HOUSE HOLD FOOD SECURITY AMONG BELOW POVERTY LINE BENEFICIERIES OF PUBLIC DISTRIBUTING SYSTEM DURING COVID-19 PANDEMIC PERIOD

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By

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PROJECT WORK

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HOUSE HOLD FOOD SECURITY AMONG BELOW POVERTY LINE BENEFICIERIES OF PUBLIC DISTRIBUTING SYSTEM DURING COVID-19 PANDEMIC PERIOD

(M.sc Food Science and Nutrition)

REGISTER NO: AM20HFN013

Date ……

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Head of the Department

CERTIFICATE

I hereby certify that the dissertation entitled "House hold food security among Below Poverty Line beneficiaries of public distributing system during covid-19 pandemic period" prepared and submitted by Ms. Vinaya.V.C is an original research work carried out under my guidance and supervision.

Signature of the Head of the Department

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DECLARATION

I hereby declare that this research work entitled "House hold food security among BPL beneficiaries of public distributing system during covid-19 pandemic period" is an original research work carried out by me under the supervision and guidance of Dr. Betty Rani Issac, Associate Professor, Department of Home Science, St. Teresa's College Ernakulam.

Place: Vinaya.V.C

Date:

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CHAPTER - I

INTRODUCTION

COVID-19 is a virus-borne infection caused by the SARS-CoV-2 viral (WHO). The virus is human-transmittable and has produced a worldwide pandemic. This disease has the potential to be fatal. SARS-CoV-2 is a highly transmissible type of virus. A growing number of persons with severe diseases have died around the world. By the 30th of March, 2020 the number of confirmed cases had risen exponentially to 7.25 lakhs worldwide. To prevent the virus from spreading further, many countries have instituted social distance and lockdown measures.

India, which has the world's second-largest population, is severely affected by COVID-19 disease. Initially, coronavirus cases in India were caused by an international connection rather than transmission within the country. The first three cases of illness happened in Kerala. By the 15th of March, 2020 the total number of confirmed patients had reached 107, and the number of positive cases has been increasing steadily since then. Kerala is one of the states in India with the highest recovery rate, lowest mortality rate, and slow progression of COVID-19 patients. To combat the spread of this disease, the Ministry of Health and Family Welfare (MoHFW) issued travel warnings. Furthermore, travel visas for other countries have been restricted, MoHFW proposed various interventions such as social distancing of 1 m to avoid/decrease the rate and extent of disease transmission in a community, which eventually leads to a decrease in disease spread, morbidity, and mortality.

To deal with COVID-19, India imposed a 68-day four-phased lockdown. Because of this lockdown, mobility in supermarket and pharmacy stores, entertainment and retail, transit to station visits to parks, and workplaces has been curtailed. On account of an increasing number of COVID-19 infestations, the Indian government announced a prolonged 2nd phase lockdown. COVID-19 has an impact on both urban and rural life in India. COVID-19 killed people not only through virus infection but also due to economic and mental breakdown, with developing countries suffering from unemployment and famine. It also affects the education system and medical facilities. Poverty, famine, and hunger are still issues in India, and they worsen as a result of COVID-19.

The COVID-19 pandemic has resulted in a tremendous loss of human life throughout the world and poses an unparalleled risk to public health, food systems, and the workplace.

Many people are unable to feed themselves and their family during lockdowns because they lack the means to earn a living that which lead to severe poverty and malnutrition. The epidemic has impacted the whole food chain, exposing its vulnerability. Border closures, trade restrictions, and confinement measures have made it difficult for farmers to access markets, including to buy inputs and sell their produce, and for agricultural workers to harvest crops, disrupting domestic and international food supply chains and reducing access to healthy, safe, and diverse diets. According to a CSE resurvey, 59% of rural households consumed less than they did before the lockdown. (Nath, Nelson Mandela, and Gawali 2021). Vulnerable groups, such as landless laborers, wage earners, and small-scale farmers, have been hindered from going about their daily lives and have suffered the most (Workie Et.al, 2020).

Similar to air, food is also required for survival. “Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life”. (World Food Summit, 1996). Food security has 4 dimensions such as food availability, food accessibility, utilization and stability. Food availability means a sufficient supply of high-quality food, whether produced domestically or imported (including food aid). Access to food entails Individuals' access to sufficient resources (entitlements) for obtaining suitable meals for a healthy diet. Utilization refers to a need for food to achieve a state of nutritional well-being in which all physiological demands are fulfilled through an appropriate diet, clean water, sanitation, and health care. The term "stability" refers to a state of food security, a population, home, or person must have constant access to sufficient food. They should not be at risk of losing access to food as a result of unexpected occurrences (such as an economic or climate disaster) or cyclical events (e.g. seasonal food insecurity). As a result, the term "stability" may be applied to both the availability and access aspects of food security.

The impact of a pandemic on food security will affect some groups more than others. Those who are already suffering from hunger, illness, or poverty are the most vulnerable people in most emergency circumstances. During a major pandemic, these populations were in extreme danger. The government of India uses the Below Poverty Line as a criterion for determining economic disadvantage and identifying individuals and households in need of government help. It is calculated using a number of characteristics that differ from state to state and within states. When food security is endangered, it is dependent on the Public Distribution System (PDS), as well as government attention and intervention. The Public Distribution System (PDS) is primarily a social welfare and anti-poverty project of the Indian government.

The PDS provides rice, wheat, sugar, kerosene, and other necessary items to the public at subsidised prices. Food security is determined by a variety of factors such as socioeconomic level, employment, education, household size, and so on.

Relevance of the study

On the COVID-19 front, India confronts a number of significant hurdles. India's economy has slowed and joblessness has risen. COVID-19 caused both economic and non-economic disaster on several fronts. Among them, food security was a big worry. The epidemic has had a major impact on the food supply chain. The impact of the pandemic on food security will be detrimental to the people living below the poverty line. The government of India has provided economic assistance, including subsidising the price of rice and wheat distribution during pandemic period. In Kerala, The Community Kitchen programme, supported by Kudumbhasree, has delivered free meals to labourers, those in quarantine, isolation, impoverished, and other needy people. The supplied free rations under the Public Distribution Scheme to people. During the COVID-19 pandemic, the Public Distribution System must be substantially more efficient in order to maintain food security for the most disadvantaged groups, but no such data has been recorded. Therefore, we decided to study house hold food security among Below Poverty Line beneficiaries of public distributing system during covid-19 pandemic period.

Aim of the Study

To determine food security among BPL families in Kerala during pandemic period and the role of Public Distribution System (PDS).

Objectives

- To study the socioeconomic background among BPL families benefiting for public distribution system.
- To determine dietary diversity of the selected BPL families
- To assess the food security of the households.
- To evaluate the efficacy of the public distribution system.
- To determine the benefit of household food items available through the Food Kit provided by the Government of Kerala during pandemic period.

CHAPTER - II
REVIEW OF LITERATURE

The Review of literature pertaining to the study entitled 'Household food security among beneficiaries of the public distributing system during the covid-19 Pandemic period' is described under the following headings.

2.1) Public Distributing System in different countries
2.2) Role of distributing system in providing food security
2.3) Food security issues during pandemic
2.4) Challenges faced by BPL households during covid pandemic

2.1) Public Distributing System in different countries

According to Zhou et.al, (2006), when the Communist Party of China took control in 1949, there was a food crisis created by decades of war. In October 1953, it was proposed that the government purchase grain directly for distribution to urban consumers via rationing. This was approved by the government and implemented in December 1953. Food distribution systems in China, which were first designed to combat food shortages, have played a significant role in ensuring appropriate food consumption, particularly during times of food scarcity. These nations feed their citizens at subsidised costs using a rationing system. The rationing system in China favoured the registered urban population, regardless of income. Rural households with a grain deficit or who do not produce grain were also included. Grain coupons may be redeemed at government grain shops, restaurants, and manufactured food stores, among other places. Local grain coupons were often provided on a monthly basis, however they may be used at any time or within a set time frame. Cereals (mainly rice and wheat flour), various coarse grains, and edible oil were the most common foods sold in government grain shops.

According to Ali et.al, (2008), during British rule (1939- 47), the Bengal Rationing Order of 1943 formed the regulatory framework. There were two rationing systems in place: Statutory Rationing for urban areas and Modified Rationing for nonurban regions. The evaluation of PFDS performance is inextricably tied to its fundamental aims, which may be classified as Enforcing pricing floors and ceilings, Distribution targeting to reduce poverty and provide food security for vulnerable groups and Disaster management

According to Anita (2021), food banks first appeared in Canada in the early 1980s as a short-term solution to the rise in food insecurity caused by job losses in the oil sector and the accompanying economic crisis. In the absence of comprehensive government policy, food banks have spread, and these organisations are now Canada's first line of defense against hunger and food poverty. In terms of terminology, food banks in Canada serve the functions of both "food pantries" – local non-profit organisations that provide food assistance in the form of unprepared grocery items to people in need – and the central warehouses known as food banks in the United States, which distribute food to various types of front-line food programmes. Food banks in Canada provide free food aid, although the frequency of visits is normally restricted to once per month, with the purpose of delivering a few days' worths of goods during each visit.

According to Korayem, (2013), Egypt's food subsidy system is divided into two parts: ration card (RC), which provides precise quotas of subsidised commodities (sugar, oil, rice, and tea) to qualifying families; and Baladi Bread (BB), which is supplied through market outlets with no discrimination between customers (first come, first serve). Egypt's subsidy system dates back to the mid-1940s, when the first programme was launched following World War II to distribute basics such as sugar, kerosene, coarse cotton textiles, edible oil, and tea to everyone (not just specific groups). The RC and BB subsidy systems will be evaluated from a targeting standpoint in terms of the efficiency with which the subsidy is allocated to the necessary consumer goods of low-income people (the target group), as well as the efficiency with which the BB and RC commodities are distributed to this target group. Three criteria will be used in this regard: (a) the importance of BB and RC commodities as consumer goods; (b) the importance of BB and RC commodities in the budgets of the poor and low-income (expenditure) people; and (c) the efficiency of the BB and RC commodities distribution mechanisms in reaching the target group (poor and the low-income households).

2.2) Role of distributing system in providing food security

According to Ray et.al, (2011), PDS features include targeting households with incomes below the official poverty line. The entire population is classified into Below Poverty Line (BPL) and Poverty Line (APL) categories. The two groups are treated differently in terms of quantities and prices. The PDS also offers dual central issue prices for BPL and APL households. Third pricing, introduced in 2001, is for Antyodaya Scheme participants (a scheme for the "poorest

of the poor" in which food grain is provided with an additional subsidy). The third important feature of the Targeted PDS is that it has altered center-state obligations in terms of entitlements and PDS allocations. The central government decides the size of the BPL population and their rights under the TPDS. And allocations for APL populations, as well as supplementary allocations for BPL and APL populations, are made somewhat arbitrarily based on prior consumption and state requests.

According to Kattumuri (2011), the Public Distribution System (PDS) is reported to have existed in India before independence. The basic household items are distributed through 499,000 'fair pricing stores' to a target population of 330 million people who are nutritionally vulnerable. PDS is managed collaboratively by the central and state governments, with the centre in charge of procurement, storage, transportation, and distribution. The states are in charge of distribution through fair pricing shops, as well as identifying households living below the poverty line (BPL), issuing cards, supervising and monitoring.

According to George et.al, (2019), India's Public Distribution System (PDS) plays a critical role in minimizing food insecurity by functioning as a safety net by supplying commodities at a subsidised rate. The Food Security Net Program, in collaboration with the Central and State Governments, attempts to supply basic household products like as wheat, rice, sugar, and kerosene. To facilitate distribution, the Food Corporation of India (FCI) functions as a central nodal agency in charge of procuring food grains from farmers at prices that are usually higher than market prices. Individual state governments then purchase food grains from the FCI at a subsidised price known as the 'central issue price,' and these items are distributed to consumers through fair price or ration stores.

According to Balani (2013), PDS was introduced as a wartime rationing system around World War II. The National Food Security Act (NFSA) 2013 was passed by Parliament in September 2013. The NFSA aims to make the right to food a legal entitlement by distributing subsidised food grains to roughly two-thirds of the population. The Act depends on the current Targeted Public Distribution System (TPDS) system to distribute these entitlements. This note explains how the existing TPDS system works and what role the centre and states play. It also investigates obstacles in the effective implementation of TPDS and ways to modify the existing machinery, which is the goal of the Public Distribution System.

According to Chander et.al, (2017), the PDS underwent two major changes in the 1990s: the Revised PDS (RPDS) and the Targeted PDS (TPDS). A two-tier card system was

implemented to distinguish cardholders above and below the poverty line. Each family was assigned to one of the three groups listed below and was given a PDS card indicating their eligibility for food grain subsidies. These cards were classified as 'Above Poverty Line' (APL), 'Below Poverty Line' (BPL), and 'Antodaya Anna Yojana' (AAY).

According to Nagabhushanamma et.al, (2020), the benefits of the public distribution system are It provides food security to underprivileged people of India, lowering India's poverty rate, ensuring that no one dies as a result of hunger, helps to keep food costs stable and ensuring that food is available at reasonable and subsidised prices. Drawbacks of the public distribution system are the food grains supplied by ration stores are insufficient to satisfy the poor's consumption demands, food grain quality is really poor and there is corruption involved in the process of selecting poor families therefore the benefit of PDS does not reach the most vulnerable members of society and managers of ration stores frequently do not provide subsidised food grains to the poor and instead sell them at higher costs on the black market.

According to Sahoo et.al, (2019), PDS contains numerous defects that lead to ineffectiveness and inefficiency in accomplishing its goals. Identification of beneficiaries, excessive diversion of food grains, stocks of food grains much beyond the necessary buffer norm, poor infrastructure for storage, subsidies reaching true recipients are all major issues.

According to Devi (2017), governments at both the central and state levels have implemented lots of new reforms to strengthen the system, ranging from digitization to computerization of the entire system to higher commissions for FPS dealers. Over the years, steps have been taken and improvements have been noted in the system; however, devoted and organised efforts are necessary on a regular basis to upgrade the functioning of PDS.

According to the Department of Civil Supplies & Consumer Affairs of Government of Kerala (2022), The Department of Civil Supplies is significant in public distribution, market discipline, consumer awareness promotion, and consumer interest protection. The Department of Civil Supplies functions under the Department of Food, Civil Supplies and Consumer Affairs of the Government of Kerala. The Public Distribution System was established in the state on July 1, 1965. Considering the relevance and necessity of promoting consumer awareness and protecting human rights, the government has established a special wing of the Secretariat's Food, Civil Supplies, and Consumer Affairs Department to address the subject of Consumer Affairs. A Consumer Affairs Cell has also been established in the Commissionerate of Civil Supplies. The functions performed by the Department are Rationing and marketing of

basic commodities under control, Consumer Affairs, Consumer Dispute Redressal Commission (CDRC) and Fora (CDRFs) and the distribution of kerosene

According to Amritha et.al, (2017), TPDS is advantageous to Kerala's BPL households. For their daily needs, they depend largely on the commodities supplied by FPS. In term of BPL Card holders, the TPDS system works well in Kerala. It distributes the primary food grain (rice) at a subsidised rate to the society's most disadvantaged groups.

According to Nair (2011), Kerala's PDS is one of the most efficient and successful measures of food security, serving as a model for other states. The model's distinguishing qualities were its universal coverage, very high levels of utilisation, physical access provided by a massive network of retail stores, rural bias, and progressive system utilisation. PDS continues to be an important source of food security for these households. Given the poor's continuous reliance on the PDS, the significant exclusion errors entail massive societal costs.

According to Thomas (2019), PDS is the government of India's primary social welfare and anti-poverty initiative. PDS provides people with essential commodities such as rice, wheat, sugar, and non-food items at below-market costs. The researchers adapted the Kottayam District of Kerala for their study and investigated how the PDS operates and benefits the needy. Because the PDS recipients are people with low education and little income, the PDS helps them save their money and therefore raises their standard of living by reducing poverty.

2.3) Food security issues during pandemic

According to Joint statement by ILO, FAO, IFAD and WHO (2020), the pandemic has impacted the entire food chain, exposing its vulnerability. Border closures, trade restrictions, and confinement measures have disrupting domestic and international food supply chains and reducing access to healthy, safe, and diverse diets. The pandemic has wrecked jobs and put millions of people's lives in jeopardy. As breadwinners lose their jobs, become ill, or die, millions of women and men's food security and nutrition are jeopardised, with those in low-income nations, notably the most marginalised populations, such as small-scale farmers and indigenous peoples, bearing the brunt of the burden.

According to Udmale et.al, (2020), COVID-19 is causing serious disruptions in food supply chains from the local to the global level in ways that our globalised world has never seen before. The developed world as a whole has been found to be resilient to food supply disruptions.

Although major cereal producers have increased domestic grain supply, COVID-19-induced trade restrictions may have a significant impact on their agricultural income and GDP due to reduced international commerce and prices. Import-dependent countries (mostly developing countries) will see a reduction in domestic cereal supply as a result of trade restrictions.

According to Morin et.al, (2020), the global COVID-19 epidemic, as well as the social distancing attempts implemented to prevent its spread, have disrupted economies and food systems on a global and local scale, with far-reaching implications for food security. Food insecurity is likely to have major public health repercussions. Furthermore, COVID-19 emphasises that the concept of "One Health" encompasses more than just the appearance of an infectious disease, but also food-related health effects. Finally, in order to prepare for future outbreaks or dangers to food systems, the SDGs and "Planetary Health" must be considered.

According to Jaacks et.al, (2021), the purpose of this study was to assess the impact of the COVID-19 lockdown on agricultural production, livelihoods, food security, and dietary diversity in India. The majority reported receiving additional food rations from the government. All farmers reported eating grains in the most recent week, while 92 percent ate legumes, 96 percent ate vegetables, 86 percent ate dairy, and 83 percent ate potatoes. Landless farmers were less likely to consume potatoes, legumes, and vegetables. Fruit and dairy consumption were much lower among landless and small/marginal farmers. Dietary diversity was 2.20 among landless farmers.

According to Éliás et.al, (2021), in a systematic review, researchers collected and synthesised empirical data on food security during the first year of the epidemic. The vast majority (78%) of the 51 included publications reported increased household food insecurity (access, use) and/or disruption to food production (availability) as a result of households having persistently low income and insufficient savings. These households could not afford the same quality and/or quantity of food, resulting in an immediate demand shortfall on the producer side.

According to Litton et.al, (2021), food insecurity is prevalent among respondents, with 36.2 percent experiencing food insecurity in the previous month. Early in the COVID-19 pandemic, the percentage of food insecurity in the United States is estimated to have increased to 22.8 percent, owing mostly to job disruptions induced by state lockdowns. These findings emphasise the importance of adequate food assistance during the COVID-19 pandemic and in future pandemics, as well as public health messaging promoting good eating.

According to Summerton (2020), the COVID-19 outbreak presents an unprecedented issue for India; due to the country's large population and the magnitude of its informal economy, lockdown restrictions have been particularly disruptive. Central and state governments have attempted to adjust to the challenge by implementing new social protection programmes and modifying existing ones; nevertheless, in order to keep markets operating and poverty at bay, this response must be only the beginning.

According to Sinha (2021), even during pre-covid days, there is a serious possibility of the country encountering a major hunger and malnutrition crisis due to high malnutrition levels and insufficient dietary diversity among a big number of Indians. Government Federal aid in the form of food and monetary transfers can play a critical role in avoiding such a crisis, which is possible given the expanding food stocks in the FCI godowns. Furthermore, an expansionary fiscal policy in which the government spends more on welfare schemes such as PDS and MGNREGA can help to revive the economy by placing money in the hands of individuals who have a high propensity to consume. The PMGKY provided food and cash to transfer mechanisms, all of which were based on transfers to existing beneficiaries under various schemes. While there have been some challenges in getting cash transfers due to transportation restrictions and obstacles in accessing banks, it is reported that food grains distribution through the PDS provided some respite.

According to Alvi et.al, (2020), one of the most significant outcomes of the lockdown and subsequent school closures has been the temporary suspension of mid-day meals and supplementary nutrition programmes, which has wide-ranging and significant ramifications for children's nutrition and food security across the country. Similarly, the disruption of supplementary nutrition programmes provided under the Integrated Child Development Services (ICDS) programme is expected to affect more than 100 million pregnant and breastfeeding mothers, as well as children under the age of six, who rely on Anganwadi (Rural Child Care Centers). To satisfy basic nutritional needs through cooked food and home rations. Access to school feeding and supplementary nutrition programmes is likely to threaten the already tenuous food security of both the urban and rural poor, with long-term health and economic consequences.

According to Jayalakshmi et.al, (2021), during such challenging times of lockdown, the Kerala government took action to keep people from becoming hungry. Inclusive interventions such as providing free dry rations, establishing community kitchens, and participating in direct

cash transfers were some of the highlights of the efforts implemented by the Kerala government to alleviate the state's food crisis. By prioritising the most disadvantaged segments of society in receiving the benefits of these initiatives, the government ensured that no individual or household was left behind. The government was able to reach out to all sections of the population because to the strongly decentralised structure of governance at the ground level.

2.4) Challenges faced by BPL households during covid pandemic

According to Workie et.al, (2020), vulnerable groups, such as landless labourers, wage earners, and small-scale farmers, have been hindered from going about their daily lives and have suffered the most. The global and national food systems have been stunned by the COVID-19 pandemic's effects. The pandemic has a direct impact on food supply and demand channels, which suggest a decline in food stock and an increase in food costs. When the epidemic worsens, purchasing power and the ability to produce and distribute food will be impacted indirectly. However, the latter will vary in terms of severity and will disproportionately affect the vulnerable (usually women, elderly, and children) and the impoverished (Food and Agriculture Organization, 2020).

According to Gopalana et.al, (2020), the nationwide lockdown has led in financial losses and has impacted all parts of society; the domino effect on health, healthcare, and nutrition may face significant setbacks to previously achieved achievements of National health programmes. The economic impact of this pandemic is projected to be more severe in India, as follows: (A) an increase in poverty, putting more people below the poverty line; (b) rising socioeconomic inequalities, thus harming health and nutrition indicators; and (c) a compromise on health measures (medical advice on use of masks, social distance, quest cough, fever, etc.). All these would have major long-term associations with health indicators. During the pandemic, the economic crisis had a significant impact on persons from lower socioeconomic groups (SES).

According to Suresh et.al, (2022), the lockdown had a direct influence on the employment status and income of rural households, but the impact varied depending on the type of job. The survey also found a shift in food consumption patterns, with increased consumption of subsidised staple items. It was also revealed that the government-announced help reached the rural populace with some delay.

According to Kujur (2020), an examination of the relationship between state government labour measures in India and the severity of the pandemic reveals that the impressive performances of states such as Uttar Pradesh, Delhi, Kerala, Odisha, and Bihar serve as a beacon for other states to proactively initiate measures that benefit the despondent labour.

According Singh et.al, (2020), the news of the lockdown resulted in a significant loss in income and employment. Casual labour households have suffered the greatest loss of income and employment. Income and job losses are also more prevalent in Scheduled Caste (SC) and Other Backward Caste (OBC) households. In the absence of an income, households were forced to rely on their savings or borrow money to meet their basic requirements. With rapidly diminishing savings and delayed income recovery, households may require substantial government support to avoid destitution.

According to Niyati (2021), disruptions in the food supply system, loss of livelihoods and revenue, and variations in food prices aggravated the issue. 73% of rural households reported lower food consumption, and many rural households reported increasing indebtedness as a result of job loss during the lockdown (CSE 2020). According to a CSE resurvey, 59% of rural households consumed less than they did before to the lockdown. (Nath, Nelson Mandela, and Gawali 2021). This essay investigates the impact of the Covid-19 epidemic on rural households' food security and indebtedness. The public distribution system (PDS) played an important in supplying food to families. In the study 46 of the 73 low-income households possessed BPL cards.

CHAPTER – III

METHODOLOGY

As the COVID-19 pandemic spreads, food security has become a major worry in last two years. The Food and Agriculture Organization of the United Nations (FAO) defines food security as "when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food, which meets their dietary needs and food preferences for an active and healthy life". COVID-19 impacts food access by causing income and job losses that reduce one's ability to purchase food. Food insecurity will lead to malnutrition and many other health negative outcome. Through a network of ration stores, PDS aims to supply low-income people with subsidised food and fuel. PDS aims to give subsidised food and fuel to the underprivileged through a network of ration stores. Identifying the impoverished, acquiring grains, and delivering food grains to beneficiaries are shared obligations between the centre and the states. As a result, during the Covid-19 Pandemic, the present study was carried out to assess household food security among beneficiaries of the public distribution system.

The following subheadings detail the methodologies used in this investigation.

3.1 Selection of the area
3.2 Selection of the Sampling method
3.3 Selection of the subjects
3.4 Description of tools used in the study
3.5 Conducting the study
3.6 Analysis and Interpretation

3.1 Selection of the area

Edathala Panchayath in Ernakulam district was selected as the locale for the present study. Edathala is a grama panchayat near Aluva town and a village in Aluva taluk of Ernakulam district. Edathala Grama Panchayat is one of the largest Panchayats in Ernakulam District, having high population density. As of 2011 India census, Edathala had a total population of 77,811. Males and females constitute 38,454 (49.41%) and 39,357 (50.58%) of the population respectively. Seventy percent of the population belongs to the

middle class. According to the Edathala Religion Data 2011 32.85% are Hindu 46.71% are Muslim and 20.22% are Christian.

3.2 Selection of the sampling method

Stratified Sampling was selected as the method for this study. There are 17 wards in Edathala Panchayath which were considered as the strata and from this 16th rural region ward was selected. From this ward, 2 ration shops were chosen to collect the data for the study.

3.3 Selection of the subjects

From this area 2 ration shops were selected which had a total of 400 beneficiaries in each ration shop. From these two ration shops, 100 subjects belonging to Below Poverty Line (BPL) category were randomly selected. The Public Distribution System (PDS) emerged as a system of scarcity management through the distribution of foodgrains at low costs. PDS has been a significant aspect of the government's programme for managing the country's food economy over the years. There are two types of ration cards. Above-the-Poverty-Line (APL) ration cards were distributed to households that earned more than the poverty line (as estimated by the Planning Commission). Below Poverty Line (BPL) ration cards were issued to low-income families.

3.4 Selection of the tools

The tool selected were interview schedules. In this study 4 different tools were used.

Personal and demographic information was collected by the interview schedule constructed by the investigator. investigator. This can help researchers learn more about their subjects. The interview schedule included 6 subsections which included personal and demographic information of the households, Dietary assessment, food availability during covid-19 Pandemic period, details regarding Public distributing system in the selected area and the type and availability of food kits distributed by the Government during pandemic period.

This Kuppuswamy’s socio-economic scale (2020) is used for determining an individual's or a family's socioeconomic status This is a modified scale that takes into account the educational and occupational position of the family's head, as well as the family's entire aggregate income from all sources.

The Kuppuswamy SES consists of three parameters, each of which is divided into subgroups and assigned a score to each subgroup. Kuppuswamy SES has a total score range of 3-29 and divides families into five groups: high class, upper middle class, lower middle class, upper lower, and lower socioeconomic class. This is an important factor determining an individual's or a family's health condition. In SES, the monthly of the family is a parameter. It is divided into 7 categories ranging from Rs.10,001 to Rs.199,862. Occupation is also one of the components of SES. In SES, the parameter occupation is categorized into 7 sections ranging from unemployment to professions and each of which has a specific score. In SES, the education is categorized into 7 sections and which include different education level from illiterate to graduation with specific score.

Guide to Measuring Household Food Security (Revised 2000) was used to measure the level of food insecurity among the selected families. It can measure a household's level of food insecurity or hunger must be determined by obtaining information on a variety of specific conditions, experiences, and behaviours that serve as indicators of the varying degrees of severity of the condition. This is a continuous, linear scale that provides a single numerical value to the intensity of food insecurity/hunger experienced by a household. These scale values encompass a wide range, expressing the whole spectrum of food insecurity/hunger intensity. The scale's unit of measurement is a matter of convention. The unit of measurement has been chosen such that the entire range of severity may be stated numerically from 0 to 10. Simplifying the food security scale into a limited set of categories, each indicating a relevant range of severity on the underlying scale, and discussing the proportion of the population in each of these categories is often useful for policy and research purposes. The four categories are: -

- Food secure - There is no or very little indication of food insecurity in households.
- Food insecure without hunger - Concerns about the adequacy of the home food supply, as well as adaptations to household food management, such as lower food quality and increased odd coping mechanisms, are signs of food insecurity.
- Food insecure with hunger (moderate) - Adults in the home have had their food consumption lowered to the point that they have felt hungry on many occasions.
- Food insecure with hunger (severe) - At this level, all homes with children have lowered the food intake of their children to the point that the youngsters have gone hungry. For some other families with children, this has already happened at a lower level of

intensity. Adults in families with and without children have consistently had greater food intake decreases.

Fourth part of the tool included questions related to utilization and efficiency of the Public Distribution System (PDS). Public Distribution System (PDS) developed as a way to deal with scarcity by distributing food at low prices (NFSP). States were expected to develop and implement reliable systems for identifying qualified recipients for food grain delivery, as well as grain distribution in a transparent and accountable way at the level of the Fair Price Shop, as part of the PDS (FPS). Respondents were asked about the efficacy of the programme in their area.

All the 4 tools were combined to a single schedule and was used to collect the required information.

3.5 Conduct the study

This was a cross sectional study by collecting details from the selected sample from both ration shops. The investigator visited the ration shop, met the respondents and explained the purpose of the study. The data was collected by interviewing each selected individual visiting the ration shops and some details were also collected from the persons in charge both ration shop. A total hundred subjects belonging to BPL families were personally interviewed.

3.6 Collection and Interpretation of data

The gathered data from the selected samples were consolidated and is presented as appropriate tables and figures.

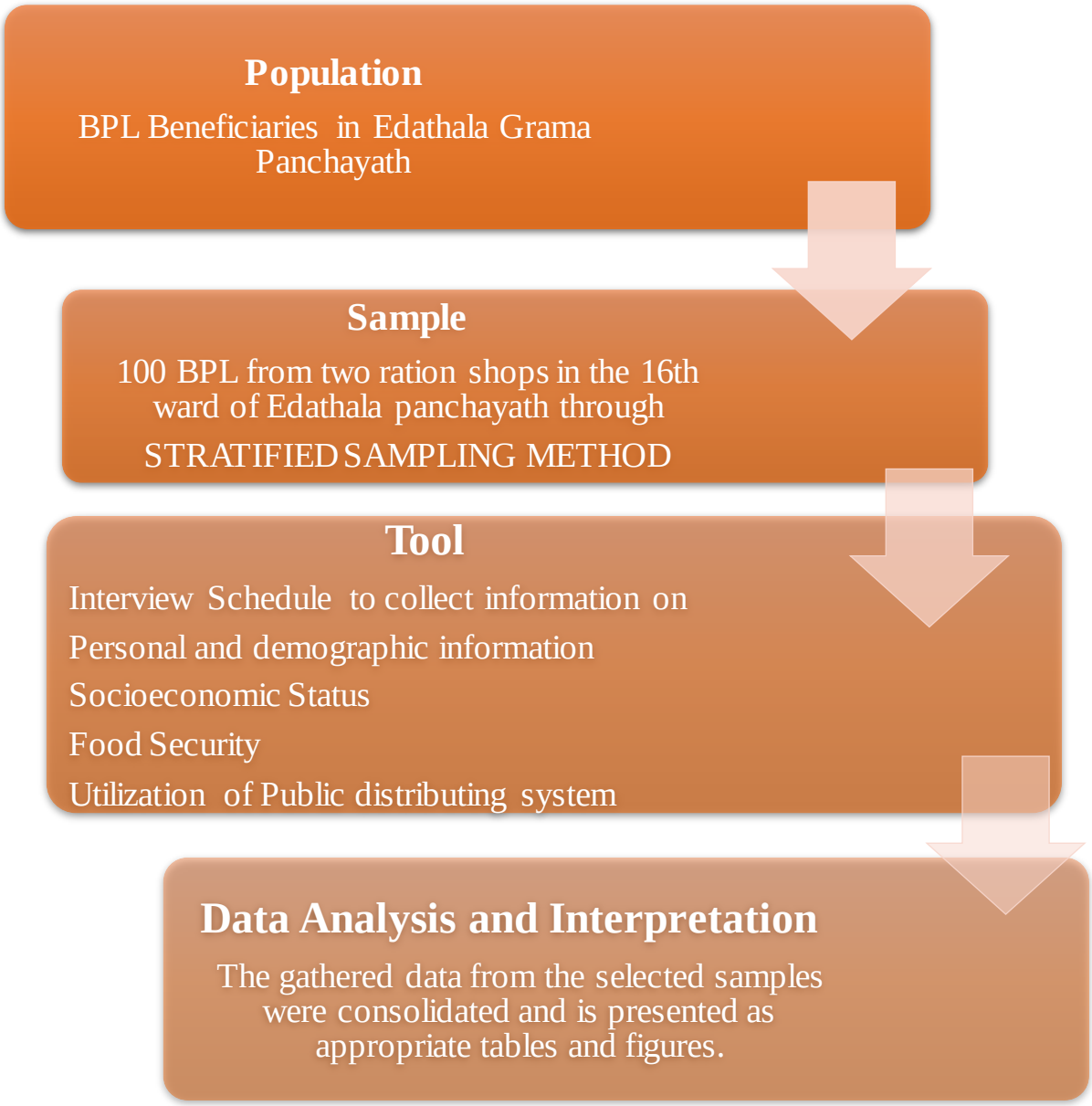

Figure 1: Flow Chart of the Study

CHAPTER - IV

RESULTS AND DISCUSSION

In response to the coronavirus disease 2019 (COVID-19) pandemic, a lockdown was imposed, and this has severely harmed the food security and nutrition of many households. When food security is threatened, people have to rely on the Public Distribution System (PDS) and government vigilance and action. Food security has four main dimensions such as physical availability of food, Economic and physical access to food, Food utilization and stability of the other three dimensions over time. Food security is influenced by many factors like Socioeconomic status, employment, education, size of the household etc. The result of the study entitled "Household food security among beneficiaries of the public distributing system during the COVID-19 Pandemic period" is discussed under the following headings.

4.1 Background details of the Subjects
4.2 Sociodemographic analysis of BPL holders
4.3 Dietary assessment of the selected family
4.4 Status of household regarding food security
4.5 Food accessibility during Covid affected period
4.6 Utilization of Public Distributing System

4.1 Background details of the subject

The background details of the subject provide context for the obtained data, helps to describe the selected subjects and assess their findings. It also helps to learn more about the sample. That is Demographic data enables to have a deeper understanding of background characteristics.

4.1.1 No. of the family members

The size of the family is a major factor of food security in a family. Family structure, the number of persons in the household, all will impact food consumption, allocation, and nutritional demands, as well as household food poverty. The size of the families chosen for the study is shown in table 1 below.

Table 1: No. of Family members in each family

N =100

No. of Family member	Number	Percentage (%)
2 – 4	60	60.0
5-7	39	39.0
≥ 10	1	1.0

Table 1 shows that 60.0 % of households have 2-4 individuals. And 39.0 % of households have 5-7 people. One family had more than 10 members.

According to Placzek (2021), when it comes to food choices, the composition of a family has an impact on personal preferences and specific family practises.

4.1.2 Classification of family members based on their age

The utilization of food items in a house depends on the age group. Because each age group have specific requirements. The classification of the family members based on their age are listed in table 2.

Table 2: Family members and their age

N =426

Age	Gender	Number	Percentage (%)
Infants [< 1]	Male	3	0.70
	Female	2	0.5
Pre School [1-9]	Male	19	4.5
	Female	13	3.0
Adolescents [10-17]	Male	27	6.3
	Female	22	5.2
Family Member > 18	Male	109	25.5
	Female	138	32.4
Family Member > 60	Male	35	8.2
	Female	58	13.6

Table 2 indicates the ages of the family members. Some families have 0.70% and 0.5% of male and female children under the age of one year. There were 4.5% and 3.0% of male and female children under the age of 1-9 were present. About 6.3% and 5.2% of male and female adolescences between the ages of 10 and 17 were also present. About 8.2% and 13.6% of male and female of more than 60 years were present.

4.2 : Socio-demographic analysis of BPL holders

The socioeconomic position of a people has a significant impact on their health, food security and nutritional state. It is a measure of an individual's or family's social standing, and it has a significant impact on an individual's or family's health, educational attainment, diet, lifestyle, and other factors. Income has the potential to impact people's health by allowing those with a high income to live healthy lifestyles while others at the bottom of the income spectrum have less of these enabling resources. So, it is necessary to assess the Sociodemographic details of the BPL holders.

4.2.1 Monthly Income of the family

Income is commonly considered as a direct measure of material resources. Individuals living on or around the poverty line may find it challenging to obtain good and nutritious foods at reasonable prices. In SES, the monthly income of the family is a parameter. It is divided into 7 categories ranging from Rs.10,001 to Rs.199,862. The family's monthly income is shown in Table 3. The table includes both the income of the head of the family and the income of the entire family. The income of the study's chosen family is listed below.

Table 3: Monthly Income of the family

N = 100

PARAMETERS	Number	Percentage (%)
Income of the head of the family (Rs.)		
≤ 6,174	49	49.0
6,175 - 18,496	51	51.0
Income of the Family		
≤ 10,001	15	15.0
10,002–29,972	85	85.0

Table 3 shows that nearly half of the families (49.0%) reported that the head of the household earns less than Rs. 6,174, while the other half (51.0%) earn between Rs. 6,175 and Rs.18,496. More than half of the families (85.0%) reported having a monthly income ranging from Rs.10,000 to Rs.29,972.

4.2.2 Occupation and education of the head of the selected family

Occupation and education of the components of SES. The occupational status reflects the level of education needed to achieve the work, as well as the wage levels that vary between jobs and within occupational ranks. The Education is important in obtaining occupational skillsets as well as distinctive attributes that distinguish persons with higher SES from those with lower SES. The table 4 shows the level of education and the occupation of the head is given below.

Table 4: Occupation and education of the head of the selected family

N = 100

PARAMETERS	Number	Percentage (%)
Occupation of the Head		
Unemployed	32	32.0
Elementary Occupation	29	29.0
Plant & Machine Operators and Assemblers	25	25.0
Craft & Related Trade Workers	13	13.0
Skilled Agricultural & Fishery Workers	1	1.0
Education of the Head		
Illiterate	7	7.0
Primary school certificate	7	7.0
Middle school certificate	28	28.0
High school certificate	44	44.0
Intermediate or diploma	13	13.0
Graduate	1	1.0

Table 4 shows that 32.0% of the head of the family were unemployed. Then, 29.0% and 25.0% of them work in the elementary occupation and Plant & Machine Operators and Assemblers, respectively. In terms of education, 44.0 % hold a high school diploma. Only 7% of the people are illiterate.

According to Vijayan *et.al,* (2022), during covid-19 pandemic period many losses job, deduction in wage, found difficulty in finding jobs and difficulty in repaying loans and these lead to economic crisis in people.

4.2.3 The socioeconomic status of the selected family

Kuppuswamy's socio-economic scale is used to measure the socio-economic status of the selected families. The Kuppuswamy SES consists of three parameters, each of which is divided into subgroups and assigned a score to each subgroup. Table 5 depicts the socioeconomic level of the selected household and is shown below.

Table 5: The socioeconomic status of the selected families

N=100

Socioeconomic Class	Number	Percentage (%)
Lower Middle	3	3.0
Upper Lower	88	88.0
Lower	9	9.0

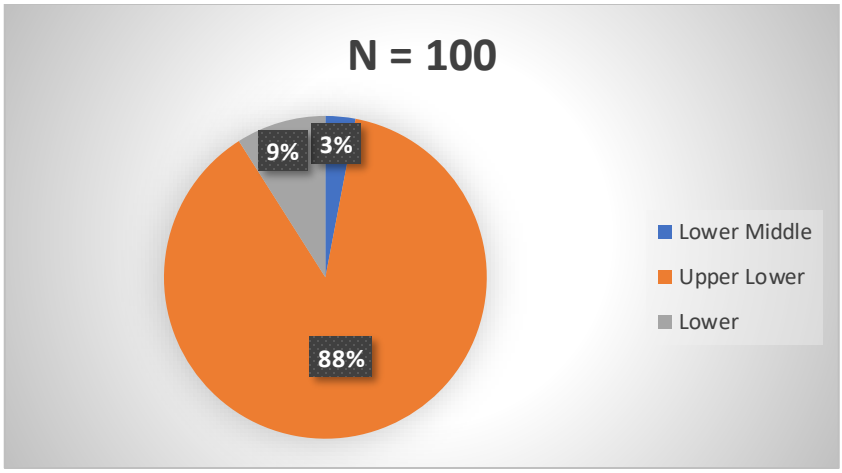

Figure 2: The socioeconomic status of the selected family

Table 5 shows that 88.0% of the participants are in the upper lower socioeconomic class. Only 9.0 % of the sample is in the lowest class, and 3.0% is in the lower middle class.

The government of India uses the term "below poverty line" to indicate economic disadvantage and to identify individuals and households in need of government help and relief. According to Placzek (2021), Low socioeconomic status (SES) groups frequently make less nutritious eating choices. Food choices are determined by a wide range of factors, including availability, cost, preferences, and habits (Vabø and Hansen, 2014), which in turn are related to socio-economic and demographic factors.

4.3 Dietary diversity of the selected families

Food insecurity has been linked to a poor diet, which has been linked to negative health outcomes. Because by eating a variety of foods, there is only less chance of being micro and macro nutrient deficient and other chronic diseases. In terms of dietary diversity, the middle-income group in Kerala's urban areas enjoys a greater variety of foods than the poor and high-income groups. The COVID-19 pandemic harmed food accessibility and availability, changed eating habits, and worsened food insecurity, especially in the most vulnerable areas. As a result, Dietary diversity of BPL holders must be analysed (Jafri *et.al*, (2021).

4.3.1 Consumption of cereals and cereal products

Cereals and cereal products are staple foods in the majority of human diets in both developed and developing nations, accounting for a significant amount of dietary energy and nutrients. Table 6 shows the cereal and cereal product consumption of the selected families and given below.

Table 6: Frequency of consumption of cereals and cereal products

N = 100

Type of cereals and cereal products	Frequency of Consumption							Total
	Daily (%)	At least 2-3 times a week (%)	Once a week (%)	Once in 2 weeks (%)	1-2 times a month (%)	Rarely (%)	Never (%)	
Rice	95 (95.0%)	4 (4.0%)	1 (1.0%)	0	0	0	0	100
Wheat	58 (58.0%)	37 (37.0%)	3 (3.0%)	0	1 (1.0%)	0	1 (1.0%)	100
Rice flakes	0	22 (22.7%)	51 (52.6%)	0	22 (22.7%)	1 (1.0%)	1 (1.0%)	100
Vermicilli	0	12 (12.0%)	74 (74.0%)	14 (14.0%)	0	0	0	100
Bread	1 (1.0%)	32 (32.0%)	23 (23.0%)	22 (22.0%)	16 (16.0%)	1 (1.0%)	5 (5.0%)	100
Broken wheat	0	5 (5.0%)	3 (3.0%)	35 (35.0%)	46 (46.0%)	4 (4.0%)	7 (7.0%)	100
Ragi	1 (1.0%)	5(5.0%)	0	2 (2.0%)	9 (9.0%)	16 (16.0%)	67 (67.0%)	100
Corn	0	0	0	0	0	4 (4.0%)	96 (96.0%)	100
Jowar	0	0	0	0	0	0	100 (100%)	100

Table 6 shows that 95.0 % of families consume rice on a daily basis, but only 58 % consume wheat every day. Rice flakes and vermicelli are eaten once a week by 52.6 % and 74.0% of families, respectively. Bread is consumed at least 2-3 times a week by 32.0% of families. Then 46.0% of them eat broken wheat once or twice a month. Other cereals are less popular among the families.

According to George (2021), the consumption of millets in the state has been discovered to be relatively low.

4.3.2 Consumption of pulses

Pulses are a healthy approach to satisfy dietary guidelines since which contain high in protein and fibre, as well as vitamins and minerals including iron, zinc, folate, and magnesium and which are linked to a lower risk of various chronic illnesses. Table 7 shows the pulse consumption of the selected families and given below.

Table: 7: Frequency of consumption of pulses

N = 100

Type of Pulses	Frequency of Consumption							Total
	Daily (%)	At least 2-3 times a week (%)	Once a week (%)	Once in 2 weeks (%)	1-2 times a month (%)	Rarely (%)	Never (%)	
Bengal gram	5 (5.1%)	63 (63.6%)	31 (31.3%)	0	0	0	0	100
Bengal gram Dal	1 (1.0%)	29 (29.0%)	15 (15.0%)	49 (49.0%)	4 (4.0%)	1 (1.0%)	1 (1.0%)	100
Green gram	5 (5.0%)	55 (55.0%)	40 (40.0%)	0	0	0	0	100
Cow pea	1 (1.0%)	30 (30.0%)	11 (11.0%)	52 (52.0%)	6 (6.0%)	0	0	100
Green peas	2 (2.0%)	47 (47.0%)	48 (48.0%)	3 (3.0%)	0	0	0	100
Dal	10 (10.0%)	56 (56.0%)	34 (34.0%)	0	0	0	0	100
Black gram	0	46 (46.0%)	52 (52.0%)	2 (2.0%)	0	0	0	100
Soya bean	0	6 (6.0%)	10 (10.0%)	34 (34.0%)	23 (23.0%)	10 (10%)	17 (17.0%)	100
Rajma	0	0	0	0	0	4 (4.0%)	96 (96.0%)	100

Table 7 shows that 63.6% and 55.0% of the selected families consume bengal gram and green gram at least 2-3 times a week. About 49.0% and 52.0% of families consume bengal gram dal and cowpea once in 2 weeks. Almost half of the families 48.0% and 52.0% consume green peas and black gram once a week. 56.0% of the families consume dal at least 2-3 times a week.

About 34% of them consume soybean once in 2 weeks. Majority of families (96.0%) never consume Rajma.

According to NFHS 5 (2019-2021), the data shows that 48.85 % of people in India consume pulses daily.

4.3.3 Consumption of fruits

Fruits and are included in dietary recommendations due to their high concentrations of dietary fibre, vitamins, minerals, particularly electrolytes, antioxidants and also phytochemicals. The Table 8 depicts the consumption of fruits by the selected families consume fruits, as shown below.

Table 8: Frequency of consumption of fruits

N = 100

Type of Fruits	Frequency of Consumption							Total
	Daily (%)	At least 2-3 times a week (%)	Once a week (%)	Once in 2 weeks (%)	1-2 times a month (%)	Rarely (%)	Never (%)	
Banana	53 (53.0%)	41 (41.0%)	6 (6.0%)	0	0	0	0	100
Guava	0	1 (1.0%)	0	6 (6.0%)	55 (55.0%)	36 (36.0%)	2 (2.0%)	100
Grapes	0	12 (12.0%)	31 (31.0%)	46 (46.0%)	7 (7.0%)	4 (4.0%)	0	100
Apple	0	6 (6.0%)	8 (8.0%)	29 (29.0%)	51 (51.0%)	6 (6.0%)	0	100
Orange	0	11 (11.0%)	28 (28.0%)	47 (47.0%)	11 (11.0%)	3 (3.0%)	0	100
Lemon	5 (5.0%)	47 (47.0%)	30 (30.0%)	17 (17.0%)	0	1 (1.0%)	0	100
Water melon	1 (1.0%)	18 (18.0%)	47 (47.0%)	23 (23.0%)	7 (7.0%)	2 (2.0%)	0	100
Mango	0	5 (5.0%)	27 (27.0%)	18 (18.0%)	37 (37.0%)	13 (13.0%)	0	100
Papaya	0	0	1 (1.0%)	36 (36.0%)	48 (48.0%)	14 (14.0%)	1 (1.0%)	100
Pine apple	0	1 (1.0%)	0	14 (14.0%)	61 (61.0%)	22 (22.0%)	2 (2.0%)	100

Table 8 shows that 53.0% of the families consume bananas on a daily basis. Lemon is consumed by 47.0% of the families at least twice a week. Guava, apple, and papaya are consumed 1-2 times a month by 55.0%, 51.0%, and 48.0% of the families, respectively. 47.0% of them eat orange once every two weeks. Mango and pineapple are consumed 1-2 times each month by around 37.0% and 61.0%, respectively. It also shows that 47.0% of people eat watermelon at least once a week.

According to NFHS 5 (2019-2021), the data shows that 12.35 % of people in India consume fruits daily.

According to World Health Organization and United Nations Food and Agriculture Organization reports, adults should eat at least five servings of fruits and vegetables each day. Despite a growing awareness of the health advantages of fruits and vegetables, individuals consume less than the recommended amount

4.3.4 Consumption of nuts and dry fruits

Nuts and dried fruits are high in nutrients that enhance human health. Because of their nutritional profiles, nuts and dried fruits are healthy foods. They provide dietary fibre, potassium (K), and a number of health-protective bioactive substances. The frequency of consumption of nuts and dry fruits are shown in the Table 9.

Table: 9: Frequency of consumption of nuts and dry fruits

Type of Nuts and dry fruits	Frequency of Consumption [N = 100 (%)]							Total
	Daily	At least 2-3 times a week	Once a week	Once in 2 weeks	1-2 times a month	Rarely	Never	
Cashew nut	1 (1.0%)	1 (1.0%)	5 (5.0%)	33 (33.0%)	50 (50.0%)	10 (10.0%)	0	100
Coconut	88 (88.0%)	10 (10.0%)	1 (1.0%)	1 (1.0%)	0	0	0	100
Peanut	0	17 (17.0%)	36 (36.0%)	35 (35.0%)	10 (10.0%)	3 (3.0%)	0	100
Raisins	0	0	1 (1.0%)	35 (35.0%)	57 (57.0%)	7 (7.0%)	0	100
Dates	0	0	1 (1.0%)	37 (37.0%)	54 (54.0%)	8 (8.0%)	0	100

The Table 9 shows that, 88.0% of families consume coconut daily. Thirty six percent of the families consume peanut once a week. Other nuts and dry fruits are consumed 1-2 times a month by most of the families.

4.3.5 Consumption of vegetables

Diets rich with vegetable have been associated to lower rates of various chronic diseases, including cancer and cardiovascular disease. Vegetables also provide vitamins and minerals to the diet, as well as phytochemicals that act as antioxidants, phytoestrogens, and anti-inflammatory agents, among other things. Table 10 indicates the frequency of consumption of vegetables and it is given below.

Table: 10: Frequency of consumption of vegetables

Type of vegetables	Frequency of Consumption [N = 100 (%)]							Total
	Daily	At least 2-3 times a week	Once a week	Once in 2 weeks	1-2 times a month	Rarely	Never	
Root and tubers	85 (85.0%)	12 (12.0%)	2 (2.0%)	1 (1.0%)	0	0	0	100
Brassica	4 (4.0%)	23 (23.0%)	30 (30.0%)	35 (35.0%)	8 (8.0%)	0	0	100
Onion	96 (96.0%)	3 (3.0%)	0	1 (1.0%)	0	0	0	100
Legumes	23 (23.0%)	37 (37.0%)	31 (31.0%)	9 (9.0%)	0	0	0	100
Tomato	62 (62.0%)	35 (35.0%)	3 (3.0%)	0	0	0	0	100
Leafy vegetables	9 (9.0%)	14 (14.0%)	8 (8.0%)	40 (40.0%)	26 (26.0%)	2 (2.0%)	1 (1.0%)	100
Melon	2 (2.0%)	58 (58.0%)	22 (22.0%)	10 (10.0%)	7 (7.0%)	1 (1.0%)	0	100

Table 10 depicts consumption of vegetables by the families. Majority of the families consume onion (96.0%), root and tubers (85.0%), and tomato (62.0%) every day. Only 35.0% and 40.0% of the families consume Brassica and Leafy vegetables once in a week, respectively. In every two weeks, Legumes and melon are consumed by 58.0% and 37.0% of families, respectively in at least 2-3 times every week.

According to NFHS 5 (2019-2021), the data shows that 39.85% of people in India consume green leafy vegetables weekly.

4.3.6 Consumption of meat and fish

Poultry, fish, and meat are one of the five basic food categories in a balanced diet and they supply vital nutrients such as protein, long-chain omega 3 fatty acids, vitamin B12, iron, and zinc. The frequency of the consumption of meat and fish is depicted in table 11, which is shown below.

Table 11: Frequency of consumption of meat and fish

Type of Meat and fish	Frequency of Consumption [N = 100 (%)]							Total
	Daily	At least 2-3 times a week	Once a week	Once in 2 weeks	1-2 times a month	Rarely	Never	
Sardine	1 (1.0%)	83 (83.0%)	11 (11.0%)	2 (2.0%)	0	1 (1.0%)	2 (2.0%)	100
Anchovy	0	2 (2.0%)	19 (19.0%)	57 (57.0%)	18 (18.0%)	2 (2.0%)	2 (2.0%)	100
Mackerel	2 (2.0%)	82 (82.0%)	9 (9.0%)	1 (1.0%)	2 (2.0%)	2 (2.0%)	2 (2.0%)	100
Other fish	0	1 (1.0%)	7 (7.0%)	29 (29%)	63 (63.0%)	0	0	100
Beef	0	3 (3.0%)	19 (19.0%)	23 (23.0%)	17 (17.0%)	28 (28.0%)	10 (10.0%)	100
Poultry	0	10 (10.0%)	54 (54.0%)	18 (18.0%)	12 (12.0%)	3 (3.0%)	3 (3.0%)	100
Egg	2 (2.0%)	68 (68.0%)	12 (12.0%)	9 (9.0%)	4 (4.0%)	2 (2.0%)	3 (3.0%)	100

Most of the families prefer sardine (83.0%) and mackerel (82.0%) at least 2-3 times a week, respectively. But only 2% of the families prefer anchovy (2.0%) at least 2-3 times a week. Only 19.0% choose beef once a week, while 54.0% prefer poultry once a week. Majority of the families (68.0%) consume eggs at least 2-3 times every week.

According to NFHS 5 (2019-2021), the data shows that, 34.8% and 39.5% of people in India consume fish and Chicken, meat weekly. Only 45.3% of Indian population consume egg weekly.

4.3.7 Consumption of milk and milk products

Dairy products provide a combination of important nutrients that are difficult to acquire in low-dairy or dairy-free diets, and a dairy-free diet does not allow many people to meet their daily calcium requirements. Table 12 shows the consumption of milk and milk products by the selected families and given below.

Table 12: Frequency of consumption of milk and milk products

Type of Milk and milk products	Frequency of Consumption [N = 100 (%)]							Total
	Daily	At least 2-3 times a week	Once a week	Once in 2 weeks	1-2 times a month	Rarely	Never	
Milk	78 (78.0%)	14 (14.0%)	4 (4.0%)	2 (2.0%)	1 (1.0%)	1 (1.0%)	0	100
Curd	4 (4.0%)	38 (38.0%)	30 (30.0%)	27 (27.0%)	0	1 (1.0%)	0	100

The majority of families (78.0%) consume milk every day, whereas 38.0% consume curd at least 2-3 times each week.

According to NFHS 5 (2019-2021), the data shows that, 48.8% of people in India consume milk or curd daily.

4.3.8 Consumption of spices

Spices are mostly used and consumed in Indian cuisine because of their external flavour. Spices, are largely used for taste for seasoning, include bioactive components that may have antioxidant, antimutagenic, anti-inflammatory, and antimicrobial/antibacterial activities. Table 13 indicates the consumption of spice by the selected families and is given below.

Table: 13: Frequency of consumption of spices

Type of spices	Frequency of Consumption [N = 100 (%)]							Total
	Daily	At least 2-3 times a week	Once a week	Once in 2 weeks	1-2 times a month	Rarely	Never	
Black pepper	65 (65.0%)	27 (27.0%)	0	5 (5.0%)	0	3 (3.0%)	0	100
Chilly	98 (98.0%)	2 (2.0%)	0	0	0	0	0	100
Cinnamon	1 (1.0%)	0	4 (4.0%)	22 (22.0%)	30 (30.0%)	35 (35.0%)	8 (8.0%)	100
Cardamom	0	0	5 (5.0%)	24 (24.0%)	27 (27.0%)	36 (36.0%)	8 (8.0%)	100
Clove	0	1 (1.0%)	4 (4.0%)	22 (22.0%)	30 (30.0%)	35 (35.0%)	8 (8.0%)	100
Turmeric	99 (99%)	1 (1.0%)	0	0	0	0	0	100
Coriander	100 (100%)	0	0	0	0	0	0	100

Table 13 show that, with the exception of cinnamon, cardamom, and clove, most of families use various spices on a regular basis, including black pepper (65.0%), chilli (98.0%), turmeric (99%), and coriander (100%).

4.4: Status of household regarding food security

Food security refers to the availability of food as well as people's ability to obtain it. Availability of food and Access to food are the two dimensions of food security (FAO,2006). Guide to Measuring Household Food Security (Revised 2000) was are used to measure the level of food insecurity. It can measure a household's level of food insecurity or hunger must be determined by obtaining information on a variety of specific conditions, experiences, and behaviours that serve as indicators of the varying degrees of severity of the condition. During a major pandemic, the vulnerable populations was in extreme danger.

4.4.1 Food Security Status Level

This is a continuous, linear scale that assigns a single numerical number to the severity of a household's food insecurity or hunger. Simplifying the food security scale into a limited set of categories, each indicating a relevant range of severity on the underlying scale, and discussing the proportion of the population in each of these categories is often useful for policy and research purposes. The food security status level of the selected families is shown in Table 14 and is given below.

Table 14: Food Security Status Level

N=100

Food Security Status Level	Number	Percentage (%)
Food Secure	40	40.0
Food Insecure without Hunger	36	36.0
Food Insecure with Hunger, Moderate	20	20.0
Food Insecure with Hunger, Severe	4	4.0

Table 14 shows the food security status level of the selected household. Forty Percent of the household were food secure. But 36.0% and 20.0% of the household were Food Insecure without Hunger and Food Insecure with Hunger, Moderate respectively. It was found that 4.0% of the household experienced Food Insecure with Hunger, Severe.

Food security scale include some statement to understand the status of the household food security. This parameter is not part of the scale but it is included for optional use. It's used as a preliminary screener for families, or as part of the core module's first-stage screener, and/or for its extra information content. Of which 63.0% of families reported that they had enough to eat

but not always the kinds of food they want while 2.0% of the subject reported that sometimes they don't get enough to eat. To justify the statement "sometimes or often not get enough to eat". 2.0% of the families reported the insufficient food items was due to the lack of money. And to justify the statement "If enough food, but not the kinds we want". Of which 83.3% of the families reported that they don't have enough money for food. 11.1% of the families reported that many foods were not available to them. 11.1% reported that it was hard for them to get to the store.

According to Jayalakshmi *et.al,* (2021), the Government of Kerala took action to keep people from being hungry during such critical period of lockdown. Some of the highlights of the steps adopted by the Government of Kerala to solve the state's food crisis were inclusive actions such as providing free dry rations, establishing community kitchens, and engaging in direct cash transfers. These actions demonstrate the government's commitment to resolving the issue, which was made feasible by the participation of effective decentralised governance through local self-government institutions and community organisations.

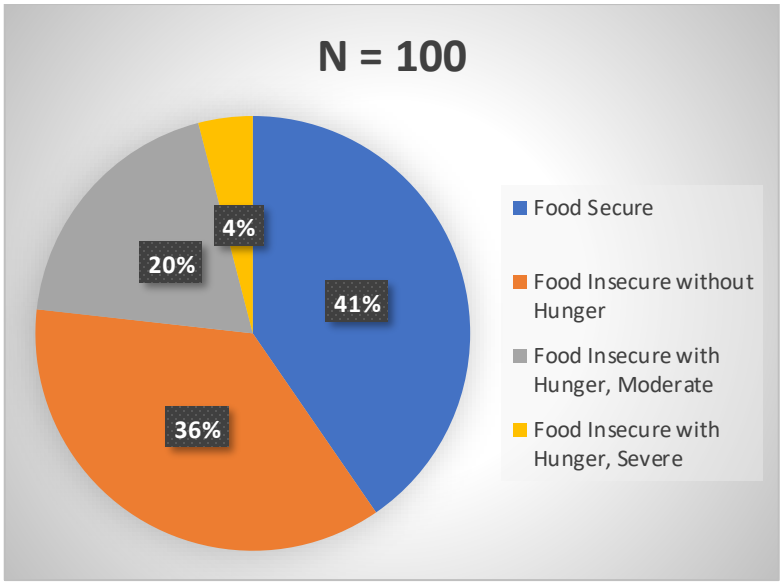

Figure 3: Food Security Status Level

Table 15: Correlation between Food Security Status Level and Socioeconomic Class

Parameters	**Correlations coefficient**	**Result**
Food Security Status Level	-0.50	Negative Correlation
Socioeconomic Class	-0.50	Negative Correlation

Here, Correlation coefficient is -0.50 and the p-value is 0.667 which is greater than significance level -0.05. So, there is insufficient evidence to conclude that there is a significant linear relationship between Food Security Status Level and Socioeconomic Class because the correlation coefficient is -0.50. Hence, the statistical analysis of the result showed that the Food Security status level are negatively correlated with socioeconomic class among the selected families.

4.5 Food accessibility of the selected families during Covid affected period.

Covid-19 and the consequent quarantine have a real impact on the population's food security. According to Guidelines for home quarantine of MoHFW, Home quarantine applies to anyone who comes in contact with an infectious person, a polluted environment, or a person suspected or infected with COVID-19. Therefore, visiting public places such as shops, medical store, hospital and hotel etc. were prohibited. Without a help from outside, people cannot get food and essential things.

4.5.1 Prevalence COVID-19 pandemic in the selected area

COVID-19 affects the Ernakulam district (Kerala, India) like it does all other nations and territories. When the number of COVID-19 cases recorded in other states began to decline, the Ernakulam district remained to have a high number of cases. The number of persons infected with the corona virus in the selected households is shown in Table 16 below.

Table 16: Number of family infected with the Corona virus

N = 100

Infected with Corona Virus	Number	Percentage (%)
Yes	49	49.0
No	51	51.0

Table 16 shows that 49.0% of the families where their family members were infected with covid-19. While 51% of the families weren't infected with Covid-19.

4.5.2 Accessibility of Food

The Government of Kerala distributed food and groceries to these people through community kitchens and ration shops. Apart from the government's community

kitchens, free food distribution by organisations, individuals, and local groups have make sure that no one goes hungry during lockdowns. The accessibility of adequate food items for the selected families is shown in Table 17 and it is given below.

Table 17: Accessibility to Enough Food

n = 49

Obtain Enough Food	Number	Percentage (%)
Yes	49	100
No	0	0

It was seen that all the families (100%) reported that they had enough food during Covid affected period.

4.5.3 Sources of enough food for the family

During the covid epidemic, the Kerala government runs community meals, various organisations supply free food. The table 18 illustrates the sources of food items for the selected families and it is given below.

Table 18: Sources of enough food for the family

n = 49

Sl.No	Places	Number	Percentage (%)
1.	Resident Associations	12	24.5
2.	Religious community	4	8.2
3.	Community Kitchen	10	20.4
5.	Bought from the store	36	73.4
6.	Others	7	14.2

* Multiple responses

Table 18 show that 73.4% of families brought food from the shops. Only 24.5% of the families reported that they got food items from many resident associations. About 20.4% and 8.2% of families got food items from community kitchen and religious community. Apart from these 14.2% of the families reported that they got food item from other sources too.

4.5.4 Availability of all kind of food during covid affected period

The COVID-19 pandemic put unforeseen strains on food systems, posing plenty of new problems. This also affect the availability of different kind food product. The Table 19 shows the availability of kinds of food during covid pandemic and it is given below.

Table 19: Availability of all kind of food during covid affected period.

n = 49

Obtain All type of Food	Number	Percentage (%)
Yes	43	87.7
No	6	12.2

Table 19 shows that 87.7% of families had all food item while 12.2% couldn't buy or get all food.

4.5.5 Type of food products that were mostly unavailable during covid affected period

During the quarantine period, direct purchase of the food items was difficult from the stores. Many food items can be stored for several days. Some food items must be purchased on the day of use since they cannot be stored for an extended period of time.

Table 20: Type of food products that were mostly unavailable during covid affected period.

n =49

Food Items	Number	Percentage (%)
Fish and Meat	15	30.6
Fruits and Vegetables	11	22.4
Milk	13	26.5

The table 20 shows that 30.6% of the families reported that fish and meat were unavailable during covid affected period. For 22.4% of the families fruits and vegetables were unavailable. And 26.5% of families reported the unavailability of milk.

4.5.6 Support during covid affected period

Many covid infected patients encountered difficulties with treatment, money, and medicine, among other things. Due to covid pandemic many people lost their job and reduced the wages. Many self-employed persons lose their income during the quarantine period. The Table 21 shows the acquirement of support during the covid and it is given below.

Table 21: Support received during the covid affected period

n = 49

Received any support	Number	Percentage (%)
Yes	25	51.02
No and Don't know	24	48.9

During covid-19, the majority of the families (51.02%) got support from different places. While 48.9% of the families did not get or could not recall any help during Covid-19.

4.5.7 Service from various places

Apart from the government policy, many other organizations and selfless program provide support rather than food kit. Such as money, medicine etc. The table 22 shows the services from the different place and it is given below.

Table 22: Service from various places

n = 25

Places	Number	Percentage (%)
Asha Worker	8	32.0
Residential Associations	2	8.0
Primary Health Centre	9	36.0
Panchayath	3	12.0
Religious Community	1	4.0
Neighbourhood	1	4.0
Society Bank	1	4.0
Total	25	100

The majority of the families (36.0%) and (32.0%) received help from PHC and Asha workers. Only 12.0% of the families received support from panchayath. Other sources of support include the religious community (4.0%), a residential association (8.0%), neighbours (4.0%), society bank (4.0%) and so on.

4.6 Utilization of Public Distributing System

COVID-19 has an impact on the food and agricultural supply chain in two major ways such as food supply and food demand according to the Food and Agriculture Organization (FAO,2020). A public distribution system (PDS) is designed as a technique for revival. PDS was entrusted with managing the food security demands as a result of the Covid-19 outbreak, extending its portfolio and supplying free grains. The details regarding the utilisation of PDS by the selected families are given below;

4.6.1 Details on availability of Ration card

Ration cards are official documents provided by Indian state governments to families entitled to purchase subsidised food grain from the Public Distribution System under the National Food Security Act (NFSA). Prior to the NFSA, there were three types of ration cards such as Above Poverty Line (APL) ration cards, Below Poverty Line (BPL) ration cards and Antyodaya Anna Yojana (AAY). The details of the ration cards of the selected families are shown in table 23 and it is given below.

Table 23: Basic details of Ration card

N = 100

Parameters	Number	Percentage (%)
Ration card Holder		
Yes	100	100
No	0	
Inclusion of all family members in the ration shop		
Yes	96	96.0
No	4	4.0
Type of Ration card		
BPL	100	100
APL	0	0

Table 23 show that all of the families have ration cards and are BPL recipients. About 4.0% of the families reported that not all family members are included on their ration card.

4.6.2 Duration as years of using this ration card

Every five years, ration cards are renewed based to specific criteria. This is to identify families within the scope of priority. New ration cards were issued based on the eligibility requirements. The Table 24 shows the years of using the ration card of the selected families.

Table 24: Years of using this ration card

N = 100

Years	Number	Percentage (%)
1 - 10	10	10.0
11 - 20	26	26.0
21 - 30	37	37.0
31 - 40	22	22.0
41 - 50	2	2.0
51- 60	3	3.0

Table 24 shows that For the past 21-30 years, 37.0% of families have used the same ration card. While 22.0% of families have used the same ration card for 31-40 years. And, 26.0% of the families have used the same ration card for 11 - 20 years.

4.6.3 Regular commodities obtained from the Ration shops

PDS is primarily a social welfare of Government of India and anti-poverty initiative. Major commodities given include major food grains like as wheat, rice, and sugar, as well as essential fuels such as kerosene, via a network of fair pricing stores (also known as ration shops) established in different states around the nation. The commodities from the ration shop to the selected homes are shown in Table 25 and it is given below.

Table 25: Commdities get from the Ration shops

N = 100

Food Items	Number	Percentage (%)
Rice	100	100 %
Wheat	100	100 %
Atta	100	100
Pulse Type 1	0	0
Pulse Type 2	0	0
Oil Type 1	0	0
Oil Type 2	0	0
Kerosen	96	96 %
Sugar	0	0
Other	0	0

*** Multiple response**

Table 25 shows that Almost every families get rice, wheat, and atta every month, while 96.0% reported that they get kerosene every month. Sugar and Pulses like commodieties will only be available in supplyco (Kerala State Civil Supplies Corporation) at sudsidized rate.

4.6.4 Commodites available in food kit

The Kerala government has decided to provide food kits through ration shops in light of the recent increase in COVID-19 cases. The state government of Kerala has distributed free food packages to all families. The commodities included in the food kit are listed in table 26 and it is given below.

Table 26: Commodities in food kit

N = 100

Food Items	Number	Percentage (%)
Rice	100	100
Wheat	100	100
Atta	100	100
Pulse Type 1	100	100
Pulse Type 2	100	100
Oil Type 1	100	100
Oil Type 2	100	100
Kerosen	100	100
Sugar	100	100
Jaggery	0	0
Ghee	0	0
Spices	100	100
Dryfruits and Nuts	0	0

Table 26 shows that all families got Rice, Wheat, Atta, 2 type of pulse, 2 types of oil, kerosene, sugar and spices in every food kit.

4.6.5 Ration in every month

Every month, essential goods including as rice, wheat, sugar, kerosene, and the like are distributed to the population through the PDS at reduced prices. Table 27 depicts the food products received from the ration shop in each month.

Table 27: Food items from ration in every month

N = 100

Food items from ration in every month	Number	Percentage (%)
Yes	98	98.0
No	2	2.0

The majority of families (98.0%) stated that they receive items from rations in every month. Because of a card renewal issue, 2.0% of the families did not receive rationing every month.

4.6.6 Distance from Ration Shop

The grama panchayat normally decides where a fair pricing shop would be located in the village. The control order makes no mention of location, however the FPS should ideally be positioned in the village's centre area, where it is easily accessible to everybody. Table 28 shows the distance between the ration shop and the homes of selected families are given below.

Table 28: Distance from Ration Shop

N = 100

Distance (km)	Number	Percentage (%)
0.1- 0.7 m	31	31.0
1 - 1.3 m	55	55.0
1.5 – 2 m	14	14.0

More than half of the families (55.0%) have ration shops within 1- 1.3 m distance. And, 14.0% of the families have 1.5 - 2 m distance from their house to the ration shop.

4.6.7 Sufficiency of commodities from Ration shop

Everything a family needs for a month is included in the food kit, from vegetable oils to pulses for a family. Table 29 indicates the sufficiency of commodities from the ration shop, which is shown below.

Table 29: Sufficiency of commodities from the ration shop

N = 100

Sufficiency of commodities	Number	Percentage (%)
Sufficient	79	79.0
Not sufficient	21	21.0

During the pandemic, around 21.0% of the families reported that they did not get enough food products from the ration shop. While just 79.0% of the families reported that they received enough quantity of food.

4.6.8 List of food item that are brought from outside

Kerala's state government has provided free food kit to all families through Public Distribution System. It includes many essential items. But, some of the people had to depend on other shop for particular commodities. The Table 30 shows the list of food items that are brough from outside and it is given below.

Table 30: List of food item that are brought from outside

N = 100

List of food item that are brought from outside	Number	Percentage (%)
Cereals	53	53
Pulse	60	60
Fruits and Vegetables	100	100
Fish, Meat and Egg	98	98
Milk and Milk Products	100	100

*Multiple response

Every family depended on other stores to obtain food goods such as fruits and vegetables, fish, meat and eggs, and milk and milk products. About 53.0% and 60.0% of the individuals rely only on other stores for cereals and pulses, respectively.

4.6.9 Difficulties experienced regarding PDS

To reduce poverty among the general public, the Indian government pushed the public distribution system, which provides subsidised basic necessities to the general population. In the public distribution system, several malpractices have been committed, such as the delivery of low-quality items. The difficulties that the families experienced from PDS is shown in Table 31 and it is given below.

Table 31: Difficulties experienced regarding PDS

N = 100

Difficulty from Ration Shop	Number	Percentage (%)
Yes	2	2.0
No	98	98.0

About 2.0% of the families mentioned problems with ration stores, such as overcrowding, a lack of certain food items, and poor food quality. The main problems were food quality and a shortage of certain food products. While the rest of the families (98.0%) were satisfied with the service of Ration shops.

According to Ramaswamy et.al (2015), adulteration, distribution of low-quality items, and under-weighing are all issues that plague the public distribution system.

4.6.10 Benefits of Public Distributing System

Ration shops serve an important role in ensuring food security for the most disadvantaged groups. The Table 32 shows the benefits of ration shops and it is given below.

Table 32: Benefits of PDS

N = 100

Food items	Number	Percentage (%)
Moderate Rate	94	94
Availability of essential food items	32	32
Some Food Provided Free	24	24
Get Food Every Month	91	91

*Multiple response

The benefits of the ration shop are shown in Table 32. Majority of the families (94.0%) of the reported to the food commodities are sold at a reasonable rate. And 91.0% reported monthly food distribution.

4.6.11 Opinion regarding need for extra food items

The food kit has all of the essentials food. However, some food products are unavailable for many individuals. Table 33 shows the requirement of extra food items from ration shop and given below.

Table 33: Opinion regarding need for extra food items

N = 100

Require of extra food items from Ration Shop	Number	Percentage (%)
Yes	55	55
No	45	45

About 55.0% said they needed more food from the ration stores. While 45% of the families reported that the didn't required any extra food.

4.6.12 List of Required extra food items from Ration Shop

The Table 34 shows the list of the required extra food items from Ration shop and it is given below.

Table 34: List of Required extra food items from Ration Shop

N = 55

List of Required extra food items from Ration Shop	Number	Percentage (%)
More Pulses	34	61.8
Improved Quality of food product	7	12.7
Rice Flours	3	5.4
Jaggery	21	38.2

*Multiple answer

Majority of the families 61.8% reported that required more pulses in the kit. About 38.2% of the families reported that they needed jaggery. Only 5.4% of the families required rice flour. Along with this 12.7 % mentioned about the improved quality of food product.

CHAPTER - V

SUMMARY AND CONCLUSION

"Food security refers to a household's physical and economic access to sufficient, safe, and nutritious food that fulfills the dietary needs and food preferences for living an active and healthy life" (FAO, 2006). In response to the coronavirus disease 2019 (COVID-19) pandemic, the Government of India imposed the largest lockdown in history and this lockdown has severely harmed food security and nutrition for millions of people in India. When food security is threatened, it is dependent on the Public Distribution System (PDS) and government vigilance and action. As a result, during Covid-19 Pandemic, the present study was carried out to assess household food security among below poverty line beneficiaries of the public distribution system. The study was conducted to determine the household security among the BPL families in Edathala panchayath during the pandemic period.

The objectives of the present study are: -

- To study the socioeconomic background among BPL families benefiting for public distribution system.
- To determine dietary diversity of the selected BPL families
- To assess the food security of the households.
- To evaluate the efficacy of the public distribution system.
- To determine the benefit of household food items available through the Food Kit provided by the Government of Kerala during pandemic period.

The study was conducted in Edathala Panchayath and from this panchayath, 16th rural region ward was selected. Stratified sampling was selected to collect the samples. From this area only 2 ration shop was selected and there is total 400 beneficiaries in each ration shop. From these two-ration shop, 100 subjects were randomly selected. The tool selected was interview schedule.

In this study 4 different tools were used.

Personal demographic, Modified Kuppuswamy socioeconomic scale (2020), Utilization and efficiency of Public distributing system questionnaire and Guide to Measuring Household Food Security (Revised 2000).

The Summary and conclusion of the study are discussed below.

- About 88.0% of the participants are in the upper lower socioeconomic class. Only 9.0 % of the sample is in the lowest class, and 3.0% is in the lower middle class.
- Only 35.0% and 40.0% of the families consume Brassica and Leafy vegetables once in a week, respectively.
- Nearly half of the families 40% of the household were food secure. But 36.0% and 20.0% of the household were Food Insecure without Hunger and Food Insecure with Hunger, Moderate respectively. It was found that 4.0% of the household experienced Food Insecure with Hunger, Severe.
- Majority of families (73.4%) brought food from the shops. Only 24.5% of the families reported that they got food items from many resident associations. About 20.4% and 8.2% of families got food items from community kitchen and religious community. Apart from these 14.2% of the families reported that they got food item from other sources too.
- The majority of the families (36.0%) and (32.0%) received help from PHC and Asha workers. Only 12.0% of the families received support from panchayath. Other sources of support include the religious community (4.0%), a residential association (8.0%), neighbours (4.0%), society bank (4.0%) and so on.
- Every families gets rice, wheat, and atta every month, while 96% reported that they get kerosene every month. Majority of the families (100%) got Rice, Wheat, Atta, 2 type of pulse, 2 types of oil, kerosene, sugar and spices in every food kit
- During the pandemic, around 21.0% of the families reported that they did not get enough food products from the ration shop. While just 79.0% of the families reported that they received enough quantity of food.
- Majority of the families 61.8% reported that required more pulses in the kit. About 38.2% of the families reported that they needed jaggery. Only 5.4% of

the families required rice flour. Along with this 12.7 % mentioned about the improved quality of food product.

Government of Kerala and various departments, agencies took some action to tackle the food security threats during the lock-down period after the incidence of COVID-19 Pandemic. Inclusive solutions such as providing free dry rations, managing community kitchens, and participating in direct cash transfers were among the highlights of the Kerala government's response to the state's food crisis. First, persons having ration cards under the Public Distribution System, such as Antyodaya Anna Yojana (AAY) and Priority Household (PHH), were given free ration. Non-priority cardholders also received 15 kg of rice for free. In addition, families without a ration card were given free rations. At the same time, the government was operating community kitchens with the help of the Kudumbashree Mission and local self-government organisations. During the final stages of the lockdown, all ration cards were given free kits including necessary food items distributed through fair pricing stores. Rice, Atta (wheat flour), lentils, spices, and oil were among the foods included in the food kit. The food kits were distributed first to AAY cards, then priority cardholders, non-priority state subsidy cardholders, then non-priority non-state subsidy cardholders. These Interventions were extremely beneficial to tackle the food security.

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APPENDIX

A. വ്യകതി വിവരവും കുടുംബ പാശ്ചാത്തലവും

1. കുടുംബനാഥൻറെ / കുടുംബനാഥയുടെ പേര്: _____.

2. ഫോൺ നമ്പർ: : _____.

B. സാമൂഹിക-സാമ്പത്തിക നില

1. ഈ വിഭാഗങ്ങളിൽ ഏതാണ് നിങ്ങളുടെ പ്രതിമാസ വരുമാനത്തെ നന്നായി വിവരിക്കുന്നത്?

   പ്രതിമാസ വരുമാനം

   ☐ ≥ 1,23,322

   ☐ 61,663 - 1,23,321

   ☐ 46,129 - 61,662

   ☐ 30,831 - 46,128

   ☐ 18,497 - 30,830

   ☐ 6,175 - 18,496

   ☐ ≤ 6,174

2. ഈ വിഭാഗങ്ങളിൽ ഏതാണ് നിങ്ങളുടെ വീട്ടുടമസ്ഥന്റെ തൊഴിൽ നന്നായി വിവരിക്കുന്നത്

   വീട്ടുടമസ്ഥന്റെ തൊഴിൽ

   ☐ നിയമസഭാംഗങ്ങൾ, മുതിർന്ന ഉദ്യോഗസ്ഥർ & മാനേജർമാർ

   ☐ പ്രൊഫഷണലുകൾ

   ☐ ടെക്നീഷ്യൻമാരും അസോസിയേറ്റ് പ്രൊഫഷണലുകളും

   ☐ ഗുമസ്തന്മാർ / ക്ലർക്ക്

   ☐ പരിചയസമ്പത്തുള്ള കാർഷിക, മത്സ്യബന്ധന തൊഴിലാളികൾ

   ☐ കരകൗശലവും അനുബന്ധ വ്യാപാര തൊഴിലാളികളും

   ☐ പ്ലാന്റ് & മെഷീൻ ഓപ്പറേറ്റർമാരും അസംബ്ലർമാരും

☐ പ്രാഥമിക തൊഴിൽ

☐ തൊഴിൽരഹിതൻ

3. ഈ വിഭാഗങ്ങളിൽ ഏതാണ് നിങ്ങളുടെ കുടുംബനാഥന്റെ വിദ്യാഭ്യാസം നന്നായി വിവരിക്കുന്നത്?

<u>കുടുംബനാഥന്റെ വിദ്യാഭ്യാസം</u>

☐ ഓണേഴ്സ് ബിരുദം

☐ ബിരുദധാരി

☐ ഇന്റർമീഡിയറ്റ് അല്ലെങ്കിൽ ഡിപ്ലോമ

☐ ഹൈസ്കൂൾ

☐ മിഡിൽ സ്കൂൾ (5-7)

☐ പ്രാഥമിക വിദ്യാഭ്യാസം

☐ നിരക്ഷരൻ/ പഠിച്ചട്ടില്ല

4. കുടുംബത്തിന്റെ മുഴുവൻ പ്രതിമാസ വരുമാനം

<u>പ്രതിമാസ കുടുംബ വരുമാനം (രൂപയിൽ)</u>

☐ ≥ 199,862

☐ 99,931–199,861

☐ 74,755 –99,930

☐ 49,962–74,755

☐ 29,973– 49,961

☐ 10,002–29,972

☐ ≤ 10,001

5. കുടുംബാംഗങ്ങൾ

വയസ്സ്	പുരുഷ അംഗങ്ങൾ	സ്ത്രീ അംഗങ്ങൾ
< 1		
1-9		
10-17		
മുതിർന്നവർ		

6. ആകെ അംഗങ്ങൾ: _____.

C. ഭക്ഷണ ക്രമത്തിന്റെ നിർണയം

SL. NO	ധാന്യങ്ങൾ	സ്ഥിരമായി	ആഴ്ചയിൽ 2-3 തവണയെങ്കിലും	ആഴ്ചയിൽ ഒരിക്കൽ	2 ആഴ്ചയിൽ ഒരിക്കൽ	മാസത്തിൽ 1-2 തവണ	അപൂർവ്വമായി	ഒരിക്കലുമില്ല
1.	അരി							
2.	ഗോതമ്പ്							
3.	റവ							
4.	അവിൽ							
5.	ബ്രഡ്							
6.	നുറുക്ക് ഗോതമ്പ്							
7.	റാഗി							
8.	ചോളം							
9.	മണിച്ചോളം (ജോവർ)							
10.	മറ്റുള്ളവ							

SL. NO	പയർവർഗ്ഗങ്ങൾ	സ്ഥിരമായി	ആഴ്ചയിൽ 2-3 തവണയെങ്കിലും	ആഴ്ചയിൽ ഒരിക്കൽ	2 ആഴ്ചയിൽ ഒരിക്കൽ	മാസത്തിൽ 1-2 തവണ	അപൂർവ്വമായി	ഒരിക്കലുമില്ല
1.	കടല							
2.	കടലപ്പരിപ്പ്							

3.	ചെറുപയർ							
4.	വൻപയർ							
5.	പച്ചപ്പട്ടാണി / ഉണക്കിയപ്പട്ടാണി							
6.	തുവരപ്പരിപ്പ്							
7.	ഉഴുന്ന്							
8.	സോയാബീൻ							
9.	രാജ്മ							
10.	മറ്റുള്ളവ							

SL.NO	പഴവർഗ്ഗങ്ങൾ	സ്ഥിരമായി	ആഴ്ചയിൽ 2-3 തവണയെങ്കിലും	ആഴ്ചയിൽ ഒരിക്കൽ	2 ആഴ്ചയിൽ ഒരിക്കൽ	മാസത്തിൽ 1-2 തവണ	അപൂർവ്വമായി	ഒരിക്കലുമില്ല
1.	വാഴപ്പഴം							
2.	പേരക്ക							
3.	മുന്തിരി							
4.	ആപ്പിൾ							
5.	ഓറഞ്ച്							
6.	ചെറുനാരങ്ങ							
7.	തണ്ണിമത്തൻ							
8.	മാമ്പഴം							
9.	പപ്പായ							
10.	കൈതച്ചക്ക							
11.	മറ്റുള്ളവ							

SL. NO	അണ്ടിപ്പരിപ്പുകളും ഉണക്കിയപ്പഴങ്ങളും	സ്ഥിരമായി	ആഴ്ചയിൽ 2-3 തവണയെങ്കിലും	ആഴ്ചയിൽ ഒരിക്കൽ	2 ആഴ്ചയിൽ ഒരിക്കൽ	മാസത്തിൽ 1-2 തവണ	അപൂർവ്വമായി	ഒരിക്കലുമില്ല
1.	കശുവണ്ടി							
2.	നാളികേരം							
3.	നിലക്കടല							
4.	ഉണക്കമുന്തിരി							
5.	ഈന്തപ്പഴം							
10.	മറ്റുള്ളവ							

SL.NO	പച്ചക്കറികൾ	സ്ഥിരമായി	ആഴ്ചയിൽ 2-3 തവണയെങ്കിലും	ആഴ്ചയിൽ ഒരിക്കൽ	2 ആഴ്ചയിൽ ഒരിക്കൽ	മാസത്തിൽ 1-2 തവണ	അപൂർവ്വമായി	ഒരിക്കലുമില്ല
1.	കിഴങ്ങുവർഗങ്ങൾ ((ഉരുളക്കിഴങ്ങ്, കാരറ്റ്, ബീറ്റ്റൂട്ട് മുതലായവ)							
2.	കോളിഫ്ലവർ, കാബേജ്							
3.	ഉള്ളി (ചെറിയുള്ളി,							

	വെളുത്തുള്ളി മുതലായവ)							
4.	പയർ							
5.	തക്കാളി							
6.	ഇലക്കറികൾ (ചീര, മുരിങ്ങ, കാബേജ് മുതലായവ..)							
7.	മത്തങ്ങ, വെള്ളരി മുതലായവ							
8.	മറ്റുള്ളവ							

SL.NO	നോൺ വെജിറ്റേറിയൻ ഉൽപ്പന്നങ്ങൾ	സ്ഥിരമായി	ആഴ്ചയിൽ 2-3 തവണയെങ്കിലും	ആഴ്ചയിൽ ഒരിക്കൽ	2 ആഴ്ചയിൽ ഒരിക്കൽ	മാസത്തിൽ 1-2 തവണ	അപൂർവ്വമായി	ഒരിക്കലുമില്ല
1.	ചാള / മത്തി							
2.	കൊഴുവ							
3.	അയില							
4.	മറ്റുള്ളവ							
5.	ബീഫ്							
6.	കോഴി							
7.	മുട്ട							

SL.NO	പാലുൽപ്പന്നങ്ങൾ	സ്ഥിരമായി	ആഴ്ചയിൽ 2-3 തവണയെങ്കിലും	ആഴ്ചയിൽ ഒരിക്കൽ	2 ആഴ്ചയിൽ ഒരിക്കൽ	മാസത്തിൽ 1-2 തവണ	അപൂർവ്വമായി	ഒരിക്കലുമില്ല
1.	പാൽ							
2.	തൈര്							

SL.NO	സുഗന്ധവ്യഞ്ജനങ്ങൾ	സ്ഥിരമായി	ആഴ്ചയിൽ 2-3 തവണയെങ്കിലും	ആഴ്ചയിൽ ഒരിക്കൽ	2 ആഴ്ചയിൽ ഒരിക്കൽ	മാസത്തിൽ 1-2 തവണ	അപൂർവ്വമായി	ഒരിക്കലുമില്ല
1.	കുരുമുളക്							
2.	മുളക്							
3.	കറുവപ്പട്ട							
4.	ഏലക്ക							
5.	ഗ്രാമ്പൂ							
6.	മഞ്ഞൾ							
7.	മല്ലി							
8.	മറ്റുള്ളവ							

D. കുടുംബഭക്ഷ്യ സുരക്ഷ

1. താഴെ പറയുന്ന കാര്യങ്ങളിൽ ഏതാണ് കഴിഞ്ഞ 12 മാസകാലയളവിൽ നിങ്ങളുടെ ഭക്ഷണ രീതികളെ കുറിച്ച് വിവരിക്കുന്നത്?

☐ എപ്പോഴും ഞങ്ങൾക്ക് വേണ്ട പലതരത്തിൽ ഉള്ളതും ആവിശ്യമായ ഭക്ഷണസാധനങ്ങളും ലഭിക്കും

☐ ഞങ്ങൾക്ക് ഇപ്പോഴും വേണ്ട പലതരത്തിൽ ഉള്ള ഭക്ഷണസാധങ്ങൾ ലഭിച്ചില്ലെങ്കിലും, അതാവശ്യത്തിനുള്ള ഭക്ഷണസാധനകൾ ലഭിക്കാറുണ്ട്

☐ ചിലപ്പോൾ ഞങ്ങൾക്ക് ആവിശ്യമായ ഭക്ഷണം ലഭിക്കാറില്ല

☐ പലപ്പോഴും ഞങ്ങൾക്ക് ആവിശ്യമായ ഭക്ഷണസാധനങ്ങൾ ലഭിക്കാറില്ല

(a) ചിലപ്പോൾ ഞങ്ങൾക്ക് ആവിശ്യമായ ഭക്ഷണം ലഭിക്കാറില്ല ആണ് ടിക്ക് ചെയ്തെതെങ്കിൽ എന്ത് കൊണ്ട്? കാരണം വ്യക്തമാക്കുക

☐ ഭക്ഷണം വാങ്ങിക്കുന്നതിനു മതിയായ പണം ഇല്ലാത്തതു കൊണ്ട്

☐ കടയിലേക്കു എത്താൻ വളരെ ബുദ്ധിമുട്ടായതു കൊണ്ട്

☐ ഭക്ഷണ നിയന്ത്രിക്കുന്നത് കൊണ്ട്

☐ സ്റ്റോവ് പ്രവർത്തിക്കാത്തതുകൊണ്ടു

☐ ആരോഗ്യപ്രശ്നങ്ങൾ കാരണം പാചകം ചെയ്യാനോ ഭക്ഷണം കഴിക്കാനോ കഴിയുന്നില്ല

(b) ഞങ്ങൾക്ക് ഇപ്പോഴും വേണ്ട പലതരത്തിൽ ഉള്ള ഭക്ഷണസാധങ്ങൾ ലഭിച്ചില്ലെങ്കിലും, അതാവശ്യത്തിനുള്ള ഭക്ഷണസാധനകൾ ലഭിക്കാറുണ്ട് ആണ് ടിക്ക് ചെയ്തെതെങ്കിൽ എന്ത് കൊണ്ട്? കാരണം വ്യക്തമാക്കുക

☐ ഭക്ഷണം വാങ്ങിക്കുന്നതിനു മതിയായ പണം ഇല്ലാത്തതു കൊണ്ട്

☐ കടയിലേക്കു എത്താൻ വളരെ ബുദ്ധിമുട്ടായതു കൊണ്ട്

☐ ഭക്ഷണ നിയന്ത്രിക്കുന്നത് കൊണ്ട്

☐ ആഗ്രഹിക്കുന്ന തരത്തിലുള്ള ഭക്ഷണം ലഭ്യമല്ലാത്തതുകൊണ്ടു

☐ ഗുണമേന്മയില്ലാത്തതു ഭക്ഷണം ലഭിക്കത്തതു കൊണ്ട്

താഴെ പറയുന്നവയിൽ നിങ്ങള്ക്ക് സംഭവിച്ചട്ടുണ്ടോ ഇല്ലയോ എന്ന് സൂചിപ്പിക്കുക

2. കഴിഞ്ഞ 12 മാസത്തിനിടയിൽ കൂടുതൽ ഭക്ഷണസാധനങ്ങൾ വാങ്ങിക്കുന്നതിനു മുൻപ് വീട്ടിൽ ഉള്ള ഭക്ഷണസാധനങ്ങൾ തീർന്നു പോകുമോ എന്ന് ഓർത്തു വേവലാതിപ്പെട്ടിരിന്നു ?

   ☐ പലപ്പോഴായി

   ☐ ചിലപ്പോൾ

   ☐ ഒരിക്കലും ഇല്ല

3. കഴിഞ്ഞ 12 മാസത്തിനിടയിൽ വാങ്ങിയ ഭക്ഷണസാധനങ്ങൾ തികഞ്ഞിരുന്നോ, ഞങ്ങൾക്ക് കൂടുതൽ ഭക്ഷണസാധനങ്ങൾ വാങ്ങുവാൻ പണം ഉണ്ടായിരുന്നില്ല ?

   ☐ പലപ്പോഴായി

   ☐ ചിലപ്പോൾ

   ☐ ഒരിക്കലും ഇല്ല

4. കഴിഞ്ഞ 12 മാസത്തിനിടയിൽ സമീകൃത ഭക്ഷണം കഴിക്കാൻ ഞങ്ങൾക്കു കഴിഞ്ഞിരുന്നില്ല ?

   ☐ പലപ്പോഴായി

   ☐ ചിലപ്പോൾ

   ☐ ഒരിക്കലും ഇല്ല

5. കഴിഞ്ഞ 12 മാസത്തിനിടയിൽ ഭക്ഷണസാധനകൾ വാങ്ങുവാൻ പണം ഇല്ലാത്തതുകൊണ്ട്, കുട്ടികൾക്കുള്ള ഭക്ഷണസാധനകളിൽ ചെലവ് കുറഞ്ഞ സാധനങ്ങളെയാണ് ആശ്രയിക്കുന്നത് ?

   ☐ പലപ്പോഴായി

   ☐ ചിലപ്പോൾ

   ☐ ഒരിക്കലും ഇല്ല

6. കഴിഞ്ഞ 12 മാസത്തിനിടയിൽ സമീകൃതാഹാരം ഞങ്ങൾക്ക് താങ്ങാനാവാത്ത കാരണം കുട്ടികൾക്ക് നൽകാനായില്ല ?

   ☐ പലപ്പോഴായി

   ☐ ചിലപ്പോൾ

   ☐ ഒരിക്കലും ഇല്ല

7. കഴിഞ്ഞ 12 മാസത്തിനിടയിൽ ആവിശ്യമായ ഭക്ഷ്യവസ്തുക്കൾ വാങ്ങുവാൻ കഴിയാത്തതു കൊണ്ട് കുട്ടികൾക്ക് മതിയായ ഭക്ഷണം കഴിക്കുവാൻ സാധിച്ചിരുന്നില്ല ?

   ☐ പലപ്പോഴായി

   ☐ ചിലപ്പോൾ

   ☐ ഒരിക്കലും ഇല്ല

8. കഴിഞ്ഞ 12 മാസത്തിനിടയിൽ ഭക്ഷണം വാങ്ങാൻ പണമില്ലാത്തതിനാൽ എനിക്ക് / നിങ്ങളുടെ വീട്ടിലെ മറ്റു അംഗങ്ങൾക്ക് ഭക്ഷണത്തിന്റെ അളവ് കുറയ്ക്കുകയോ/ ഭക്ഷണം വേണ്ടെന്നു വെക്കുകയോ ചെയ്തട്ടുണ്ടായി ?

   ☐ പലപ്പോഴായി

   ☐ ചിലപ്പോൾ

   ☐ ഒരിക്കലും ഇല്ല

   (i) ഇത് എത്ര തവണ സംഭവിച്ചു ?

      ☐ എല്ലാ മാസവും

      ☐ ചില മാസങ്ങളിൽ എന്നാൽ എല്ലാ മാസവും അല്ല

      ☐ ഒന്നോ രണ്ടോ മാസങ്ങളിൽ മാത്രം

9. കഴിഞ്ഞ 12 മാസത്തിനിടയിൽ പണമില്ലാത്തതിനാൽ എപ്പോഴെങ്കിലും നിങ്ങൾ വിചാരിച്ചതിലും കുറവ് ഭക്ഷണം കഴിച്ചിട്ടുണ്ടോ?

☐ പലപ്പോഴായി

☐ ചിലപ്പോൾ

☐ ഒരിക്കലും ഇല്ല

10. കഴിഞ്ഞ 12 മാസത്തിനിടയിൽ പണമില്ലാത്തതിനാൽ എപ്പോഴെങ്കിലും വിശന്നിട്ടും ഭക്ഷണം കഴിക്കാൻ പറ്റാത്ത അവസ്ഥ ഉണ്ടായിട്ടുണ്ടോ?

☐ പലപ്പോഴായി

☐ ചിലപ്പോൾ

☐ ഒരിക്കലും ഇല്ല

11. ചില സമയത്ത് ആളുകൾക്ക് വേണ്ടത്ര ഭക്ഷണം ഇല്ലാത്തതിനാൽ ശരീരഭാരം കുറയുന്നു. കഴിഞ്ഞ 12 മാസത്തിനിടയിൽ, ആവശ്യത്തിന് ഭക്ഷണമില്ലാത്തതിനാൽ നിങ്ങളുടെ ശരീരഭാരം കുറഞ്ഞിരുന്നു ?

☐ പലപ്പോഴായി

☐ ചിലപ്പോൾ

☐ ഒരിക്കലും ഇല്ല

12. കഴിഞ്ഞ 12 മാസത്തിനിടയിൽ ഭക്ഷണം വാങ്ങാൻ പണമില്ലാത്തതിനാൽ നിങ്ങളോ നിങ്ങളുടെ വീട്ടിലെ മറ്റു അംഗങ്ങളോ ഒരു ദിവസം മുഴുവൻ ഭക്ഷണം കഴിക്കാതിരിന്നട്ടുണ്ടോ ?

☐ പലപ്പോഴായി

☐ ചിലപ്പോൾ

☐ ഒരിക്കലും ഇല്ല

(i) ഇത് എത്ര തവണ സംഭവിച്ചു ?

☐ എല്ലാ മാസവും

☐ ചില മാസങ്ങളിൽ എന്നാൽ എല്ലാ മാസവും അല്ല

☐ ഒന്നോ രണ്ടോ മാസങ്ങളിൽ മാത്രം

13. കഴിഞ്ഞ 12 മാസത്തിനിടയിൽ ഭക്ഷണം വാങ്ങാൻ പണമില്ലാത്തതിനാൽ എപ്പോഴെങ്കിലും നിങ്ങളുടെ ഏതെങ്കിലും ഒരു കുട്ടിയുടെ ഭക്ഷണത്തിന്റെ അളവ് കുറച്ചിട്ടുണ്ടോ ?

☐ പലപ്പോഴായി

☐ ചിലപ്പോൾ

☐ ഒരിക്കലും ഇല്ല

14. കഴിഞ്ഞ 12 മാസത്തിനിടയിൽ ഭക്ഷണം വാങ്ങാൻ പണമില്ലാത്തതിനാൽ പണമില്ലാത്തതിനാൽ എപ്പോഴെങ്കിലും നിങ്ങളുടെ ഏതെങ്കിലും ഒരു കുട്ടി ഭക്ഷണം വേണ്ടെന്നു വെക്കുകയുണ്ടായിട്ടുണ്ടോ ?

☐ പലപ്പോഴായി

☐ ചിലപ്പോൾ

☐ ഒരിക്കലും ഇല്ല

(i) ഇത് എത്ര തവണ സംഭവിച്ചു ?

☐ എല്ലാ മാസവും

☐ ചില മാസങ്ങളിൽ എന്നാൽ എല്ലാ മാസവും അല്ല

☐ ഒന്നോ രണ്ടോ മാസങ്ങളിൽ മാത്രം

15. കഴിഞ്ഞ 12 മാസത്തിനിടയിൽ കൂടുതൽ ഭക്ഷണം വാങ്ങാൻ കഴിയാത്തതു കൊണ്ട് നിങ്ങളുടെ കുട്ടികൾ എപ്പോഴെങ്കിലും വിശന്നിരിന്നട്ടുണ്ടോ ?

☐ പലപ്പോഴായി

☐ ചിലപ്പോൾ

☐ ഒരിക്കലും ഇല്ല

16. കഴിഞ്ഞ 12 മാസത്തിനിടയിൽ ഭക്ഷണം വാങ്ങാൻ പണമില്ലാത്തതിനാൽ നിങ്ങളുടെ ഏതെങ്കിലുമൊരു കുട്ടികൾ ഒരു ദിവസം മുഴുവൻ ഭക്ഷണം കഴിക്കാതിരിന്നട്ടുണ്ടോ ?

☐ പലപ്പോഴായി

☐ ചിലപ്പോൾ

☐ ഒരിക്കലും ഇല്ല

E. കൊറോണ ബാധിത സമയത്തെ ഭക്ഷണക്രമങ്ങൾ

1. കഴിഞ്ഞ 2-3 വർഷത്തിനിടയിൽ കുടുംബത്തിൽ ആർക്കെങ്കിലും കൊറോണ വൈറസ് ബാധിച്ചിട്ടുണ്ടോ?

☐ ഉണ്ട്

☐ ഇല്ല

2. ഉണ്ടെങ്കിൽ, എങ്ങനെയാണ് ഭക്ഷണക്രമം ക്രമീകരിച്ചത്?_____.

3. ആ കാലത്തു നിങ്ങൾക്ക് ആവിശ്യമായ ഭക്ഷണസാധനങ്ങൾ ലഭിച്ചിരുന്നോ?

☐ ഉണ്ട്

☐ ഇല്ല

4. ഉണ്ടെങ്കിൽ എവിടെ നിന്നു ലഭിച്ചു?

☐ അസോസിയേഷൻ

☐ മത സമൂഹം

☐ കമ്മ്യൂണിറ്റി കിച്ചൻ / പഞ്ചായത്

☐ ജീവകാരുണ്യ പ്രവർത്തകർ

☐ കടയിൽ നിന്ന് വാങ്ങിച്ചു

☐ മറ്റുള്ളവ

5. നിങ്ങള്ക്ക് എല്ലാ ഭക്ഷ്യസാധനങ്ങളും വാങ്ങാൻ കഴിഞ്ഞിരുന്നോ?

☐ ഉണ്ട്

☐ ഇല്ല

6. ഇല്ലെങ്കിൽ ഏതൊക്കെ ?_____.

7. കഴിഞ്ഞ കോവിഡ്-19 ലോക്ക്ഡൗൺ സമയത്ത് വീട്ടുകാർക്ക് എന്തെങ്കിലും പിന്തുണ (പണം, ഭക്ഷണം, ഭക്ഷ്യേതര അവശ്യ സേവനങ്ങൾ) ലഭിച്ചിട്ടുണ്ടോ ?

☐ ഉണ്ട്

☐ ചിലപ്പോൾ

☐ ഇല്ല

☐ അറിയില്ല

8. സേവനം വ്യക്തമാക്കുക: _____.

F. പൊതുവിതരണ സംവിധാനം സംബന്ധിച്ച വിശദാംശങ്ങൾ

1. നിങ്ങളുടെ കുടുംബത്തിനു റേഷൻ കാർഡ് ഉണ്ടോ?

☐ ഉണ്ട്

☐ ഇല്ല

2. നിങ്ങളുടെ റേഷൻ കാർഡ് എല്ലാ കുടുംബാഗംങ്ങളും ഉൾപ്പെട്ടിട്ടുണ്ടോ ?

☐ ഉണ്ട്

☐ ഇല്ല

3. റേഷൻ കാർഡിന്റെ തരം:

☐ APL

☐ BPL

4. എത്ര വർഷമായി നിനക്ക് ഈ റേഷൻ കാർഡ് ഉപയോഗിക്കുന്നു?

_____.

5. (a) റേഷൻ കടകളിൽ നിന്നും നിങ്ങളുടെ റേഷൻ കാർഡ് ഉപയോഗിച്ച് നിങ്ങൾക്ക് വാങ്ങാൻ കഴിയുന്ന സാധനങ്ങൾ ഏതൊക്കെയെന്നു ടിക്ക് ചെയ്യുക ?

<u>പൊതുവായി ലഭിക്കുന്ന സാധനങ്ങൾ</u>

☐ അരി

☐ ഗോതമ്പ്

☐ ആട്ട

☐ പയർവർഗ്ഗങ്ങൾ (തരം 1)

☐ പയർവർഗ്ഗങ്ങൾ (തരം 2)

☐ എണ്ണ (തരം 1)

☐ എണ്ണ (തരം 2)

☐ മണ്ണെണ്ണ

☐ പഞ്ചസാര

☐ മറ്റുള്ളവ (താഴെ വ്യക്തമായി വ്യക്തമാക്കുക)

(c) കിറ്റ്

☐ അരി

☐ ഗോതമ്പ്

☐ ആട്ട

☐ പയർവർഗ്ഗങ്ങൾ (തരം 1)

☐ പയർവർഗ്ഗങ്ങൾ (തരം 2)

☐ എണ്ണ (തരം 1)

☐ എണ്ണ (തരം 2)

☐ പഞ്ചസാര

☐ ശർക്കര

☐ നെയ്യ്

☐ സുഗന്ധവ്യഞ്ജനങ്ങൾ

☐ അണ്ടിപ്പരിപ്പുകളും ഉണക്കിയപ്പഴങ്ങളും

☐ മറ്റുള്ളവ (താഴെ വ്യക്തമായി വ്യക്തമാക്കുക)

6. നിങ്ങൾക്ക് എല്ലാ മാസവും റേഷൻ ലഭിക്കാറുണ്ടോ?

☐ ഉണ്ട്

☐ ഇല്ല

7. ഇല്ലെങ്കിൽ എന്തുകൊണ്ട്? _____.

8. നിങ്ങളുടെ വീട്ടിൽ നിന്ന് റേഷൻ കട എത്ര ദൂരെയാണ്? _____.

9. റേഷൻ കടയിൽ നിന്നും ലഭിക്കുന്ന എല്ലാ സാധനങ്ങളും വീട്ടാവശ്യത്തിനു തികയറുണ്ടോ ?

☐ ഉണ്ട്

☐ ഇല്ല

10. ഇല്ലെങ്കിൽ ഏതൊക്കെ ഭക്ഷ്യ വസ്തുക്കൾ പുറത്തു നിന്നു വാങ്ങിക്കുന്നു എന്നത് ടിക്ക് ചെയുക ?

☐ ധാന്യങ്ങൾ

☐ പയർവർഗ്ഗങ്ങൾ

☐ പഴവർഗ്ഗങ്ങൾ & പച്ചക്കറികൾ

☐ നോൺ വെജിറ്റേറിയൻ ഉൽപ്പന്നങ്ങൾ

☐ പാൽ ഉത്പന്നങ്ങൾ

11. റേഷൻ കടയുമായി ബന്ധപ്പെട്ടു എന്തെങ്കിലും ബുദ്ധിമുട്ടു അനുഭവപെട്ടിട്ടുണ്ടോ

☐ ഉണ്ട്

☐ ഇല്ല

12. ഉണ്ടെങ്കിൽ സൂചിപ്പിക്കുക _____.

13. ഈ സമൂഹത്തിൽ റേഷൻ കടകൾ ഉള്ളത് കൊണ്ടുള്ള ഗുണങ്ങൾ

☐ മിതമായ നിരക്ക്

☐ ആവിശ്യ ഭക്ഷ്യാൽപ്പനകളുടെ ലഭ്യത

☐ സൗജന്യമായി ചില ഭക്ഷ്യാൽപ്പനം ലഭിക്കുക

☐ എല്ലാ മാസവും ഭക്ഷണസാധനങ്ങൾ ലഭിക്കുക

☐ മറ്റുള്ളവ

14. റേഷൻ കടകളിൽ നിന്നും ലഭിക്കുന്ന സാധനങ്ങൾ അല്ലാതെ ഇനിയും എന്തെങ്കിലും ഉൾപെടുത്തേണ്ടതുണ്ടോ

☐ ഉണ്ട്

☐ ഇല്ല

15. ഉണ്ടെങ്കിൽ ഏതെല്ലാം _____.

ABSTRACT

COVID-19 caused both economic and non-economic disaster on several fronts. Among them, food security was a big worry. The impact of the pandemic on food security will be detrimental to the people living below the poverty line. Therefore, we decided to study household food security among Below Poverty Line beneficiaries of public distributing system during covid-19 pandemic period.

The study was conducted in Edathala Panchayath and from this panchayath, 16th rural region ward was selected. Stratified sampling was selected to collect the samples. From this area only 2 ration shop was selected. From these two-ration shop, 100 subjects were randomly selected. The tool selected was interview schedule. In this study 4 different tools were used. Personal demographic, Modified Kuppuswamy socioeconomic scale (2020), Utilization and efficiency of Public distributing system questionnaire and Guide to Measuring Household Food Security (Revised 2000).

The study reveals that About 88.0% of the participants are in the upper lower socioeconomic class. Only 9.0 % and 3.0% of the sample is in the lower class and lower middle class. Nearly half of the families 40% of the household were food secure. But 36.0% and 19.0% of the household were Food Insecure without Hunger and Food Insecure with Hunger, Moderate respectively. It was found that 4.0% of the household were Food Insecure with Hunger, Severe. Only 24.5% of the families got food items from many resident associations. About 20.4% and 8.2% of families got food items from community kitchen and religious community. Apart from these 14.2% of the families got food item from other sources too. Every families got rice, wheat, and atta and food kit every month. Majority of the families 61.8% reported that required more pulses in the kit. Majority of the families 61.8% required more pulses in the kit. About 38.2% and 5.4% of the families required jaggery and rice flour. Along with this 12.7 % mentioned about the improved quality of food product.

Government of Kerala and various departments, agencies took some action to tackle the food security threats during the lock-down period after the incidence of COVID-19 Pandemic. Inclusive solutions such as providing free dry rations, managing community kitchens, and participating in direct cash transfers were among the highlights of the Kerala government's response to the state's food crisis. These Interventions were extremely beneficial to tackle the food security.