policy for farmers		
Do you have Kisan Credit Card		
Benefit from Agricultural Department		
Agricultural Technology and management agency(ATMA)		
Horticulture and Soil schemes		
Subsidy for agricultural equipment's and machineries		

### SOURCE OF OBTAINING ABOUT SCHEMES AND AGRICULTURAL INFORMATION

Source	Yes	No
Farmers Internship Programme		
Agro Exhibition		
Farmer's meet		
Agricultural university portals		

Government Departments		
Newspaper and Magazines		
Internet		
Gram Panchayat		
Farmers call center and SMS broadcast services		
Television agriculture Programmes		
Radio News		
NGOs		
Govt. Awareness Programmes in Villages in Village level		
Tamil Nadu Agricultural University		
Tamil Nadu Govt. Agricultural Department		
Indian Council of Agricultural Research (ICAR)		

#### **BENEFITS OBTAINED BY SCHEMES**

<b>Benefits</b>	<b>Yes</b>	<b>No</b>
Schemes improved livelihood of farmers		
Schemes provide security for life		
Schemes provide economic support		
Schemes provide agricultural inputs		
Schemes provide social support such as conducting support group, discussion meet, etc.		
Benefits availed from the scheme have been utilized for farming		
Govt. schemes promote social & economic development of farmers		
Satisfied with the wage/ income that earn from agriculture		
Satisfied with information provided by role players for schemes		

#### **11. UTILIZATIONS OF FARMING TECHNOLOGIES, APPS AND MEDIA FARMING TECHNOLOGIES**

<b>Farming technological equipment</b>	<b>Yes</b>	<b>No</b>
Tractor		
Oil engine		
Electric motor		
Pumpset		
Hand sprayer		
Duster		
Country plough		
Bose plough		
Power tiller		
Levelling board		
Puddler		
Seed drill		
Sickl		

#### **UTILIZATION OF AGRICULTURAL APPS AND MEDIA**

<b>Agricultural apps</b>	<b>Yes</b>	<b>No</b>
Kisan suvidha		
IFFCO Kisan Agriculture		
RML Farmer – Krishi Mitr		
Pusa Krishi		
Agri app		
Crop Insurance		
Agri- market		
Shetkari		
Fasal salah		
Kheti-Badi		
Digital Green		
e-Arik		
Lifeline India		
VASAT		
e-NAM		
AGRISNET		
ASHA		
TNAU agritech		
e-velanmani		

## 12. PROBLEMS FACED BY THE FARMERS

<b>Particulars</b>	<b>Yes</b>	<b>No</b>
Market prices of crops are sufficient		
Should farmers independent to decide the market value of their crops		
Subsidies provided for farmers are necessary and Subsidies needed to carry on		
Pesticides polluting soil and water resources		
Values of pesticides should be verified and dangerous pesticides should be banned		
Decreasing level of Ground water is a serious problem		
Farmers enhanced to use Organic Farming and Commercial crops needs to Preferred		
People needs to work in Fields are more than want		
Training to farmers should be provided		
Commission agent system of marketing process is best for farmers		
Direct payment of crops value should be made to farmers		
Insurance of farmer, his family necessary and Insurance of crops also needed		
Farmers needed Agriculture Loans, but Interest rates should be low		
Small farmers require special attention by Govt.		
Govt. should enhance farmers to start assisted works like Dairy, Poultry, Fishery, etc.		
Agricultural tools harvesters, Tractors, needed to supply on subsidy basis		
Water and Soil testing labs in rural areas		
Water resources are enough for irrigation		
Electricity supply enough for Agriculture sector and it needs to be free		
Crops should be purchased by private and govt. agencies		
Agricultural Research University and institutions enough		
Farmers needed special packages in case of natural disasters (Droughts, Floods )		
Rain plays a vital role in Agriculture so lack of rains affects the productivity badly		
Labor is not easily available and much expensive		
Do you feel difficulty in Agricultural works		

## CHALLENGES FACED BY FARMERS

<b>Challenges</b>	<b>Yes</b>	<b>No</b>
Failure of monsoon		
Lacks proper irrigation facility		
Sub divided and fragmented land holding		

Seasonal nature of farming		
Low social status		
Low income from farming		
Low prices of agriculture product		
Lack of credit facilities		
Conversion of agriculture land into non-agricultural purpose		
Effects of new agricultural policy		
Political intervention		
Poor implementation of Government scheme		
High cost of seeds and fertilizer		

### 13. WELL-BEING OF FARMERS

Aspects		Tick below
Have you felt any of these from too many worries in the last few weeks	Hard to breath	
	Dizzy	
	Get angry or wild real quick	
	Too many bad moods	
	Trouble sleeping	
Do you take any medications	Yes	
	No	
Do you have trouble sleeping and awful dreams	Yes	
	No	
Have you been feeling tired or having little energy	Yes	
	No	
If yes, reason	Poor physical health	
	Workload	
	Stress	
	None	
Have you lost interest on doing farm works	Yes	
	No	
	Sometimes	
Are you feel isolated from peer group because of workload on agriculture	Yes	
	No	
After completing the farm works what would you do	Watching TV	
	Reading books/ newspaper	
	Playing with children/ grand child	
	Chat with peer group	
	Cooking	
	Cleaning the house	
How often do you take trips or tour for entertainment	Very often	
	Rare	
	Never	
If no, reason	To tack care of Farm and livestock	
	Health issues	
	Not interested	
	Cannot afford	
	None	
Food habits (morning)	Ice briyani	
	Rice and kolambu	
	Idlly with chutney	
Food habit (afternoon)	Full meals	
	Rice and kolambu	
	Briyani	
Food pattern (night)	Rice with kolambu	

	Chappathi with chutney	
	Idly or dosai	
When do you prefer non-veg foods	Weekly once	
	Weekly thrice	
	Full week	
Dress pattern	Dhoti and shirt	
	Saree	
	Chutithar	
	Pant and shirt	
Mention the festival you celebrate most	Pongal	
	Diwali	
	Workers day	
	Farmers day	
If it is Pongal narrate your experience		

#### 14. OCCUPATIONAL STRESS

Occupational stress	Yes	No
Are you feeling stressful with farming works?		
I have unpleasant feeling when I cannot control the market prices.		
I cannot pay attention to the prevention of land, soil, water, noise and air pollution because I do not have knowledge and sufficient money.		
Due to the financial pressure and debt load, I frequently have mood swings and lose my emotion stability		
Because of economic problem, I start smoking, drink alcohol, skip food		
Due to the money problem, unable to afford for health care or physical check-up.		
My stress is due to the greatest expense of tractors, sowing machine, harvesters and transport trucks		
I am unpleasant when the prices of agricultural products have been pushed down below the cost of production, but the prices of inputs have gone up.		
I borrowed money from various financial Institutions for investment for rice farm and for family expense but I cannot return the money back.		
I do not have my own field; instead, I rent from landlords in a high rent rate.		
I do not have enough money for the next cycle of agricultural production.		

15. Any suggestions regarding improve livelihood of farmers

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**Thank you...**

## PART II

### An interview schedule to Analysis the Status of Farm Labourers

1. Name:

2. Address:

3. Name of the Village:

4. Name of the Taluka:

5. Name of the District:

#### 6. SOCIO-ECONOMIC PROFILE OF THE FARM LABOURERS

	Aspects	Tick below
Age	Upto 20 years	
	21 to 35 years	
	36 to 50 years	
	51 to 60 years	
Gender	Male	
	Female	
Community	OBC	
	ST	
	SC	
Religion	Hindu	
Educational qualification	Primary	
	Secondary	
	HSC	
	Degree	
	Illiterate	
Marital status	Married	
	Unmarried	
	Widowed	
	Divorced	
Type of family	Nuclear	
	Joint	
House	Own house	
	Rent house	
	Tenant house	
Type of house	Bamboo house	
	Cement tile roof house	
	Thatched house	

#### FAMILY BACKGROUND

S.No	Name	Gender	Relationship	Educational qualification	Occupation

#### 7. BASIC INFORMATION ABOUT FARAM LABOURERS

Characteristics		Tick below
Members of family engaged in Agriculture work	Only Self	
	With spouse	
	With parents	
	With spouse and children	
If your children are studying type of school/ collage they are studying	Government school	
	Private school	
If children engaged in Agri work, no. of children	1-2 children	
	3-4 children	
	More than 5 children	
Experience of family in agriculture work	Upto 5 years	
	6 to 10 years	
	Above 10 years	
Are you only depends on Agriculture	Yes	
	No	
If No, State the source of income of other family members please specify	Daily wages work	
	Salaried	
	Business	
	None	
No. of days of work in agriculture in a month	5-10 days	
	11-20 days	
	More than 20 days	
How many days do you get work in a year	Below 100	
	100-200	
	200-250	
	250-300	
	300 – above	
Family income through agriculture work	Up to Rs. 75000	
	Rs. 75000-1,25,000	
	Rs. 1,25,000-Rs. 2,00,000	
	More than Rs. 2,00,000	
Income through animal husbandry	Up to Rs. 75000	
	Rs. 75000-1,25,000	
	Rs. 1,25,000-Rs. 2,00,000	
	More than Rs. 2,00,000	
Nature of Work	Local Agricultural Labourer	
	Migrated Agricultural Labourer	
Category of Farm Labourer	Landless	
	Land Holder	
Own land	1-4 hector	
	4-10 hector	
	Above 10 hector	
	None	
Are you doing seasonal and unseasonal agricultural works	Yes	
	No	
If yes, What you have do unseasonal agricultural time	MGNREGA	
	Constructional works	
	Other farming works	
	None	
Did land owners provide the farming tools	Yes	
	No	
	Sometimes	
If no, mention the tool you bring for	Hoe	

agricultural work	Billhook	
	Pesticide and fertilizer sprayer	
	None	

### 8. VILLAGE INFRASTRUCTURE OF FARM LABOURERS

Characteristics		Tick below
Kind of road	Earth	
	Gravel	
	Black top	
	Concrete	
How is the condition of the roads	Good	
	Satisfactory	
	Poor	
Major means of transport	Both public and private transportation	
	Own transportation	
Is there your household Electrified	Yes	
	No	
Does the village have drinking water facilities	Yes	
	No	
Is sanitation facility available in your household	Yes	
	No	
Are there primary and secondary schools in the village	Yes	
	No	
Is there health service Centre are available in the village	Yes	
	No	
Do you get Post/mail frequently	Yes	
	No	
Is there Anganawadi Centre in the village	Yes	
	No	
Is there e-connection in the village	Yes	
	No	
Do you have Telephone/ phone	Yes	
	No	
Are you a member of co-operative society	Yes	
	No	

### 9. OCCUPATIONAL STATUS

Particular		Tick below
Composition Agricultural Labourers by Nature of Work	Casual Labourers	
	Annual Free Labourers	
	Contract Labourers	
	Attached Labourers	
Nature of Household Employment	Agricultural Employment	
	Non Agricultural Employment	
The Experience of work on Agricultural Labourship	1 to 5 years	
	6 to 10 years	
	11 to 15 years	
	16 to 20 years	
	21 to 25 years	
	More than 25 years	
Causes of the choice of this occupation	No Substitute work	
	Landless	
	Low level of Education	
	No other skills	
	Interest in Agricultural Work	

	Easy to obtain	
	Large size of family	
Pre-Occupation before agricultural Labourship	Agricultural Labourship	
	Private Service	
	Porters	
	Farming	
	Animal Husbandry	
	Domestic Work	
	Retail Trades	
Daily working hours	5 to 6	
	7 to 8	
	9 to 10	
	More than 10 hours	
Working month in a year	2 to 4	
	5 to 7	
	8 to 12	
	Infinite	
Highest peak period of work in the last year	June to October	
	November to February	
	March to May	
Daily wages received from agricultural activities	300	
	400	
	500	
	600	
Working hours in time	9:30 am to 5:00 pm	
	8:00 am to 3:00 pm	
	7am to 2:00 pm	

#### OCCUPATIONAL STRESS OF FARM LABOURERS

Reasons	Yes	No
Are you feeling stressful with farming works?		
I have unpleasant feeling when I cannot control the market prices of agricultural products.		
Due to the financial pressure and debt load, I frequently have mood swings and Lose my emotion stability		
Because of economic problem, I start smoking, drink alcohol, skip food and take sleeping pills.		
Due to the money problem, I am unable to afford for health care or physical check-up.		
My stress is due to the greatest technological improvement of tractors, sowing machine, harvesters and transport trucks		
I borrowed money from various financial Institutions for investment for rice farm and for family expense but I cannot return the money back.		
I do not have my own field; I can't do agriculture on my own land		
I do not have enough money to expense for the unforeseen circumstances.		

#### Mention you're any one day plan (work routine)

Time / period	Daily work pattern

#### 10. AGRICULTURAL ACTIVITIES OF FARM LABOURERS

Type of agricultural work	Aspects	Tick below
	Cleaning Land	

	Use of Fertilizer	
	Diggings	
	Use of Pesticides	
	Harvesting	
	Watering	
	Plantation	
	All types of work given by landholder	
Distance of work form residential place	Up to 2 KM	
	3 to 4 KM	
	5 to 6 KM	
	More than 6 KM	
Are you doing substitute work	Yes	
	No	
If yes, name the work	Private Service	
	Poultry	
	Animal Husbandry	
	Other Work	
	None	
If no why?	No desire	
	Other engagement	
	Not available	
	Complaints of health	
Causes of doing substitute work	To earn more income	
	Large size of family	
	For repayment of loan	
	Interest in agriculture	
	No other skill	
	No other substitute work	
Livestock	Cow	
	Buffalo	
	Bullock	
	Goat	
	Hen	
	Fish	
	Pig	

### 11. MIGRATION FOR AGRICULTURAL WORKS OF FARM LABOURERS

Aspects		Tick below
Are you migrated for agriculture work	Yes	
	No	
If yes, No of migrations so far from your native place	10 to 20 times	
	30 to 40 times	
	More than 50 times	
	None	
If no, is it you working in your village itself	Yes	
	No	

State the reasons for Farm labourers quit/migrate from/for agriculture works

Reasons	Yes	No	Maybe
Unemployment			
Poor Salary / Wages			
Lack of Job Security			
Poor Job satisfaction			
Absence of Social Status			
Lengthy Working Hours			

Bad Working Conditions			
Abuse of women Labour			
Poor Health			
Poor Sanitation Facility			
Absence of Incentive / Bonus			
Scope for future development			

### 12. FACILITIES PROVIDED BY THE LAND OWNER

Aspects		Tick below
Facilities provided through Landowner	Provision of snacks, tea	
	Provision of liquor	
	Provision of equipment	
	Involve social gathering	
	Provision of fuel	
	Provision of transport charges	
Is there any trade union of farm labourers in your villages	Yes	
	No	
Behavior of landowner to farm labourers	Good	
	Satisfactory	
	Misbehavior	
Do you have any Addictions	Yes	
	No	
If yes, specify	Drug (drinking)	
	Tobacco (smoking)	
	Gutkha (chewing)	
	None	
Do you get bonus from landowners	Yes	
	No	
If yes, Type of bonus	Money	
	Dress	
	Sweets	
	None	
Accessibility of community assets	Community Halls	
	Roads	
	Schools/Colleges	
	Hospital	
	All	

### 13. KNOWLEDGE AND USAGE OF GOVERNMENT SCHEMES, PROGRAMMES

Programme/schemes	Yes	No
MGNREGA		
Chief minister solar powered greenhouse scheme		
National Health Mission		
Pradhan mantri gram Sadak yojna		
Subsidy for livestock		
Farm labourers training		
Do you have Kisan Credit Card		
Benefit from Agricultural Department		
Agricultural Technology and management agency(ATMA)		
Are you covered under Provident Fund scheme		
Do you have any insurance		

State reasons for keeping Farm labourers in Agriculture

Reasons	Yes	No
Government can fix the fare wages to fulfill food and Accommodation		
Provide Training for unskilled Agricultural labourers		
Providing Insurance Scheme		
Providing Pension scheme		
Job security / Regular Employment		
Good working environment		
Treatment on par with non-Agriculture labourers		
Bonus or incentive scheme		
Health and sanitary		
Safety Measurers		
No skills to do other works		
Illustrate		
Ancestral work		
Unavailability of other works		

#### Other programme

Particular	Tick below
Have you attended any skill development training programme	Yes
	No
Are you member in any of the following organization (If yes please specify the Name of the organization)	Self Help Groups (SHG)
	Cooperative Society
	Caste based societies
	Political Parties
	All
Do you seek any help from Government organization	Yes
	No
Do you think the Government schemes promote social and economic development of farm labourers	Yes
	No
MGNREGA (Daily) wage	Rs 210
	Rs 190
	Rs 180
	None
Do you have Employee State Insurance(ESI) card	Yes
	No
If no reason you think	Unrecognized sector by gov.
	Temporary workers
	Seasonal workers
Do you know about social security schemes for farm labourers	Yes
	No
Do you get benefited by social security schemes	Yes
	No

#### 14. WELL-BEING OF FARMERS LABOURERES

Aspects	Tick below
Have you felt any of these from too many worries in the last few weeks	Hard to breath
	Dizzy
	Get angry or wild real quick
	Too many bad moods
	Trouble sleeping
Do you take any medications	Yes
	No
Do you have trouble sleeping and awful dreams	Yes
	No

Have you been feeling tired or having little energy	Yes	
	No	
If yes, reason	Poor physical health	
	Workload	
	Stress	
	None	
Have you lost interest on doing farm works	Yes	
	No	
	Sometimes	
Are you feel isolated from peer group because of workload on agriculture	Yes	
	No	
After completing the farm works what would you do	Watching TV	
	Reading books/ newspaper	
	Playing with children/ grand child	
	Chat with peer group	
	Cooking	
	Cleaning the house	
How often do you take trips or tour for entertainment	Very often	
	Rare	
	Never	
If not, reason	To tack care of Farm and livestock	
	Health issues	
	Not interested	
	Cannot afford	
	None	
Food habits (morning)	Ice briyani	
	Rice and kolambu	
	Idlly with chutney	
Food habit (afternoon)	Full meals	
	Rice and kolambu	
	Briyani	
Food pattern (night)	Rice with kolambu	
	Chappathi with chutney	
	Idlly or dosai	
When do you prefer non-veg foods	Weekly once	
	Weekly thrice	
	Full week	
Dress pattern	Dhoti and shirt	
	Saree	
	Chutithar	
	Pant and shirt	
Mention the festival you celebrate most	Pongal	
	Diwali	
	Workers day	
	Farmers day	

### 15. CHALLENGES FACED BY THE FARMERS LABOURERS

Particulars		Tick below
Do you face any agricultural problems	Yes	
	No	
Do you have any difficulty in obtaining work from Agriculture	Yes	
	No	
Are you satisfied with the wage/ income that earn from agriculture	Yes	
	No	

Debt aspects	Loans from Banks	
	Loan from Cooperative Societies	
	Loan from money-lenders	
	Loan from Relatives	
	Mortgages	
	Ancestral Loan	
	Jewels Loan	
	L.I.C.	
Purpose of Loan	House Loan	
	Education loan	
	Vehicle loan	
	Children marriage	
Do you have any health problems	Yes	
	No	
If yes what type of health problem	Musculoskeletal disorders	
	Cardiovascular disorder	
	Hearing loss	
	Chemical hazards	
	Respiratory hazards	
	Skin disorders	
	Heat stress	
None		
How do you manage	Own money	
	Health insurance	
	Using jewels	
	Loan	
	Money lenders	
Do you have a health insurance	Yes	
	No	
Do you think agricultural policies and programmes is only for farmers	Yes	
	No	
Do you think farm labourers are unrecognized sector in society and government	Yes	
	No	


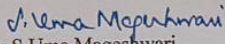
State the challenges faced by Farm Labourers

Challenges	Yes	No
Unemployment		
Poor Salary / Wages		
Lack of Job Security		
Poor Job satisfaction		
Absence of Social Status		
Lengthy Working Hours		
Bad Working Conditions		
Abuse of women Labour		
Poor Health		
Poor Sanitation Facility		
Absence of Incentive / Bonus		
Scope for future development		
Unorganized by government		

16. Any suggestions regarding improve livelihood of farm labourers

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## ANNEXURE II

INSTITUTIONAL HUMAN ETHICS COMMITTEE	
 <p><b>Avinashilingam</b> Institute for Home Science and Higher Education for Women (Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956) Re-accredited with 'A++' Grade by NAAC. Recognised by UGC Under Section 12 B Coimbatore-641 043, Tamil Nadu, India</p>	
<p><b>Chairman</b> Dr.SudhaRamalingam Director-Research &amp; Innovation, Professor-Community Medicine, PSG Institute of Medical Sciences &amp; Research, Coimbatore</p> <p><b>Member Secretary</b> Dr.S.UmaMageshwari Professor and Head, Department of Food Service Management &amp; Dietetics</p> <p><b>Members</b> Mr.K.Arunmoli (Legal Expert) Dr.Subhashini K. Sripathi Dr.A.Saraswathy (Medical Officer) Ms.D.Kavitha Dr.A.R.SudamaniRamasamy Dr.G.Victoria Naomi Dr. Judith Justin Dr.AnithaSubash</p>	<p style="text-align: right;">26<sup>th</sup> Febraury 2022</p> <p>To Ms.Aarthi R Department of Home Science Extension Education Avinashilingam Institute for Home Science and Higher Education for Women Coimbatore – 641 043</p> <p>Dear Aarthi R, Ref: Your proposal No. IHEC/21-22/EXT-01 entitled “Analysis on Status of Farmers and Farm Labouers in Thondamuthur” submitted for approval of IHEC on 23.11.2021.</p> <p>The Institutional Human Ethics Committee of our University hereby grants approval to your research proposal No. IHEC/21-22/ EXT-01 entitled “Analysis on Status of Farmers and Farm Labourers in Thondamuthur” submitted by you. The Approval number for the same is AUW/IHEC/RM-21-22/XPD-01.</p> <p>We wish you all the best in your research endeavours.</p> <p style="text-align: right;">Regards,  Dr.S.Uma Mageshwari Member Secretary</p> 